

FEDERAL OPERATING PERMIT

A FEDERAL OPERATING PERMIT IS HEREBY ISSUED TO
Gulf Coast Growth Ventures LLC

AUTHORIZING THE OPERATION OF
Gulf Coast Growth Ventures
Olefins, Derivative and Utilities
All Other Basic Organic Chemical Manufacturing

LOCATED AT
San Patricio County, Texas
Latitude 27° 55' 47" Longitude 97° 19' 19"
Regulated Entity Number: RN109753731

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: O4169 Issuance Date: _____

For the Commission

Table of Contents

| Section | Page |
|---|------|
| General Terms and Conditions | 1 |
| Special Terms and Conditions: | 1 |
| Emission Limitations and Standards, Monitoring and Testing, and Recordkeeping and Reporting..... | 1 |
| Additional Monitoring Requirements | 10 |
| New Source Review Authorization Requirements | 10 |
| Compliance Requirements..... | 11 |
| Risk Management Plan | 11 |
| Protection of Stratospheric Ozone | 12 |
| Permit Location | 12 |
| Permit Shield (30 TAC § 122.148) | 12 |
| Attachments | 13 |
| Applicable Requirements Summary..... | 14 |
| Additional Monitoring Requirements | 144 |
| Permit Shield | 195 |
| New Source Review Authorization References | 207 |
| Appendix A | 220 |
| Acronym List | 221 |
| Appendix B | 222 |

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 F, G, H, YY, EEEE, FFFF, ZZZZ, and DDDDD as identified in the attached Applicable Requirements Summary table are

subject to 30 TAC Chapter 113, Subchapter C, § 113.110, § 113.120, § 113.130, § 113.560, § 113.880, § 113.890, § 113.1090, and § 113.1130, respectively, which incorporates the 40 CFR Part 63 Subpart 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_x, 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.

B. For visible emissions from a building, enclosed facility, or other structure; the permit holder shall comply with the following requirements:

- (i) Title 30 TAC § 111.111(a)(7)(A) (relating to Requirements for Specified Sources)
- (ii) Title 30 TAC § 111.111(a)(7)(B)(i) or (ii)
- (iii) For a building containing an air emission source, enclosed facility, or other structure containing or associated with an air emission source subject to 30 TAC § 111.111(a)(7)(A), complying with 30 TAC § 111.111(a)(7)(B)(i) or (ii), and capable of producing visible emissions from, but not limited to, particulate matter, acid gases and NO_x, the permit holder shall also comply with the following periodic monitoring requirements for the purpose of annual compliance certification under 30 TAC § 122.146:
 - (1) An observation of visible emissions from a building containing an air emission source, enclosed facility, or other structure containing or associated with an air emission source which is required to comply with 30 TAC § 111.111(a)(7)(A) shall be conducted at least once during each calendar quarter unless the air emission source or enclosed facility is not operating for the entire quarter.
 - (2) Records of all observations shall be maintained.
 - (3) Visible emissions observations of air emission sources or enclosed facilities 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 air emission sources or enclosed facilities operated only at night must be made with additional lighting and the temporary installation of contrasting backgrounds. Visible emissions shall be determined with each emissions outlet in clear view of the observer. The observer shall be at least 15 feet, but not more than 0.25 mile, away from each emissions outlet 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.

(4) 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)(7) and (a)(7)(A).
- (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)(7)(B) 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. Emission limits on nonagricultural processes, except for the steam generators specified in 30 TAC § 111.153, shall comply with the following requirements:

- (i) Emissions of PM from any source may not exceed the allowable rates as required in 30 TAC § 111.151(a) (relating to Allowable Emissions Limits)
- (ii) Sources with an effective stack height (h_e) less than the standard effective stack height (H_e), must reduce the allowable emission level by multiplying it by $[h_e/H_e]^2$ as required in 30 TAC § 111.151(b)
- (iii) Effective stack height shall be calculated by the equation specified in 30 TAC § 111.151(c)

D. Outdoor burning, as stated in 30 TAC § 111.201, shall not be authorized unless the following requirements are satisfied:

- (i) Title 30 TAC § 111.207 (relating to Exception for Recreation, Ceremony, Cooking, and Warmth)
- (ii) Title 30 TAC § 111.219 (relating to General Requirements for Allowable Outdoor Burning)
- (iii) Title 30 TAC § 111.221 (relating to Responsibility for Consequences of Outdoor Burning)

4. For storage vessels maintaining working pressure as specified in 30 TAC Chapter 115, Subchapter B, Division 1: "Storage of Volatile Organic Compounds," the permit holder shall comply with the requirements of 30 TAC § 115.112(c)(1).

5. Permit holder shall comply with the following 30 TAC Chapter 115, Subchapter C requirements:
 - A. When filling gasoline storage vessels with a nominal capacity greater than 1,000 gallons (Stage I) at motor vehicle fuel dispensing facilities, which have dispensed less than 100,000 gallons of gasoline in any calendar month after October 31, 2014, the permit holder shall comply with the following requirements specified in 30 TAC Chapter 115, Subchapter C:
 - (i) Title 30 TAC § 115.222(3) (relating to Control Requirements), as it applies to liquid gasoline leaks, visible vapors, or significant odors
 - (ii) Title 30 TAC § 115.222(6) (relating to Control Requirements)
 - (iii) Title 30 TAC § 115.224(1) (relating to Inspection Requirements), as it applies to liquid gasoline leaks, visible vapors, or significant odors
 - (iv) Title 30 TAC § 115.226(2)(B) (relating to Recordkeeping Requirements)
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 following requirements for units subject to any subpart of 40 CFR Part 61, unless otherwise stated in the applicable subpart:
 - A. Title 40 CFR § 61.05 (relating to Prohibited Activities)
 - B. Title 40 CFR § 61.07 (relating to Application for Approval of Construction or Modification)
 - C. Title 40 CFR § 61.09 (relating to Notification of Start-up)
 - D. Title 40 CFR § 61.10 (relating to Source Reporting and Request Waiver)
 - E. Title 40 CFR § 61.12 (relating to Compliance with Standards and Maintenance Requirements)
 - F. Title 40 CFR § 61.13 (relating to Emissions Tests and Waiver of Emission Tests)
 - G. Title 40 CFR § 61.14 (relating to Monitoring Requirements)

- H. Title 40 CFR § 61.15 (relating to Modification)
 - I. Title 40 CFR § 61.19 (relating to Circumvention)
8. For facilities where total annual benzene quantity from waste is greater than or equal to 10 megagrams per year and subject to emission standards in 40 CFR Part 61, Subpart FF, the permit holder shall comply with the following requirements:
- A. Title 40 CFR § 61.342(c)(1)(i) - (iii) (relating to Standards: General)
 - B. Title 40 CFR § 61.342(c)(2) (relating to Standards: General)
 - C. For exempting waste streams:
 - (i) Title 40 CFR § 61.342(c)(3)(ii)(A) - (C) (relating to Standards: General)
 - D. Title 40 CFR § 61.342(f)(1), and (2) (relating to Standards: General)
 - E. Title 40 CFR § 61.342(g) (relating to Standards: General)
 - F. Title 40 CFR § 61.350(a) and (b) (relating to Standards: Delay of Repair)
 - G. Title 40 CFR § 61.355(a)(1)(iii), (a)(2), (a)(6), (b), and (c)(1) - (3) (relating to Test Methods, Procedures, and Compliance Provisions)
 - H. Title 40 CFR § 61.355(j) (relating to Test Methods, Procedures, and Compliance Provisions), for calculation procedures
 - I. Title 40 CFR § 61.356(a) (relating to Recordkeeping Requirements)
 - J. Title 40 CFR § 61.356(b), and (b)(1) (relating to Recordkeeping Requirements)
 - K. Title 40 CFR § 61.356(b)(2)(i) - (ii) (relating to Recordkeeping Requirements)
 - L. Title 40 CFR § 61.356(b)(5) (relating to Recordkeeping Requirements)
 - M. Title 40 CFR § 61.356(c) (relating to Recordkeeping Requirements)
 - N. Title 40 CFR § 61.357(a), (d)(1), (d)(2) (d)(6) and (d)(8) (relating to Reporting Requirements)
 - O. Title 40 CFR § 61.357(d)(3) (relating to Reporting Requirements)
9. For facilities with containers subject to emission standards in 40 CFR Part 61, Subpart FF, the permit holder shall comply with the following requirements:
- A. Title 40 CFR § 61.345(a)(1) - (3), (b), and (c) (relating to Standards: Containers)
 - B. Title 40 CFR § 61.355(h) (relating to Test Methods, Procedures and Compliance Provisions)
 - C. Title 40 CFR § 61.356(g) (relating to Recordkeeping Requirements)
 - D. Title 40 CFR § 61.356(h) (relating to Recordkeeping Requirements)

10. For facilities with individual drain systems subject to emission standards in 40 CFR Part 61, Subpart FF, the permit holder shall comply with the following requirements:
 - A. Title 40 CFR § 61.346(a)(1)(i)(A), (B), (ii), (2), and (3) (relating to Standards: Individual Drain Systems)
 - B. Title 40 CFR § 61.346(b)(1), (2), (2)(i), (3), (4)(i) - (iv), and (5) (relating to Standards: Individual Drain Systems)
 - C. Title 40 CFR § 61.346(b)(2)(ii)(A) (relating to Standards: Individual Drain Systems), for junction boxes
 - D. Title 40 CFR § 61.355(h) (relating to Test Methods, Procedures and Compliance Provisions)
 - E. Title 40 CFR § 61.356(g) (relating to Recordkeeping Requirements)
 - F. Title 40 CFR § 61.356(h) (relating to Recordkeeping Requirements)
11. 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.
12. For the chemical manufacturing process specified in 40 CFR Part 63, Subpart F, the permit holder shall comply with 40 CFR § 63.103(a) (relating to General Compliance, Reporting, and Recordkeeping Provisions) (Title 30 TAC Chapter 113, Subchapter C, § 113.110 incorporated by reference).
13. For the chemical manufacturing facilities with a 40 CFR Part 63, Subpart G Group 2 wastewater stream, the permit holder shall comply with (Title 30 TAC Chapter 113, Subchapter C, § 113.120 incorporated by reference):
 - A. Title 40 CFR § 63.132(b), (b)(1), (b)(1)(i), (b)(2), and (b)(2)(i) (relating to Process Wastewater Provisions - General)
 - B. Title 40 CFR § 63.146(b)(1) (relating to Process Wastewater Provisions - Reporting)
 - C. Title 40 CFR § 63.147(b)(8) (relating to Process Wastewater Provisions - Recordkeeping)
14. For the chemical manufacturing facilities subject to leak detection requirements in 40 CFR Part 63, Subpart G, the permit holder shall comply with the following requirements (Title 30 TAC Chapter 113, Subchapter C, § 113.120 incorporated by reference):
 - A. General Leak Detection Requirements:
 - (i) Title 40 CFR § 63.148(d)(1) - (3), and (e) (relating to Leak Inspection Provisions)
 - (ii) Title 40 CFR § 63.148(c), (g), (g)(2), (h), and (h)(2) (relating to Leak Inspection Provisions), for monitoring and testing requirements
 - (iii) Title 40 CFR §§ 63.148(g)(2), (h)(2), (i)(1) - (2), (i)(4)(i) - (viii), (i)(5), and 63.152(a)(1) - (5), for recordkeeping requirements
 - (iv) Title 40 CFR §§ 63.148(j), 63.151(a)(6)(i) - (iii), (b)(1) - (2), (j)(1) - (3), 63.152(a)(1) - (5), (b), (b)(1)(i) - (ii), and (b)(4), for reporting requirements

- B. For closed vent system or vapor collection systems constructed of hard piping:
 - (i) Title 40 CFR § 63.148(b)(1)(ii) (relating to Leak Inspection Provisions), for monitoring and testing requirements
 - (ii) Title 40 CFR § 63.148(i)(6) (relating to Leak Inspection Provisions), for recordkeeping requirements
 - C. For facilities operating flow indicators:
 - (i) Title 40 CFR § 63.148(f)(1) (relating to Leak Inspection Provisions), for monitoring and testing requirements
 - (ii) Title 40 CFR § 63.148(f)(1), (i)(3)(i) (relating to Leak Inspection Provisions), for recordkeeping requirements
 - (iii) Title 40 CFR § 63.148(j)(2) (relating to Leak Inspection Provisions), for reporting requirements
15. For transfer of waste from ethylene production facilities subject to 40 CFR Part 63, Subpart YY the permit holder shall comply with the following requirements (Title 30 TAC Chapter 113, Subchapter C, § 113.560 incorporated by reference):
- A. Title 40 CFR § 63.1096(a) - (d) (Title 30 TAC Chapter 113, Subchapter C, § 113.550 incorporated by reference)
 - B. Title 40 CFR § 63.1109(a) and (c)
16. For benzene laden waste streams from ethylene process facilities subject to 40 CFR Part 63, Subpart YY with total annual benzene quantity from the facility of 10 megagrams per year or more the permit holder shall comply with the following requirements as specified in 40 CFR § 63.1095(b)(2) (Title 30 TAC Chapter 113, Subchapter C, § 113.560 incorporated by reference):
- A. For facilities with waste managed in containers the permit holder shall comply with the following requirements:
 - (i) Title 40 CFR § 61.355(h) (relating to Test Methods, Procedures and Compliance Provisions)
 - (ii) Title 40 CFR § 61.356(g) (relating to Recordkeeping Requirements)
 - (iii) Title 40 CFR § 61.356(h) (relating to Recordkeeping Requirements)
 - B. For facilities with waste managed in individual drain systems the permit holder shall comply with the following requirements:
 - (i) Title 40 CFR § 61.346(a)(1)(i)(A), (B), (ii), (2), and (3) (relating to Standards: Individual Drain Systems)
 - (ii) Title 40 CFR § 61.346(b)(1), (2), (2)(i), (3), (4)(i) - (iv), and (5) (relating to Standards: Individual Drain Systems)
 - (iii) Title 40 CFR § 61.346(b)(2)(ii)(A) (relating to Standards: Individual Drain Systems), for junction boxes

- (iv) Title 40 CFR § 61.355(h) (relating to Test Methods, Procedures and Compliance Provisions)
 - (v) Title 40 CFR § 61.356(g) (relating to Recordkeeping Requirements)
 - (vi) Title 40 CFR § 61.356(h) (relating to Recordkeeping Requirements)
17. For miscellaneous chemical process facilities subject to maintenance wastewater requirements as specified in 40 CFR § 63.2485, Table 7, the permit holder shall comply with the requirements of 40 CFR § 63.105 (relating to Maintenance Wastewater Requirements) (Title 30 TAC Chapter 113, Subchapter C, § 113.890 incorporated by reference).
 18. For miscellaneous chemical process facilities with Group 2 wastewater streams subject to wastewater operations requirements in 40 CFR Part 63, Subpart FFFF, the permit holder shall comply with the requirements of 40 CFR § 63.132(b), (b)(1), (b)(1)(i), (b)(2), and (b)(2)(i) as specified in § 63.2485(a) (Title 30 TAC Chapter 113, Subchapter C, § 113.890 incorporated by reference).

Additional Monitoring Requirements

19. The permit holder shall comply with the periodic monitoring requirements as specified in the attached "Periodic Monitoring Summary" upon issuance of the permit. Except for, as applicable, monitoring malfunctions, associated repairs, and required quality assurance or control activities (including, as applicable, calibration checks and required zero and span adjustments), the permit holder shall conduct all monitoring in continuous operation (or shall collect data at all required intervals) at all times that the pollutant-specific emissions unit is operating. The permit holder may elect to collect monitoring data on a more frequent basis and average the data, consistent with the averaging time or minimum frequency specified in the "Periodic Monitoring Summary," for purposes of determining whether a deviation has occurred. However, the additional data points must be collected on a regular basis. In no event shall data be collected and used in particular instances to avoid reporting deviations. Deviations shall be reported according to 30 TAC § 122.145 (Reporting Terms and Conditions).

New Source Review Authorization Requirements

20. 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
21. 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.
22. 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

23. 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.
24. 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)

Risk Management Plan

25. For processes subject to 40 CFR Part 68 and specified in 40 CFR § 68.10, the permit holder shall comply with the requirements of the Accidental Release Prevention Provisions in 40 CFR Part 68. The permit holder shall submit to the appropriate agency either a compliance schedule for

meeting the requirements of 40 CFR Part 68 by the date provided in 40 CFR § 68.10(a), or as part of the compliance certification submitted under this permit, a certification statement that the source is in compliance with all requirements of 40 CFR Part 68, including the registration and submission of a risk management plan.

Protection of Stratospheric Ozone

26. Permit holders at a site subject to Title VI of the FCAA Amendments shall meet the following requirements for protection of stratospheric ozone:
- A. Any on site servicing, maintenance, and repair on refrigeration and nonmotor vehicle air-conditioning appliances using ozone-depleting refrigerants or non-exempt substitutes shall be conducted in accordance with 40 CFR Part 82, Subpart F. Permit holders shall ensure that repairs on or refrigerant removal from refrigeration and nonmotor vehicle air-conditioning appliances using ozone-depleting refrigerants are performed only by properly certified technicians using certified equipment. Records shall be maintained as required by 40 CFR Part 82, Subpart F.

Permit Location

27. 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)

28. 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

Additional Monitoring Requirements

Permit Shield

New Source Review Authorization References

Applicable Requirements Summary

Unit Summary 15

Applicable Requirements Summary 50

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 |
|-------------------------------|--|--------------------------|---------------|--|--|
| ADMINGEN | SRIC ENGINES | N/A | 60III-3 | 40 CFR Part 60, Subpart IIII | No changing attributes. |
| ADMINGEN | SRIC ENGINES | N/A | 63ZZZZ-10 | 40 CFR Part 63, Subpart ZZZZ | No changing attributes. |
| C_FUG | FUGITIVE EMISSION UNITS | N/A | 60DDD-ALL | 40 CFR Part 60, Subpart DDD | No changing attributes. |
| C_FUG | FUGITIVE EMISSION UNITS | N/A | 63FFFF-ALL | 40 CFR Part 63, Subpart FFFF | No changing attributes. |
| CCD81-LOAD | LOADING/UNLOADING OPERATIONS | N/A | R5212-11 | 30 TAC Chapter 115, Loading and Unloading of VOC | No changing attributes. |
| C-VENTGAS | EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS | N/A | R5121-10 | 30 TAC Chapter 115, Vent Gas Controls | Control Device Type = Direct flame incinerator in which the vent gas stream is burned at a temperature or at least 1300° F (704 C). |
| C-VENTGAS | EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS | N/A | R5121-16 | 30 TAC Chapter 115, Vent Gas Controls | Control Device Type = Smokeless flare |
| C-VENTGAS | EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS | N/A | R5121-20 | 30 TAC Chapter 115, Vent Gas Controls | Control Device Type = Vapor recovery system, as defined in 30 TAC § 115.10, other than an afterburner, blast furnace combustion device, boiler, catalytic or direct flame incinerator, carbon adsorption system, chiller, flare or vapor combustor. |
| DREFUSTN | LOADING/UNLOADING OPERATIONS | N/A | R5212-2 | 30 TAC Chapter 115, Loading and Unloading of VOC | No changing attributes. |
| E_FUG | FUGITIVE EMISSION UNITS | N/A | 60DDD-ALL | 40 CFR Part 60, Subpart DDD | No changing attributes. |

Unit Summary

| Unit/Group/ Process ID No. | Unit Type | Group/Inclusive Units | SOP Index No. | Regulation | Requirement Driver |
|-------------------------------|--|--------------------------|---------------|--|--|
| E_FUG | FUGITIVE EMISSION UNITS | N/A | 63FFFF-ALL | 40 CFR Part 63, Subpart FFFF | No changing attributes. |
| E-VENTGAS | EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS | N/A | R5121-10 | 30 TAC Chapter 115, Vent Gas Controls | Control Device Type = Direct flame incinerator in which the vent gas stream is burned at a temperature or at least 1300° F (704 C). |
| E-VENTGAS | EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS | N/A | R5121-16 | 30 TAC Chapter 115, Vent Gas Controls | Control Device Type = Smokeless flare |
| E-VENTGAS | EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS | N/A | R5121-20 | 30 TAC Chapter 115, Vent Gas Controls | Control Device Type = Vapor recovery system, as defined in 30 TAC § 115.10, other than an afterburner, blast furnace combustion device, boiler, catalytic or direct flame incinerator, carbon adsorption system, chiller, flare or vapor combustor. |
| G_FUG | FUGITIVE EMISSION UNITS | N/A | 60VVA-ALL | 40 CFR Part 60, Subpart VVa | No changing attributes. |
| G_FUG | FUGITIVE EMISSION UNITS | N/A | 63H-ALL | 40 CFR Part 63, Subpart H | No changing attributes. |
| GAD03 | STORAGE TANKS/VESSELS | N/A | R5112-14 | 30 TAC Chapter 115, Storage of VOCs | No changing attributes. |
| GBD05 | EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS | N/A | R5121-10 | 30 TAC Chapter 115, Vent Gas Controls | Control Device Type = Direct flame incinerator in which the vent gas stream is burned at a temperature or at least 1300° F (704 C). |
| GBD05 | EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS | N/A | R5121-16 | 30 TAC Chapter 115, Vent Gas Controls | Control Device Type = Smokeless flare |

Unit Summary

| Unit/Group/ Process ID No. | Unit Type | Group/Inclusive Units | SOP Index No. | Regulation | Requirement Driver |
|-------------------------------|--|--------------------------|---------------|---------------------------------------|--|
| GBD05 | EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS | N/A | 63G-5A | 40 CFR Part 63, Subpart G | Electing Control = Electing to control the process vent to the levels required in 40 CFR § 63.113(a)(1) without calculating the TRE index value., Control Device = Flare |
| GBD05 | EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS | N/A | 63G-5B | 40 CFR Part 63, Subpart G | Electing Control = Electing to control the process vent to the levels required in 40 CFR § 63.113(a)(2) without calculating the TRE index value, Control Device = Thermal incinerator. |
| GBX02 | EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS | N/A | R1111-1 | 30 TAC Chapter 111, Visible Emissions | No changing attributes. |
| GED03 | EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS | N/A | R5121-3 | 30 TAC Chapter 115, Vent Gas Controls | No changing attributes. |
| GED03 | EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS | N/A | 63G-2A | 40 CFR Part 63, Subpart G | Electing Control = Electing to control the process vent to the levels required in 40 CFR § 63.113(a)(1) without calculating the TRE index value., Control Device = Flare |
| GED03 | EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS | N/A | 63G-2B | 40 CFR Part 63, Subpart G | Electing Control = Electing to control the process vent to the levels required in 40 CFR § 63.113(a)(2) without calculating the TRE index value, Control Device = Thermal incinerator. |
| GFFLARE01 | FLARES | N/A | R1111-2 | 30 TAC Chapter 111, Visible Emissions | No changing attributes. |
| GFFLARE01 | FLARES | N/A | 60A-1 | 40 CFR Part 60, Subpart A | Flare Exit Velocity = Flare exit |

Unit Summary

| Unit/Group/ Process ID No. | Unit Type | Group/Inclusive Units | SOP Index No. | Regulation | Requirement Driver |
|-------------------------------|-------------------|--------------------------|---------------|---------------------------|---|
| | | | | | velocity is less than 60 ft/s (18.3 m/sec) |
| GFFLARE01 | FLARES | N/A | 60A-2 | 40 CFR Part 60, Subpart A | Flare Exit Velocity = Flare exit velocity is greater than or equal to 60 ft/s (18.3 m/sec) but less than 400 ft/s (122 m/sec)., Heating Value of Gas = Heating value is less than or equal to 1000 Btu/scf (37.3 MJ/scm). |
| GFFLARE01 | FLARES | N/A | 60A-3 | 40 CFR Part 60, Subpart A | Flare Exit Velocity = Flare exit velocity is greater than or equal to 60 ft/s (18.3 m/sec) but less than 400 ft/s (122 m/sec)., Heating Value of Gas = Heating value is greater than 1000 Btu/scf (37.3 MJ/scm) |
| GFFLARE01 | FLARES | N/A | 63A-1 | 40 CFR Part 63, Subpart A | Flare Exit Velocity = Flare exit velocity is less than 60 ft/s (18.3 m/sec) |
| GFFLARE01 | FLARES | N/A | 63A-2 | 40 CFR Part 63, Subpart A | Flare Exit Velocity = Flare exit velocity is greater than or equal to 60 ft/s (18.3 m/sec) but less than 400 ft/s (122 m/sec)., Heating Value of Gas = Heating value is less than or equal to 1000 Btu/scf (37.3 MJ/scm). |
| GFFLARE01 | FLARES | N/A | 63A-3 | 40 CFR Part 63, Subpart A | Flare Exit Velocity = Flare exit velocity is greater than or equal to 60 ft/s (18.3 m/sec) but less than 400 ft/s (122 m/sec)., Heating Value of Gas = Heating value is greater than 1000 Btu/scf (37.3 MJ/scm). |
| GLYUNLOAD | LOADING/UNLOADING | N/A | R5212-2 | 30 TAC Chapter 115, | No changing attributes. |

Unit Summary

| Unit/Group/ Process ID No. | Unit Type | Group/Inclusive Units | SOP Index No. | Regulation | Requirement Driver |
|-------------------------------|---|---|---------------|--|---|
| | OPERATIONS | | | Loading and Unloading of VOC | |
| GLYUNLOAD | LOADING/UNLOADING OPERATIONS | N/A | 63EEEE-1 | 40 CFR Part 63, Subpart EEEE | No changing attributes. |
| GRPBLRSTK | EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS | BOILER A, BOILER B, BOILER C | R1111-1 | 30 TAC Chapter 111, Visible Emissions | No changing attributes. |
| GRPBOILER | BOILERS/STEAM GENERATORS/STEAM GENERATING UNITS | USSG01A, USSG01B, USSG01C | 60Db-1 | 40 CFR Part 60, Subpart Db | Heat Input Gas/Oil = The facility combusts natural gas or distillate oil in excess of 30% of the heat input from the combustion of all fuels. |
| GRPBOILER | BOILERS/STEAM GENERATORS/STEAM GENERATING UNITS | USSG01A, USSG01B, USSG01C | 60Db-2 | 40 CFR Part 60, Subpart Db | Heat Input Gas/Oil = The facility does not combust natural gas or distillate oil in excess of 30 % of the heat input from the combustion of all fuels., D-Series Fuel Type #2 = Gaseous fossil fuel other than natural gas and coal-derived synthetic fuel meeting the definition of natural gas. |
| GRPBOILER | BOILERS/STEAM GENERATORS/STEAM GENERATING UNITS | USSG01A, USSG01B, USSG01C | 63DDDDD-1 | 40 CFR Part 63, Subpart DDDDD | No changing attributes. |
| GRPBOILER | BOILERS/STEAM GENERATORS/STEAM GENERATING UNITS | USSG01A, USSG01B, USSG01C | 63DDDDD-2 | 40 CFR Part 63, Subpart DDDDD | No changing attributes. |
| GRPCPEBPV | EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS | CADR04A, CADR04B, CCD21, CCD22, CCD23, CCD24, CCGT01, CCR01, CDFIL01, | R5121-10 | 30 TAC Chapter 115, Vent Gas Controls | Control Device Type = Direct flame incinerator in which the vent gas stream is burned at a temperature or at least 1300° F (704 C). |

Unit Summary

| Unit/Group/ Process ID No. | Unit Type | Group/Inclusive Units | SOP Index No. | Regulation | Requirement Driver |
|-------------------------------|--|---|---------------|--|--|
| | | CEC01A, CED01, CED02, CED03, CEE01, CEFIL01, CEMEM01A | | | |
| GRPCPEBPV | EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS | CADR04A, CADR04B, CCD21, CCD22, CCD23, CCD24, CCGT01, CCR01, CDFIL01, CEC01A, CED01, CED02, CED03, CEE01, CEFIL01, CEMEM01A | R5121-16 | 30 TAC Chapter 115, Vent Gas Controls | Control Device Type = Smokeless flare |
| GRPCPEBPV | EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS | CADR04A, CADR04B, CCD21, CCD22, CCD23, CCD24, CCGT01, CCR01, CDFIL01, CEC01A, CED01, CED02, CED03, CEE01, CEFIL01, CEMEM01A | R5121-20 | 30 TAC Chapter 115, Vent Gas Controls | Control Device Type = Vapor recovery system, as defined in 30 TAC § 115.10, other than an afterburner, blast furnace combustion device, boiler, catalytic or direct flame incinerator, carbon adsorption system, chiller, flare or vapor combustor. |
| GRPCPEBPV | CHEMICAL MANUFACTURING PROCESS | CADR04A, CADR04B, CCD21, CCD22, CCD23, CCD24, CCGT01, CCR01, CDFIL01, CEC01A, CED01, CED02, CED03, CEE01, CEFIL01, CEMEM01A | 63FFFF-10 | 40 CFR Part 63, Subpart FFFF | Negative Pressure = The closed vent system is operated and maintained at atmospheric pressure., Assessment Waiver = The Administrator has not granted a waiver of compliance assessment or no waiver has been requested., Prior Eval = Data from a prior evaluation or assessment is not used., Bypass Line = No bypass lines., Designated HAL = The |

Unit Summary

| Unit/Group/ Process ID No. | Unit Type | Group/Inclusive Units | SOP Index No. | Regulation | Requirement Driver |
|-------------------------------|--------------------------------------|---|---------------|---------------------------------|--|
| | | | | | emission stream is not designated as halogenated., Vent Emission Control = Reduce uncontrolled organic HAP emissions from all batch process vents within the process by venting through a closed-vent system to a flare per Table 2.1.c., Determined HAL = The emission stream is determined not to be halogenated. |
| GRPCPEBPV | CHEMICAL MANUFACTURING PROCESS | CADR04A, CADR04B, CCD21, CCD22, CCD23, CCD24, CCGT01, CCR01, CDFIL01, CEC01A, CED01, CED02, CED03, CEE01, CEFIL01, CEMEM01A | 63FFFF-11 | 40 CFR Part 63, Subpart FFFF | Bypass Line = No bypass lines., Formaldehyde = The stream does not contain formaldehyde., Small Device = A small control device (defined in § 63.2550) is not being used., Meets 63.988(b)(2) = The control device does not meet the criteria in § 63.988(b)(2)., Negative Pressure = The closed vent system is operated and maintained at atmospheric pressure., Designated HAL = The emission stream is not designated as halogenated., CEMS = A CEMS is not used., SS Device Type = Incinerator other than a catalytic incinerator., Determined HAL = The emission stream is determined not to be halogenated., Prior Eval = The data from a prior evaluation or assessment is not used., Alt 63SS Mon Parameters = Alternate monitoring parameters or requirements have not been approved by the Administrator or have not been requested., Vent |

Unit Summary

| Unit/Group/ Process ID No. | Unit Type | Group/Inclusive Units | SOP Index No. | Regulation | Requirement Driver |
|-------------------------------|--------------------------------------|---|---------------|---------------------------------|---|
| | | | | | Emission Control = Reduce uncontrolled organic HAP emissions from all batch process vents within the process to an outlet concentration of 20 ppmv or less as TOC or total organic HAP by venting to any combination of control devices except a flare., Assessment Waiver = The Administrator has not granted a waiver of compliance assessment or no waiver has been requested. |
| GRPCPEBPV | CHEMICAL MANUFACTURING PROCESS | CADR04A, CADR04B, CCD21, CCD22, CCD23, CCD24, CCGT01, CCR01, CDFIL01, CEC01A, CED01, CED02, CED03, CEE01, CEFIL01, CEMEM01A | 63FFF-12 | 40 CFR Part 63, Subpart FFFF | Bypass Line = No bypass lines., Formaldehyde = The stream does not contain formaldehyde., Small Device = A small control device (defined in § 63.2550) is not being used., Meets 63.988(b)(2) = The control device meets the criteria in § 63.988(b)(2)., Negative Pressure = The closed vent system is operated and maintained at atmospheric pressure., Designated HAL = The emission stream is not designated as halogenated., CEMS = A CEMS is not used., SS Device Type = Boiler or process heater with a design heat input capacity equal to or greater than 44 megawatts (MW) or in which all vent streams are introduced with the primary fuel or are used as the primary fuel., Determined HAL = The emission stream is determined not to be halogenated., Prior Eval = The data |

Unit Summary

| Unit/Group/ Process ID No. | Unit Type | Group/Inclusive Units | SOP Index No. | Regulation | Requirement Driver |
|-------------------------------|--|---------------------------|---------------|--|---|
| | | | | | from a prior evaluation or assessment is not used., Alt 63SS Mon Parameters = Alternate monitoring parameters or requirements have not been approved by the Administrator or have not been requested., Vent Emission Control = Reduce uncontrolled organic HAP emissions from all batch process vents within the process to an outlet concentration of 20 ppmv or less as TOC or total organic HAP by venting to any combination of control devices except a flare., HAL Device Type = No halogen scrubber or other halogen reduction device is used., Assessment Waiver = The Administrator has not granted a waiver of compliance assessment or no waiver has been requested. |
| GRPCPECPV | EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS | CCT01, CDD03, CEMEM01B | R5121-10 | 30 TAC Chapter 115, Vent Gas Controls | Control Device Type = Direct flame incinerator in which the vent gas stream is burned at a temperature or at least 1300° F (704 C). |
| GRPCPECPV | EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS | CCT01, CDD03, CEMEM01B | R5121-16 | 30 TAC Chapter 115, Vent Gas Controls | Control Device Type = Smokeless flare |
| GRPCPECPV | EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS | CCT01, CDD03, CEMEM01B | R5121-20 | 30 TAC Chapter 115, Vent Gas Controls | Control Device Type = Vapor recovery system, as defined in 30 TAC § 115.10, other than an afterburner, blast furnace combustion device, boiler, catalytic |

Unit Summary

| Unit/Group/ Process ID No. | Unit Type | Group/Inclusive Units | SOP Index No. | Regulation | Requirement Driver |
|-------------------------------|--|---------------------------|---------------|---------------------------------|--|
| | | | | | or direct flame incinerator, carbon adsorption system, chiller, flare or vapor combustor. |
| GRPCPECPV | EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS | CCT01, CDD03, CEMEM01B | 63FFFF-1 | 40 CFR Part 63, Subpart FFFF | Emission Standard = The TRE index is not maintained above the threshold (5.0 for a new source and 1.9 for an existing source) and a flare is being used for control., Determined Hal = The emission stream is determined to be non-halogenated., Designated Grp1 = The emission stream is designated as Group 1., Negative Pressure = The closed vent system is operated and maintained at or above atmospheric pressure., Designated Hal = The emission stream is not designated as halogenated., Prior Eval = The data from a prior evaluation or assessment is not used., Bypass Line = No bypass lines., Assessment Waiver = The Administrator has not granted a waiver of compliance assessment or a waiver has not been requested. |
| GRPCPECPV | EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS | CCT01, CDD03, CEMEM01B | 63FFFF-2 | 40 CFR Part 63, Subpart FFFF | Emission Standard = The TRE index is not maintained above the threshold (5.0 for a new source and 1.9 for an existing source) and a non-flare CD is being used to meet 98% reduction per § 63.2455(a) - Table 1.1.a.i., Alt 63SS Mon Parameters = Alternate monitoring parameters or requirements have |

Unit Summary

| Unit/Group/ Process ID No. | Unit Type | Group/Inclusive Units | SOP Index No. | Regulation | Requirement Driver |
|-------------------------------|-------------------------------|---------------------------|---------------|---------------------------------|--|
| | | | | | not been approved by the Administrator or have not been requested., Formaldehyde = The stream does not contain formaldehyde., Bypass Line = No bypass lines., Prior Eval = The data from a prior evaluation or assessment is not used., CEMS = A CEMS is not used., Designated Grp1 = The emission stream is designated as Group 1., Small Device = A small control device (defined in § 63.2550) is not being used., 1257A1 = No design evaluation as specified in § 63.1257(a)(1) is being conducted., Designated Hal = The emission stream is not designated as halogenated., Negative Pressure = The closed vent system is operated and maintained at or above atmospheric pressure., SS Device Type = Incinerator other than a catalytic incinerator., Meets 63.988(b)(2) = The control device does not meet the criteria in § 63.985(b)(2)., Determined Hal = The emission stream is determined to be non-halogenated., Assessment Waiver = The Administrator has not granted a waiver of compliance assessment or no waiver is requested. |
| GRPCPECPV | EMISSION POINTS/STATIONARY | CCT01, CDD03, CEMEM01B | 63FFFF-3 | 40 CFR Part 63, Subpart FFFF | Emission Standard = The TRE index is not maintained above the |

Unit Summary

| Unit/Group/ Process ID No. | Unit Type | Group/Inclusive Units | SOP Index No. | Regulation | Requirement Driver |
|-------------------------------|---------------------|--------------------------|---------------|------------|---|
| | VENTS/PROCESS VENTS | | | | threshold (5.0 for a new source and 1.9 for an existing source) and a non-flare CD is being used to meet 98% reduction per § 63.2455(a) - Table 1.1.a.i., Alt 63SS Mon Parameters = Alternate monitoring parameters or requirements have not been approved by the Administrator or have not been requested., Formaldehyde = The stream does not contain formaldehyde., Bypass Line = No bypass lines., Prior Eval = The data from a prior evaluation or assessment is not used., CEMS = A CEMS is not used., Designated Grp1 = The emission stream is designated as Group 1., Small Device = A small control device (defined in § 63.2550) is not being used., 1257A1 = No design evaluation as specified in § 63.1257(a)(1) is being conducted., Designated Hal = The emission stream is not designated as halogenated., Negative Pressure = The closed vent system is operated and maintained at or above atmospheric pressure., SS Device Type = Boiler or process heater with a design heat input capacity equal to or greater than 44 megawatts (MW) or in which all vent streams are introduced with the primary fuel or are used as the primary fuel., |

Unit Summary

| Unit/Group/ Process ID No. | Unit Type | Group/Inclusive Units | SOP Index No. | Regulation | Requirement Driver |
|-------------------------------|--|--|---------------|--|--|
| | | | | | Meets 63.988(b)(2) = The control device meets criteria in § 63.985(b)(2)., Determined Hal = The emission stream is determined to be non-halogenated., Assessment Waiver = The Administrator has not granted a waiver of compliance assessment or no waiver is requested. |
| GRPEMPEBPV | EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS | EADR04A, EADR04B, EADR05A, EADR05B, EADR06, EADR07A, EADR07B, EADR09, EADR10, ECD21, ECD22, ECD23, ECD24, ECGT01, ECR01, EDFIL01, EEC01A, EED01, EED02, EED03, EEE01, EEFIL01, EEMEM01A | R5121-10 | 30 TAC Chapter 115, Vent Gas Controls | Control Device Type = Direct flame incinerator in which the vent gas stream is burned at a temperature or at least 1300° F (704 C). |
| GRPEMPEBPV | EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS | EADR04A, EADR04B, EADR05A, EADR05B, EADR06, EADR07A, EADR07B, EADR09, EADR10, ECD21, ECD22, ECD23, ECD24, ECGT01, ECR01, EDFIL01, EEC01A, EED01, | R5121-16 | 30 TAC Chapter 115, Vent Gas Controls | Control Device Type = Smokeless flare |

Unit Summary

| Unit/Group/ Process ID No. | Unit Type | Group/Inclusive Units | SOP Index No. | Regulation | Requirement Driver |
|-------------------------------|--|--|---------------|--|--|
| | | EED02, EED03, EEE01, EEFIL01, EEMEM01A | | | |
| GRPEMPEBPV | EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS | EADR04A, EADR04B, EADR05A, EADR05B, EADR06, EADR07A, EADR07B, EADR09, EADR10, ECD21, ECD22, ECD23, ECD24, ECGTO1, ECR01, EDFIL01, EEC01A, EED01, EED02, EED03, EEE01, EEFIL01, EEMEM01A | R5121-20 | 30 TAC Chapter 115, Vent Gas Controls | Control Device Type = Vapor recovery system, as defined in 30 TAC § 115.10, other than an afterburner, blast furnace combustion device, boiler, catalytic or direct flame incinerator, carbon adsorption system, chiller, flare or vapor combustor. |
| GRPEMPEBPV | CHEMICAL MANUFACTURING PROCESS | EADR04A, EADR04B, EADR05A, EADR05B, EADR06, EADR07A, EADR07B, EADR09, EADR10, ECD21, ECD22, ECD23, ECD24, ECGTO1, ECR01, EDFIL01, EEC01A, EED01, EED02, EED03, EEE01, EEFIL01, EEMEM01A | 63FFFF-10 | 40 CFR Part 63, Subpart FFFF | Negative Pressure = The closed vent system is operated and maintained at atmospheric pressure., Assessment Waiver = The Administrator has not granted a waiver of compliance assessment or no waiver has been requested., Prior Eval = Data from a prior evaluation or assessment is not used., Bypass Line = No bypass lines., Designated HAL = The emission stream is not designated as halogenated., Vent Emission Control = Reduce uncontrolled organic HAP emissions from all batch process vents within the process by venting through a |

Unit Summary

| Unit/Group/ Process ID No. | Unit Type | Group/Inclusive Units | SOP Index No. | Regulation | Requirement Driver |
|-------------------------------|--------------------------------------|--|---------------|---------------------------------|--|
| | | | | | closed-vent system to a flare per Table 2.1.c., Determined HAL = The emission stream is determined not to be halogenated. |
| GRPEMPEBPV | CHEMICAL MANUFACTURING PROCESS | EADR04A, EADR04B, EADR05A, EADR05B, EADR06, EADR07A, EADR07B, EADR09, EADR10, ECD21, ECD22, ECD23, ECD24, ECGTO1, ECR01, EDFIL01, EEC01A, EED01, EED02, EED03, EEE01, EEFIL01, EEMEM01A | 63FFFF-11 | 40 CFR Part 63, Subpart FFFF | Bypass Line = No bypass lines., Formaldehyde = The stream does not contain formaldehyde., Small Device = A small control device (defined in § 63.2550) is not being used., Meets 63.988(b)(2) = The control device does not meet the criteria in § 63.988(b)(2)., Negative Pressure = The closed vent system is operated and maintained at atmospheric pressure., Designated HAL = The emission stream is not designated as halogenated., CEMS = A CEMS is not used., SS Device Type = Incinerator other than a catalytic incinerator., Determined HAL = The emission stream is determined not to be halogenated., Prior Eval = The data from a prior evaluation or assessment is not used., Alt 63SS Mon Parameters = Alternate monitoring parameters or requirements have not been approved by the Administrator or have not been requested., Vent Emission Control = Reduce uncontrolled organic HAP emissions from all batch process vents within the process to an outlet concentration of 20 ppmv or less as TOC or total organic HAP by venting |

Unit Summary

| Unit/Group/ Process ID No. | Unit Type | Group/Inclusive Units | SOP Index No. | Regulation | Requirement Driver |
|-------------------------------|--------------------------------------|--|---------------|---------------------------------|--|
| | | | | | to any combination of control devices except a flare., Assessment Waiver = The Administrator has not granted a waiver of compliance assessment or no waiver has been requested. |
| GRPEMPEBPV | CHEMICAL MANUFACTURING PROCESS | EADR04A, EADR04B, EADR05A, EADR05B, EADR06, EADR07A, EADR07B, EADR09, EADR10, ECD21, ECD22, ECD23, ECD24, ECGTO1, ECR01, EDFIL01, EEC01A, EED01, EED02, EED03, EEE01, EEFIL01, EEMEM01A | 63FFFF-12 | 40 CFR Part 63, Subpart FFFF | Bypass Line = No bypass lines., Formaldehyde = The stream does not contain formaldehyde., Small Device = A small control device (defined in § 63.2550) is not being used., Meets 63.988(b)(2) = The control device meets the criteria in § 63.988(b)(2)., Negative Pressure = The closed vent system is operated and maintained at atmospheric pressure., Designated HAL = The emission stream is not designated as halogenated., CEMS = A CEMS is not used., SS Device Type = Boiler or process heater with a design heat input capacity equal to or greater than 44 megawatts (MW) or in which all vent streams are introduced with the primary fuel or are used as the primary fuel., Determined HAL = The emission stream is determined not to be halogenated., Prior Eval = The data from a prior evaluation or assessment is not used., Alt 63SS Mon Parameters = Alternate monitoring parameters or requirements have not been approved by the Administrator or |

Unit Summary

| Unit/Group/ Process ID No. | Unit Type | Group/Inclusive Units | SOP Index No. | Regulation | Requirement Driver |
|-------------------------------|--|--------------------------|---------------|---------------------------------------|--|
| | | | | | have not been requested., Vent Emission Control = Reduce uncontrolled organic HAP emissions from all batch process vents within the process to an outlet concentration of 20 ppmv or less as TOC or total organic HAP by venting to any combination of control devices except a flare., Assessment Waiver = The Administrator has not granted a waiver of compliance assessment or no waiver has been requested. |
| GRPEMPECPV | EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS | ECT01, EEMEM01B | R5121-10 | 30 TAC Chapter 115, Vent Gas Controls | Control Device Type = Direct flame incinerator in which the vent gas stream is burned at a temperature or at least 1300° F (704 C). |
| GRPEMPECPV | EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS | ECT01, EEMEM01B | R5121-16 | 30 TAC Chapter 115, Vent Gas Controls | Control Device Type = Smokeless flare |
| GRPEMPECPV | EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS | ECT01, EEMEM01B | R5121-20 | 30 TAC Chapter 115, Vent Gas Controls | Control Device Type = Vapor recovery system, as defined in 30 TAC § 115.10, other than an afterburner, blast furnace combustion device, boiler, catalytic or direct flame incinerator, carbon adsorption system, chiller, flare or vapor combustor. |
| GRPEMPECPV | EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS | ECT01, EEMEM01B | 63FFFF-1 | 40 CFR Part 63, Subpart FFFF | Emission Standard = The TRE index is not maintained above the threshold (5.0 for a new source and 1.9 for an existing source) and a flare is being used for control., |

Unit Summary

| Unit/Group/ Process ID No. | Unit Type | Group/Inclusive Units | SOP Index No. | Regulation | Requirement Driver |
|-------------------------------|--|--------------------------|---------------|---------------------------------|---|
| | | | | | Determined Hal = The emission stream is determined to be non-halogenated., Designated Grp1 = The emission stream is designated as Group 1., Negative Pressure = The closed vent system is operated and maintained at or above atmospheric pressure., Designated Hal = The emission stream is not designated as halogenated., Prior Eval = The data from a prior evaluation or assessment is not used., Bypass Line = No bypass lines., Assessment Waiver = The Administrator has not granted a waiver of compliance assessment or a waiver has not been requested. |
| GRPEMPECPV | EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS | ECT01, EEMEM01B | 63FFFF-2 | 40 CFR Part 63, Subpart FFFF | Emission Standard = The TRE index is not maintained above the threshold (5.0 for a new source and 1.9 for an existing source) and a non-flare CD is being used to meet 98% reduction per § 63.2455(a) - Table 1.1.a.i., Alt 63SS Mon Parameters = Alternate monitoring parameters or requirements have not been approved by the Administrator or have not been requested., Formaldehyde = The stream does not contain formaldehyde., Bypass Line = No bypass lines., Prior Eval = The data from a prior evaluation or assessment is not used., CEMS = A CEMS is not used., Designated |

Unit Summary

| Unit/Group/ Process ID No. | Unit Type | Group/Inclusive Units | SOP Index No. | Regulation | Requirement Driver |
|-------------------------------|--|--------------------------|---------------|---------------------------------|--|
| | | | | | <p>Grp1 = The emission stream is designated as Group 1., Small Device = A small control device (defined in § 63.2550) is not being used., 1257A1 = No design evaluation as specified in § 63.1257(a)(1) is being conducted., Designated Hal = The emission stream is not designated as halogenated., Negative Pressure = The closed vent system is operated and maintained at or above atmospheric pressure., SS Device Type = Incinerator other than a catalytic incinerator., Meets 63.988(b)(2) = The control device does not meet the criteria in § 63.985(b)(2)., Determined Hal = The emission stream is determined to be non-halogenated., Assessment Waiver = The Administrator has not granted a waiver of compliance assessment or no waiver is requested.</p> |
| GRPEMPECPV | EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS | ECT01, EEMEM01B | 63FFFF-3 | 40 CFR Part 63, Subpart FFFF | <p>Emission Standard = The TRE index is not maintained above the threshold (5.0 for a new source and 1.9 for an existing source) and a non-flare CD is being used to meet 98% reduction per § 63.2455(a) - Table 1.1.a.i., Alt 63SS Mon Parameters = Alternate monitoring parameters or requirements have not been approved by the Administrator or have not been</p> |

Unit Summary

| Unit/Group/ Process ID No. | Unit Type | Group/Inclusive Units | SOP Index No. | Regulation | Requirement Driver |
|-------------------------------|-----------|--------------------------|---------------|------------|--|
| | | | | | <p>requested., Formaldehyde = The stream does not contain formaldehyde., Bypass Line = No bypass lines., Prior Eval = The data from a prior evaluation or assessment is not used., CEMS = A CEMS is not used., Designated Grp1 = The emission stream is designated as Group 1., Small Device = A small control device (defined in § 63.2550) is not being used., 1257A1 = No design evaluation as specified in § 63.1257(a)(1) is being conducted., Designated Hal = The emission stream is not designated as halogenated., Negative Pressure = The closed vent system is operated and maintained at or above atmospheric pressure., SS Device Type = Boiler or process heater with a design heat input capacity equal to or greater than 44 megawatts (MW) or in which all vent streams are introduced with the primary fuel or are used as the primary fuel., Meets 63.988(b)(2) = The control device meets criteria in § 63.985(b)(2)., Determined Hal = The emission stream is determined to be non-halogenated., Assessment Waiver = The Administrator has not granted a waiver of compliance assessment or no waiver is requested.</p> |

Unit Summary

| Unit/Group/ Process ID No. | Unit Type | Group/Inclusive Units | SOP Index No. | Regulation | Requirement Driver |
|-------------------------------|--|---|---------------|--|-------------------------|
| GRPEMRGGEN | SRIC ENGINES | GUDGEN01, UKDGEN01, UKDGEN02 | 60IIII-2 | 40 CFR Part 60, Subpart IIII | No changing attributes. |
| GRPEMRGGEN | SRIC ENGINES | GUDGEN01, UKDGEN01, UKDGEN02 | 63ZZZZ-10 | 40 CFR Part 63, Subpart ZZZZ | No changing attributes. |
| GRPEQTANK | EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS | ZWTK01, ZWTK02 | R5121-3 | 30 TAC Chapter 115, Vent Gas Controls | No changing attributes. |
| GRPEXTRUD | EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS | CLDC03, ELDC03 | R5121-4 | 30 TAC Chapter 115, Vent Gas Controls | No changing attributes. |
| GRPFURNACE | CHEMICAL MANUFACTURING PROCESS | FA-F01, FB-F01, FC-F01, FD-F01, FE-F01, FF-F01, FG-F01, FH-F01 | 63YY-1 | 40 CFR Part 63, Subpart YY | No changing attributes. |
| GRPFURNSTK | EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS | OFAF01, OFBF01, OFCF01, OFDF01, OFEF01, OFFF01, OFGF01, OFHF01 | R1111-1 | 30 TAC Chapter 111, Visible Emissions | No changing attributes. |
| GRPFWP | SRIC ENGINES | ZFP02B, ZFP02C | 60IIII-1 | 40 CFR Part 60, Subpart IIII | No changing attributes. |
| GRPFWP | SRIC ENGINES | ZFP02B, ZFP02C | 63ZZZZ-10 | 40 CFR Part 63, Subpart ZZZZ | No changing attributes. |
| GRPGLYLOAD | LOADING/UNLOADING OPERATIONS | RLOAD-GB, RLOAD-HG, RLOAD-MEG, TLOAD-MEG | R5212-4 | 30 TAC Chapter 115, Loading and Unloading of VOC | No changing attributes. |
| GRPGLYLOAD | LOADING/UNLOADING OPERATIONS | RLOAD-GB, RLOAD-HG, RLOAD-MEG, | 63G-10 | 40 CFR Part 63, Subpart G | No changing attributes. |

Unit Summary

| Unit/Group/ Process ID No. | Unit Type | Group/Inclusive Units | SOP Index No. | Regulation | Requirement Driver |
|-------------------------------|--|---|---------------|--|--|
| | | TLOAD-MEG | | | |
| GRPGLYTANK | STORAGE TANKS/VESSELS | GDTK01, GETK01, GETK02A, GETK02B | 63G-1 | 40 CFR Part 63, Subpart G | No changing attributes. |
| GRPGRANULE | EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS | CDDCO4, CDFAN01, CLDC01, EDDCO4, EDFAN01, ELDC01 | R5121-4 | 30 TAC Chapter 115, Vent Gas Controls | No changing attributes. |
| GRPHFOTANK | STORAGE TANKS/VESSELS | ZTTK06A, ZTTK06B | R5112-21 | 30 TAC Chapter 115, Storage of VOCs | Control Device Type = Flare |
| GRPHFOTANK | STORAGE TANKS/VESSELS | ZTTK06A, ZTTK06B | R5112-22 | 30 TAC Chapter 115, Storage of VOCs | Control Device Type = Direct-flame incinerator |
| GRPHFOTANK | STORAGE TANKS/VESSELS | ZTTK06A, ZTTK06B | R5112-25 | 30 TAC Chapter 115, Storage of VOCs | Control Device Type = Other control device |
| GRPHFOTANK | STORAGE TANKS/VESSELS | ZTTK06A, ZTTK06B | 63YY-BLR | 40 CFR Part 63, Subpart YY | Control Device Type: Steam Generating Unit (Boiler) |
| GRPHFOTANK | STORAGE TANKS/VESSELS | ZTTK06A, ZTTK06B | 63YY-INC | 40 CFR Part 63, Subpart YY | Control Device Type: Thermal Incinerator |
| GRPHFOTANK | STORAGE TANKS/VESSELS | ZTTK06A, ZTTK06B | 63YY-FL | 40 CFR Part 63, Subpart YY | Control Device Type: Flare |
| GRPHON-PV | EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS | GBD02, GDD07, GDE11 | R5121-10 | 30 TAC Chapter 115, Vent Gas Controls | Control Device Type = Direct flame incinerator in which the vent gas stream is burned at a temperature or at least 1300° F (704 C). |
| GRPHON-PV | EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS | GBD02, GDD07, GDE11 | R5121-16 | 30 TAC Chapter 115, Vent Gas Controls | Control Device Type = Smokeless flare |
| GRPHON-PV | EMISSION POINTS/STATIONARY | GBD02, GDD07, GDE11 | 63G-3A | 40 CFR Part 63, Subpart G | Electing Control = Electing to control the process vent to the levels |

Unit Summary

| Unit/Group/ Process ID No. | Unit Type | Group/Inclusive Units | SOP Index No. | Regulation | Requirement Driver |
|-------------------------------|--|---|---------------|--|--|
| | VENTS/PROCESS VENTS | | | | required in 40 CFR § 63.113(a)(1) without calculating the TRE index value., Control Device = Flare |
| GRPHON-PV | EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS | GBD02, GDD07, GDE11 | 63G-3B | 40 CFR Part 63, Subpart G | Electing Control = Electing to control the process vent to the levels required in 40 CFR § 63.113(a)(2) without calculating the TRE index value, Control Device = Thermal incinerator. |
| GRPLOADOUT | EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS | CMDC01, CPFAN01, EMDC01, EPFAN01 | R5121-4 | 30 TAC Chapter 115, Vent Gas Controls | No changing attributes. |
| GRPPELLET | EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS | CMFAN01, CMFAN02, EMFAN01, EMFAN02 | R5121-4 | 30 TAC Chapter 115, Vent Gas Controls | No changing attributes. |
| GRPSKIMMER | VOLATILE ORGANIC COMPOUND WATER SEPARATORS | ZWFOS01, ZWFOS02 | R5131-2 | 30 TAC Chapter 115, Water Separation | No changing attributes. |
| GRPUNLOAD | LOADING/UNLOADING OPERATIONS | DMSUNLOAD, RLUNLOAD-A, RLUNLOAD-B, TKUNLOAD-A, TKUNLOAD-B | R5212-3 | 30 TAC Chapter 115, Loading and Unloading of VOC | No changing attributes. |
| G-VENTGAS | EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS | N/A | R5121-10 | 30 TAC Chapter 115, Vent Gas Controls | Control Device Type = Direct flame incinerator in which the vent gas stream is burned at a temperature or at least 1300° F (704 C). |
| G-VENTGAS | EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS | N/A | R5121-16 | 30 TAC Chapter 115, Vent Gas Controls | Control Device Type = Smokeless flare |

Unit Summary

| Unit/Group/ Process ID No. | Unit Type | Group/Inclusive Units | SOP Index No. | Regulation | Requirement Driver |
|-------------------------------|--|--------------------------|---------------|--|--|
| MEOHUNLOAD | LOADING/UNLOADING OPERATIONS | N/A | R5212-3 | 30 TAC Chapter 115, Loading and Unloading of VOC | No changing attributes. |
| MEOHUNLOAD | LOADING/UNLOADING OPERATIONS | N/A | 63EEEE-1 | 40 CFR Part 63, Subpart EEEE | No changing attributes. |
| O_FUG | FUGITIVE EMISSION UNITS | N/A | 60VVA-ALL | 40 CFR Part 60, Subpart VVa | No changing attributes. |
| O_FUG | FUGITIVE EMISSION UNITS | N/A | 63YY-ALL | 40 CFR Part 63, Subpart YY | No changing attributes. |
| O-REGEN | EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS | N/A | R5121-5 | 30 TAC Chapter 115, Vent Gas Controls | No changing attributes. |
| O-VENTGAS | EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS | N/A | R5121-10 | 30 TAC Chapter 115, Vent Gas Controls | Control Device Type = Direct flame incinerator in which the vent gas stream is burned at a temperature or at least 1300° F (704 C). |
| O-VENTGAS | EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS | N/A | R5121-16 | 30 TAC Chapter 115, Vent Gas Controls | Control Device Type = Smokeless flare |
| O-VENTGAS | EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS | N/A | R5121-20 | 30 TAC Chapter 115, Vent Gas Controls | Control Device Type = Vapor recovery system, as defined in 30 TAC § 115.10, other than an afterburner, blast furnace combustion device, boiler, catalytic or direct flame incinerator, carbon adsorption system, chiller, flare or vapor combustor. |
| PE-REGEN | EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS | N/A | R5121-3 | 30 TAC Chapter 115, Vent Gas Controls | No changing attributes. |

Unit Summary

| Unit/Group/ Process ID No. | Unit Type | Group/Inclusive Units | SOP Index No. | Regulation | Requirement Driver |
|-------------------------------|---------------------------------------|--------------------------|---------------|--------------------------------|--|
| PROEXTRUD | POLYMER MANUFACTURING PROCESSES | N/A | 60DDD-02 | 40 CFR Part 60, Subpart DDD | No changing attributes. |
| PROGRANULE | POLYMER MANUFACTURING PROCESSES | N/A | 60DDD-02 | 40 CFR Part 60, Subpart DDD | No changing attributes. |
| PROLOADOUT | POLYMER MANUFACTURING PROCESSES | N/A | 60DDD-02 | 40 CFR Part 60, Subpart DDD | No changing attributes. |
| PROMEGCMPU | CHEMICAL MANUFACTURING PROCESS | N/A | 63F-1 | 40 CFR Part 63, Subpart F | No changing attributes. |
| PROPELLET | POLYMER MANUFACTURING PROCESSES | N/A | 60DDD-02 | 40 CFR Part 60, Subpart DDD | No changing attributes. |
| PRO-RJT01 | TREATMENT PROCESS | N/A | 61FF-2 | 40 CFR Part 61, Subpart FF | Continuous Monitoring = The wastewater treatment system unit process parameters are continuously monitored to indicate proper system operation., Closed- Vent System and Control Device = A closed-vent system and control device is used., AMOC = No alternate means of compliance (AMOC) to meet the requirements of 40 CFR § 61.349 for a closed-vent system and control device is used., By-Pass Line = The closed-vent system does not contain a by-pass line that could divert the vent stream away from the control device., Engineering Calculations = |

Unit Summary

| Unit/Group/ Process ID No. | Unit Type | Group/Inclusive Units | SOP Index No. | Regulation | Requirement Driver |
|-------------------------------|-------------------|--------------------------|---------------|----------------------------|---|
| | | | | | Performance tests are used show that the control device achieves its emission limitation., Control Device Type/Operation = Thermal vapor incinerator with a reduction of organics being greater than or equal to 95 weight percent., Fuel Gas System = Not all gaseous vent streams from the treatment process or wastewater treatment system are routed to a fuel gas system., Alternate Monitoring Parameters = Alternate monitoring parameters or requirements have not been approved by the Administrator or have not been requested. |
| PRO-RJT01 | TREATMENT PROCESS | N/A | 61FF-3 | 40 CFR Part 61, Subpart FF | Continuous Monitoring = Samples of the waste stream exiting the treatment process are collected monthly and analyzed for benzene concentration., Closed-Vent System and Control Device = A closed-vent system and control device is used., AMOC = No alternate means of compliance (AMOC) to meet the requirements of 40 CFR § 61.349 for a closed-vent system and control device is used., By-Pass Line = The closed-vent system does not contain a by-pass line that could divert the vent stream away from the control device., Engineering Calculations = Performance tests are used show that the control device achieves its emission limitation., Control Device |

Unit Summary

| Unit/Group/ Process ID No. | Unit Type | Group/Inclusive Units | SOP Index No. | Regulation | Requirement Driver |
|-------------------------------|-------------------|--------------------------|---------------|----------------------------|---|
| | | | | | Type/Operation = Thermal vapor incinerator with a reduction of organics being greater than or equal to 95 weight percent., Fuel Gas System = Not all gaseous vent streams from the treatment process or wastewater treatment system are routed to a fuel gas system., Alternate Monitoring Parameters = Alternate monitoring parameters or requirements have not been approved by the Administrator or have not been requested. |
| PRO-RJT01 | TREATMENT PROCESS | N/A | 61FF-4 | 40 CFR Part 61, Subpart FF | Continuous Monitoring = The wastewater treatment system unit process parameters are continuously monitored to indicate proper system operation., Closed-Vent System and Control Device = A closed-vent system and control device is used., AMOC = No alternate means of compliance (AMOC) to meet the requirements of 40 CFR § 61.349 for a closed-vent system and control device is used., By-Pass Line = The closed-vent system does not contain a by-pass line that could divert the vent stream away from the control device., Engineering Calculations = Performance tests are used show that the control device achieves its emission limitation., Control Device Type/Operation = Flare., Fuel Gas System = Not all gaseous vent |

Unit Summary

| Unit/Group/ Process ID No. | Unit Type | Group/Inclusive Units | SOP Index No. | Regulation | Requirement Driver |
|-------------------------------|-------------------|--------------------------|---------------|----------------------------|---|
| | | | | | streams from the treatment process or wastewater treatment system are routed to a fuel gas system., Alternate Monitoring Parameters = Alternate monitoring parameters or requirements have not been approved by the Administrator or have not been requested. |
| PRO-RJT01 | TREATMENT PROCESS | N/A | 61FF-5 | 40 CFR Part 61, Subpart FF | Continuous Monitoring = Samples of the waste stream exiting the treatment process are collected monthly and analyzed for benzene concentration., Closed-Vent System and Control Device = A closed-vent system and control device is used., AMOC = No alternate means of compliance (AMOC) to meet the requirements of 40 CFR § 61.349 for a closed-vent system and control device is used., By-Pass Line = The closed-vent system does not contain a by-pass line that could divert the vent stream away from the control device., Engineering Calculations = Performance tests are used show that the control device achieves its emission limitation., Control Device Type/Operation = Flare., Fuel Gas System = Not all gaseous vent streams from the treatment process or wastewater treatment system are routed to a fuel gas system., Alternate Monitoring Parameters = Alternate monitoring parameters or requirements have not been |

Unit Summary

| Unit/Group/ Process ID No. | Unit Type | Group/Inclusive Units | SOP Index No. | Regulation | Requirement Driver |
|-------------------------------|---------------------------------|--------------------------|---------------|---|--|
| | | | | | approved by the Administrator or have not been requested. |
| PRO-RJT01 | TREATMENT PROCESS | N/A | 61FF-6 | 40 CFR Part 61, Subpart FF | Continuous Monitoring = The wastewater treatment system unit process parameters are continuously monitored to indicate proper system operation., Fuel Gas System = All gaseous vent streams from the treatment process or wastewater treatment system are routed to a fuel gas system. |
| PRO-RJT01 | TREATMENT PROCESS | N/A | 61FF-7 | 40 CFR Part 61, Subpart FF | Continuous Monitoring = Samples of the waste stream exiting the treatment process are collected monthly and analyzed for benzene concentration., Fuel Gas System = All gaseous vent streams from the treatment process or wastewater treatment system are routed to a fuel gas system. |
| RAD02 | STORAGE TANKS/VESSELS | N/A | R5112-11 | 30 TAC Chapter 115, Storage of VOCs | No changing attributes. |
| RJT01 | MISCELLANEOUS UNITS | N/A | 60NNN-1 | 40 CFR Part 60, Subpart NNN | No changing attributes. |
| RJT01 | MISCELLANEOUS UNITS | N/A | 65CAR-BLR | 40 CFR Part 65, Subpart D | Control Device Type: Steam Generating Unit (Boiler) |
| RJT01 | MISCELLANEOUS UNITS | N/A | 65CAR-FL | 40 CFR Part 65, Subpart D | Control Device Type: Flare |
| RJT01 | MISCELLANEOUS UNITS | N/A | 65CAR-INC | 40 CFR Part 65, Subpart D | Control Device Type: Thermal Incinerator |
| RLOAD-C3 | LOADING/UNLOADING OPERATIONS | N/A | R5212-7 | 30 TAC Chapter 115, Loading and Unloading of | No changing attributes. |

Unit Summary

| Unit/Group/ Process ID No. | Unit Type | Group/Inclusive Units | SOP Index No. | Regulation | Requirement Driver |
|-------------------------------|--|--------------------------|---------------|--|-------------------------|
| | | | | VOC | |
| RLOAD-HFO | LOADING/UNLOADING OPERATIONS | N/A | R5212-5 | 30 TAC Chapter 115, Loading and Unloading of VOC | No changing attributes. |
| SLOPUNLOAD | LOADING/UNLOADING OPERATIONS | N/A | R5212-3 | 30 TAC Chapter 115, Loading and Unloading of VOC | No changing attributes. |
| SLOPUNLOAD | LOADING/UNLOADING OPERATIONS | N/A | 63EEEE-1 | 40 CFR Part 63, Subpart EEEE | No changing attributes. |
| TLOAD-SLOP | LOADING/UNLOADING OPERATIONS | N/A | R5212-5 | 30 TAC Chapter 115, Loading and Unloading of VOC | No changing attributes. |
| U_FUG | FUGITIVE EMISSION UNITS | N/A | 60DDD-ALL | 40 CFR Part 60, Subpart DDD | No changing attributes. |
| U_FUG | FUGITIVE EMISSION UNITS | N/A | 60VVA-ALL | 40 CFR Part 60, Subpart VVa | No changing attributes. |
| U_FUG | FUGITIVE EMISSION UNITS | N/A | 63FFFF-ALL | 40 CFR Part 63, Subpart FFFF | No changing attributes. |
| U_FUG | FUGITIVE EMISSION UNITS | N/A | 63H-ALL | 40 CFR Part 63, Subpart H | No changing attributes. |
| U_FUG | FUGITIVE EMISSION UNITS | N/A | 63YY-ALL | 40 CFR Part 63, Subpart YY | No changing attributes. |
| U_LAB | EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS | N/A | R5121-3 | 30 TAC Chapter 115, Vent Gas Controls | No changing attributes. |
| UCCT01 | INDUSTRIAL PROCESS COOLING TOWERS | N/A | 63FFFF-CT | 40 CFR Part 63, Subpart FFFF | No changing attributes. |
| UCCT01 | INDUSTRIAL PROCESS COOLING TOWERS | N/A | 63YY-CT | 40 CFR Part 63, Subpart YY | No changing attributes. |

Unit Summary

| Unit/Group/ Process ID No. | Unit Type | Group/Inclusive Units | SOP Index No. | Regulation | Requirement Driver |
|-------------------------------|--|--------------------------|---------------|--|---|
| UFF01A | EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS | N/A | R1111-1 | 30 TAC Chapter 111, Visible Emissions | No changing attributes. |
| UFF01B | EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS | N/A | R1111-1 | 30 TAC Chapter 111, Visible Emissions | No changing attributes. |
| UFFLARE01 | FLARES | N/A | R1111-2 | 30 TAC Chapter 111, Visible Emissions | No changing attributes. |
| UFFLARE02 | FLARES | N/A | R1111-2 | 30 TAC Chapter 111, Visible Emissions | No changing attributes. |
| UFFLARE02 | FLARES | N/A | 60A-1 | 40 CFR Part 60, Subpart A | Flare Exit Velocity = Flare exit velocity is less than 60 ft/s (18.3 m/sec) |
| UFFLARE02 | FLARES | N/A | 60A-2 | 40 CFR Part 60, Subpart A | Flare Exit Velocity = Flare exit velocity is greater than or equal to 60 ft/s (18.3 m/sec) but less than 400 ft/s (122 m/sec)., Heating Value of Gas = Heating value is less than or equal to 1000 Btu/scf (37.3 MJ/scm). |
| UFFLARE02 | FLARES | N/A | 60A-3 | 40 CFR Part 60, Subpart A | Flare Exit Velocity = Flare exit velocity is greater than or equal to 60 ft/s (18.3 m/sec) but less than 400 ft/s (122 m/sec)., Heating Value of Gas = Heating value is greater than 1000 Btu/scf (37.3 MJ/scm) |
| UFFLARE02 | FLARES | N/A | 63A-1 | 40 CFR Part 63, Subpart A | Flare Exit Velocity = Flare exit velocity is less than 60 ft/s (18.3 m/sec) |
| UFFLARE02 | FLARES | N/A | 63A-2 | 40 CFR Part 63, Subpart A | Flare Exit Velocity = Flare exit velocity is greater than or equal to |

Unit Summary

| Unit/Group/ Process ID No. | Unit Type | Group/Inclusive Units | SOP Index No. | Regulation | Requirement Driver |
|-------------------------------|---------------------------------|--------------------------|---------------|--|--|
| | | | | | 60 ft/s (18.3 m/sec) but less than 400 ft/s (122 m/sec)., Heating Value of Gas = Heating value is less than or equal to 1000 Btu/scf (37.3 MJ/scm). |
| UFFLARE02 | FLARES | N/A | 63A-3 | 40 CFR Part 63, Subpart A | Flare Exit Velocity = Flare exit velocity is greater than or equal to 60 ft/s (18.3 m/sec) but less than 400 ft/s (122 m/sec)., Heating Value of Gas = Heating value is greater than 1000 Btu/scf (37.3 MJ/scm). |
| WASHUNLOAD | LOADING/UNLOADING OPERATIONS | N/A | R5212-2 | 30 TAC Chapter 115, Loading and Unloading of VOC | No changing attributes. |
| WASHUNLOAD | LOADING/UNLOADING OPERATIONS | N/A | 63EEEE-1 | 40 CFR Part 63, Subpart EEEE | No changing attributes. |
| ZMTK01 | STORAGE TANKS/VESSELS | N/A | R5112-4 | 30 TAC Chapter 115, Storage of VOCs | No changing attributes. |
| ZTD08 | STORAGE TANKS/VESSELS | N/A | R5112-26 | 30 TAC Chapter 115, Storage of VOCs | Control Device Type = Flare |
| ZTD08 | STORAGE TANKS/VESSELS | N/A | R5112-27 | 30 TAC Chapter 115, Storage of VOCs | Control Device Type = Direct-flame incinerator |
| ZTD08 | STORAGE TANKS/VESSELS | N/A | R5112-30 | 30 TAC Chapter 115, Storage of VOCs | Control Device Type = Other control device |
| ZTD08 | STORAGE TANKS/VESSELS | N/A | 60Kb-22 | 40 CFR Part 60, Subpart Kb | Storage Vessel Description = Closed vent system (CVS) with a flare used as the control device (fixed roof) |
| ZTD08 | STORAGE TANKS/VESSELS | N/A | 60Kb-23A | 40 CFR Part 60, Subpart Kb | Storage Vessel Description = CVS and control device other than a flare |

Unit Summary

| Unit/Group/ Process ID No. | Unit Type | Group/Inclusive Units | SOP Index No. | Regulation | Requirement Driver |
|-------------------------------|--|--------------------------|---------------|---|---|
| | | | | | (fixed roof) |
| ZTD08 | STORAGE TANKS/VESSELS | N/A | 60Kb-23B | 40 CFR Part 60, Subpart Kb | Storage Vessel Description = CVS and control device other than a flare (fixed roof) |
| ZTD12 | VOLATILE ORGANIC COMPOUND WATER SEPARATORS | N/A | R5131-1 | 30 TAC Chapter 115, Water Separation | No changing attributes. |
| ZTD12 | VOLATILE ORGANIC COMPOUND WATER SEPARATORS | N/A | 61FF-10 | 40 CFR Part 61, Subpart FF | Fuel Gas System = EMISSIONS ARE ROUTED TO A CONTROL DEVICE, Close Vent System and Control Device AMOC = COMPLYING WITH THE REQUIREMENTS OF § 61.349, Alternate Monitoring Parameters = COMPLYING WITH THE MONITORING REQUIREMENTS OF SUBPART FF, Cover and Closed Vent = CLOSED VENT SYSTEM IS OPERATED SUCH THAT THE OIL-WATER SEPARATOR IS MAINTAINED AT NEGATIVE PRESSURE (LESS THAN ATMOSPHERIC), By-Pass Line = THE CLOSED VENT SYSTEM HAS NO BY-PASS LINE, Engineering Calculations = ENGINEERING CALCULATIONS ARE USED TO DEMONSTRATE CONTROL DEVICE PERFORMANCE, Control Device Type/Operation = THERMAL VAPOR INCINERATOR REDUCING ORGANICS BY 95 |

Unit Summary

| Unit/Group/ Process ID No. | Unit Type | Group/Inclusive Units | SOP Index No. | Regulation | Requirement Driver |
|-------------------------------|--|--------------------------|---------------|--|---|
| | | | | | WEIGHT PERCENT OR GREATER |
| ZTD12 | VOLATILE ORGANIC COMPOUND WATER SEPARATORS | N/A | 61FF-11 | 40 CFR Part 61, Subpart FF | Fuel Gas System = EMISSIONS ARE ROUTED TO A CONTROL DEVICE, Close Vent System and Control Device AMOC = COMPLYING WITH THE REQUIREMENTS OF § 61.349, Cover and Closed Vent = CLOSED VENT SYSTEM IS OPERATED SUCH THAT THE OIL-WATER SEPARATOR IS MAINTAINED AT NEGATIVE PRESSURE (LESS THAN ATMOSPHERIC), By-Pass Line = THE CLOSED VENT SYSTEM HAS NO BY-PASS LINE, Control Device Type/Operation = FLARE |
| ZTD12 | VOLATILE ORGANIC COMPOUND WATER SEPARATORS | N/A | 61FF-12 | 40 CFR Part 61, Subpart FF | Fuel Gas System = GASEOUS EMISSIONS ARE ROUTED TO A FUEL GAS SYSTEM |
| ZTTK02 | STORAGE TANKS/VESSELS | N/A | 63G-1 | 40 CFR Part 63, Subpart G | No changing attributes. |
| ZTTK03 | STORAGE TANKS/VESSELS | N/A | 63G-1 | 40 CFR Part 63, Subpart G | No changing attributes. |
| ZTTK04 | STORAGE TANKS/VESSELS | N/A | R5112-20 | 30 TAC Chapter 115, Storage of VOCs | No changing attributes. |
| ZTTK04 | STORAGE TANKS/VESSELS | N/A | 60Kb-34 | 40 CFR Part 60, Subpart Kb | No changing attributes. |
| ZTTK04 | STORAGE TANKS/VESSELS | N/A | 61FF-1 | 40 CFR Part 61, Subpart FF | No changing attributes. |
| ZTTK04 | STORAGE | N/A | 63YY-1 | 40 CFR Part 63, Subpart YY | No changing attributes. |

Unit Summary

| Unit/Group/ Process ID No. | Unit Type | Group/Inclusive Units | SOP Index No. | Regulation | Requirement Driver |
|-------------------------------|--------------------------|--------------------------|---------------|--|-------------------------|
| | TANKS/VESSELS | | | | |
| ZTTK05 | STORAGE TANKS/VESSELS | N/A | R5112-20 | 30 TAC Chapter 115, Storage of VOCs | No changing attributes. |
| ZTTK05 | STORAGE TANKS/VESSELS | N/A | 60Kb-35 | 40 CFR Part 60, Subpart Kb | 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) |
|---------------------------|-------------------------|---------------|--------------------------|---------------------------------------|--|--|-------------------------------------|---|---|
| ADMINGEN | EU | 60III-3 | CO | 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 CO emission limit of 3.5 g/KW-hr, as stated in 40 CFR 60.4202(a)(2) and 40 CFR 89.112(a). | § 60.4209(a) | § 60.4214(b) | [G]§ 60.4214(d) |
| ADMINGEN | EU | 60III-3 | NMHC and NO _x | 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 560 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 an NMHC+NO _x emission limit of 6.4 g/KW-hr, as stated in 40 CFR 60.4202(a)(2) and 40 CFR 89.112(a). | § 60.4209(a) | § 60.4214(b) | [G]§ 60.4214(d) |
| ADMINGEN | EU | 60III-3 | 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 | 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 | § 60.4209(a) | § 60.4214(b) | [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) |
|---------------------------|-------------------------|---------------|-------------|---------------------------------------|---|--|--|---|--|
| | | | | | § 89.112(a) | 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). | | | |
| ADMINGEN | EU | 63ZZZZ-10 | 112(B) HAPS | 40 CFR Part 63, Subpart ZZZZ | § 63.6590(b)(1) § 63.6595(c) § 63.6640(f)(1) § 63.6640(f)(2) § 63.6640(f)(2)(i) § 63.6640(f)(3) | An affected source which meets either of the criteria in paragraphs §63.6590(b)(1)(i)-(ii) of this section does not have to meet the requirements of this subpart and of subpart A of this part except for the initial notification requirements of §63.6645(f). | None | None | § 63.6645(f) |
| C_FUG | EU | 60DDD-ALL | VOC/TOC | 40 CFR Part 60, Subpart DDD | § 60.562-2(a) § 60.482-1(a) § 60.482-1(b) § 60.482-1(g) § 60.482-2(a)(2) § 60.482-2(b)(1) [G]§ 60.482-2(b)(2) § 60.482-2(c)(1) [G]§ 60.482-2(c)(2) § 60.482-2(d) [G]§ 60.482-2(d)(1) § 60.482-2(d)(2) § 60.482-2(d)(3) [G]§ 60.482-2(d)(4) [G]§ 60.482-2(d)(5) [G]§ 60.482-2(d)(6) [G]§ 60.482-2(e) § 60.482-2(f) [G]§ 60.482-2(g) § 60.482-2(h) | Comply with the requirements as stated in §60.482-2 for pumps in light-liquid service. | § 60.482-1(f)(1) § 60.482-1(f)(2) [G]§ 60.482-1(f)(3) § 60.482-2(a)(1) [G]§ 60.482-2(b)(2) [G]§ 60.482-2(d)(4) § 60.485(a) [G]§ 60.485(b) [G]§ 60.485(c) [G]§ 60.485(d) [G]§ 60.485(e) § 60.485(f) § 60.562-2(d) | § 60.482-1(g) [G]§ 60.486(a) [G]§ 60.486(b) [G]§ 60.486(c) § 60.486(e) § 60.486(e)(1) [G]§ 60.486(e)(2) [G]§ 60.486(e)(4) § 60.486(f) [G]§ 60.486(h) § 60.486(j) § 60.562-2(e) | § 60.487(a) [G]§ 60.487(b) [G]§ 60.487(c) § 60.487(e) § 60.562-2(e) § 60.565(l) |

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) |
|---------------------------|-------------------------|---------------|-----------|---------------------------------------|---|--|---|--|--|
| | | | | | § 60.482-9(a) § 60.482-9(b) [G]§ 60.482-9(d) § 60.482-9(f) § 60.486(k) § 60.562-2(d) § 60.562-2(e) | | | | |
| C_FUG | EU | 60DDD-ALL | VOC/TOC | 40 CFR Part 60, Subpart DDD | § 60.562-2(a) § 60.482-1(a) § 60.482-1(b) § 60.482-1(g) § 60.482-3(a) [G]§ 60.482-3(b) § 60.482-3(c) § 60.482-3(d) § 60.482-3(e)(1) § 60.482-3(e)(2) § 60.482-3(f) § 60.482-3(g)(1) § 60.482-3(g)(2) § 60.482-3(h) [G]§ 60.482-3(i) § 60.482-3(j) § 60.482-9(a) § 60.482-9(b) § 60.486(k) § 60.562-2(d) § 60.562-2(e) | Comply with the requirements as stated in §60.482-3 for compressors. | § 60.485(a) [G]§ 60.485(b) [G]§ 60.485(c) [G]§ 60.485(d) § 60.485(f) § 60.562-2(d) | § 60.482-1(g) [G]§ 60.486(a) [G]§ 60.486(b) [G]§ 60.486(c) § 60.486(e) § 60.486(e)(1) [G]§ 60.486(e)(2) [G]§ 60.486(e)(4) [G]§ 60.486(h) § 60.486(j) § 60.562-2(e) | § 60.487(a) [G]§ 60.487(b) [G]§ 60.487(c) § 60.487(e) § 60.562-2(e) § 60.565(l) |
| C_FUG | EU | 60DDD-ALL | VOC/TOC | 40 CFR Part 60, Subpart DDD | § 60.562-2(a) § 60.482-1(a) § 60.482-1(b) § 60.482-1(g) § 60.482-4(a) § 60.482-4(b)(1) § 60.482-4(c) § 60.482-4(d)(1) § 60.482-4(d)(2) § 60.482-9(a) | Comply with the requirements in as stated in §60.482-4 for pressure relief devices in gas/vapor service. | § 60.482-4(b)(2) § 60.485(a) [G]§ 60.485(b) [G]§ 60.485(c) [G]§ 60.485(d) § 60.485(f) § 60.562-2(d) | § 60.482-1(g) [G]§ 60.486(a) § 60.486(e) § 60.486(e)(1) § 60.486(e)(3) [G]§ 60.486(e)(4) § 60.486(j) § 60.562-2(e) | § 60.487(a) [G]§ 60.487(b) [G]§ 60.487(c) § 60.487(e) § 60.562-2(e) § 60.565(l) |

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) |
|---------------------------|-------------------------|---------------|-----------|---------------------------------------|---|---|--|---|--|
| | | | | | § 60.482-9(b) § 60.486(k) § 60.562-2(d) § 60.562-2(e) | | | | |
| C_FUG | EU | 60DDD-ALL | VOC/TOC | 40 CFR Part 60, Subpart DDD | § 60.562-2(a) § 60.482-1(a) § 60.482-1(b) § 60.482-1(g) § 60.482-5(a) [G]§ 60.482-5(b) § 60.482-5(c) § 60.486(k) § 60.562-2(d) § 60.562-2(e) | Comply with the requirements in as stated in §60.482-5 for sampling connection systems. | § 60.485(a) [G]§ 60.485(b) [G]§ 60.485(d) § 60.485(f) § 60.562-2(d) | § 60.482-1(g) [G]§ 60.486(a) § 60.486(e) § 60.486(e)(1) § 60.486(j) § 60.562-2(e) | § 60.487(a) [G]§ 60.487(b) [G]§ 60.487(c) § 60.487(e) § 60.562-2(e) § 60.565(l) |
| C_FUG | EU | 60DDD-ALL | VOC/TOC | 40 CFR Part 60, Subpart DDD | § 60.562-2(a) § 60.482-1(a) § 60.482-1(b) § 60.482-1(g) § 60.482-6(a)(1) § 60.482-6(a)(2) § 60.482-6(b) § 60.482-6(c) § 60.482-6(d) § 60.482-6(e) § 60.486(k) § 60.562-2(d) § 60.562-2(e) | Comply with the requirements in as stated in §60.482-6 for open-ended valves and lines. | § 60.485(a) [G]§ 60.485(b) [G]§ 60.485(d) § 60.485(f) § 60.562-2(d) | § 60.482-1(g) [G]§ 60.486(a) § 60.486(e) § 60.486(e)(1) § 60.486(j) § 60.562-2(e) | § 60.487(a) [G]§ 60.487(b) [G]§ 60.487(c) § 60.487(e) § 60.562-2(e) § 60.565(l) |
| C_FUG | EU | 60DDD-ALL | VOC/TOC | 40 CFR Part 60, Subpart DDD | § 60.562-2(a) § 60.482-1(a) § 60.482-1(b) § 60.482-1(g) § 60.482-7(b) § 60.482-7(d)(1) § 60.482-7(d)(2) [G]§ 60.482-7(e) [G]§ 60.482-7(f) [G]§ 60.482-7(g) [G]§ 60.482-7(h) | Comply with the requirements in as stated in §60.482-7 for valves in gas/vapor or light-liquid service. | § 60.482-1(f)(1) § 60.482-1(f)(2) [G]§ 60.482-1(f)(3) § 60.482-7(a)(1) [G]§ 60.482-7(a)(2) § 60.482-7(c)(1)(i) § 60.482-7(c)(1)(ii) § 60.482-7(c)(2) § 60.485(a) [G]§ 60.485(b) [G]§ 60.485(c) | § 60.482-1(g) [G]§ 60.486(a) [G]§ 60.486(b) [G]§ 60.486(c) § 60.486(e) § 60.486(e)(1) [G]§ 60.486(e)(2) [G]§ 60.486(e)(4) [G]§ 60.486(f) [G]§ 60.486(g) § 60.486(j) | § 60.487(a) [G]§ 60.487(b) [G]§ 60.487(c) § 60.487(e) § 60.562-2(e) § 60.565(l) |

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) |
|---------------------------|-------------------------|---------------|-----------|---------------------------------------|---|--|---|--|--|
| | | | | | § 60.482-9(a) § 60.482-9(b) [G]§ 60.482-9(c) § 60.482-9(e) § 60.482-9(f) § 60.486(k) § 60.562-2(d) § 60.562-2(e) | | [G]§ 60.485(d) [G]§ 60.485(e) § 60.485(f) § 60.562-2(d) | § 60.562-2(e) | |
| C_FUG | EU | 60DDD-ALL | VOC/TOC | 40 CFR Part 60, Subpart DDD | § 60.562-2(a) § 60.482-1(a) § 60.482-1(b) § 60.482-1(g) § 60.482-8(a) § 60.482-8(a)(2) § 60.482-8(b) § 60.482-8(c)(1) § 60.482-8(c)(2) § 60.482-8(d) § 60.482-9(a) § 60.482-9(b) § 60.482-9(f) § 60.486(k) § 60.562-2(d) § 60.562-2(e) | Comply with the requirements in as stated in §60.482-8 for flanges or other connectors. | § 60.482-8(a)(1) § 60.485(a) [G]§ 60.485(b) [G]§ 60.485(d) § 60.485(f) § 60.562-2(d) | § 60.482-1(g) [G]§ 60.486(a) [G]§ 60.486(b) [G]§ 60.486(c) § 60.486(e) § 60.486(e)(1) § 60.486(j) § 60.562-2(e) | § 60.487(a) [G]§ 60.487(b) [G]§ 60.487(c) § 60.487(e) § 60.562-2(e) § 60.565(l) |
| C_FUG | EU | 60DDD-ALL | VOC/TOC | 40 CFR Part 60, Subpart DDD | § 60.562-2(a) § 60.482-1(a) § 60.482-1(b) § 60.482-1(g) § 60.482-8(a) § 60.482-8(a)(2) § 60.482-8(b) § 60.482-8(c)(1) § 60.482-8(c)(2) § 60.482-8(d) § 60.482-9(a) § 60.482-9(b) [G]§ 60.482-9(c) § 60.482-9(e) | Comply with the requirements in as stated in §60.482-8 for valves in heavy-liquid service. | § 60.482-8(a)(1) § 60.485(a) [G]§ 60.485(b) [G]§ 60.485(d) § 60.485(f) § 60.562-2(d) | § 60.482-1(g) [G]§ 60.486(a) [G]§ 60.486(b) [G]§ 60.486(c) § 60.486(e) § 60.486(e)(1) § 60.486(j) § 60.562-2(e) | § 60.487(a) [G]§ 60.487(b) [G]§ 60.487(c) § 60.487(e) § 60.562-2(e) § 60.565(l) |

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) |
|---------------------------|-------------------------|---------------|-----------|---------------------------------------|---|---|---|--|--|
| | | | | | § 60.482-9(f) § 60.486(k) § 60.562-2(d) § 60.562-2(e) | | | | |
| C_FUG | EU | 60DDD-ALL | VOC/TOC | 40 CFR Part 60, Subpart DDD | § 60.562-2(a) § 60.482-1(a) § 60.482-1(b) § 60.482-1(g) § 60.482-8(a) § 60.482-8(a)(2) § 60.482-8(b) § 60.482-8(c)(1) § 60.482-8(c)(2) § 60.482-8(d) § 60.482-9(a) § 60.482-9(b) [G]§ 60.482-9(d) § 60.482-9(f) § 60.486(k) § 60.562-2(d) § 60.562-2(e) | Comply with the requirements in as stated in §60.482-8 for pumps in heavy-liquid service. | § 60.482-8(a)(1) § 60.485(a) [G]§ 60.485(b) [G]§ 60.485(d) § 60.485(f) § 60.562-2(d) | § 60.482-1(g) [G]§ 60.486(a) [G]§ 60.486(b) [G]§ 60.486(c) § 60.486(e) § 60.486(e)(1) § 60.486(j) § 60.562-2(e) | § 60.487(a) [G]§ 60.487(b) [G]§ 60.487(c) § 60.487(e) § 60.562-2(e) § 60.565(l) |
| C_FUG | EU | 60DDD-ALL | VOC/TOC | 40 CFR Part 60, Subpart DDD | § 60.562-2(a) § 60.482-1(d) § 60.486(k) § 60.562-2(e) | Comply with the requirements as stated in §60.482-1(d) for equipment in vacuum service. | None | [G]§ 60.486(a) § 60.486(e) § 60.486(e)(1) § 60.486(e)(5) § 60.486(j) § 60.562-2(e) | § 60.487(a) [G]§ 60.487(b) [G]§ 60.487(c) § 60.487(e) § 60.562-2(e) § 60.565(l) |
| C_FUG | EU | 60DDD-ALL | VOC/TOC | 40 CFR Part 60, Subpart DDD | § 60.562-2(a) § 60.482-1(a) § 60.482-1(b) § 60.482-1(g) § 60.482-8(a) § 60.482-8(a)(2) § 60.482-8(b) § 60.482-8(c)(1) § 60.482-8(c)(2) § 60.482-8(d) § 60.482-9(a) | Comply with the requirements in as stated in §60.482-8 for pressure relief devices in light-liquid or heavy-liquid service. | § 60.482-8(a)(1) § 60.485(a) [G]§ 60.485(b) [G]§ 60.485(d) [G]§ 60.485(e) § 60.485(f) § 60.562-2(d) | § 60.482-1(g) [G]§ 60.486(a) [G]§ 60.486(b) [G]§ 60.486(c) § 60.486(e) § 60.486(e)(1) § 60.486(j) § 60.562-2(e) | § 60.487(a) [G]§ 60.487(b) [G]§ 60.487(c) § 60.487(e) § 60.562-2(e) § 60.565(l) |

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) |
|---------------------------|-------------------------|---------------|-------------|--|---|--|--|---|---|
| | | | | | § 60.482-9(b) § 60.482-9(f) § 60.486(k) § 60.562-2(d) § 60.562-2(e) | | | | |
| C_FUG | EU | 60DDD-ALL | VOC/TOC | 40 CFR Part 60, Subpart DDD | § 60.562-2(a) [G]§ 60.482-1(e) § 60.486(k) | Comply with the requirements in as stated in §60.482-1(e) for equipment in VOC service < 300 hours/year. | None | [G]§ 60.486(a) § 60.486(e) § 60.486(e)(1) § 60.486(e)(6) § 60.486(j) | § 60.487(a) [G]§ 60.487(b) [G]§ 60.487(c) § 60.487(e) |
| C_FUG | EU | 63FFFF-ALL | 112(B) HAPS | 40 CFR Part 63, Subpart FFFF | § 63.2480(a) The permit holder shall comply with the applicable limitation, standard and/or equipment specification requirements of 40 CFR Part 63, Subpart FFFF | The permit holder shall comply with the applicable requirements of 40 CFR Part 63, Subpart FFFF | The permit holder shall comply with the applicable monitoring and testing requirements of 40 CFR Part 63, Subpart FFFF | The permit holder shall comply with the applicable recordkeeping requirements of 40 CFR Part 63, Subpart FFFF | The permit holder shall comply with the applicable reporting requirements of 40 CFR Part 63, Subpart FFFF |
| CCD81-LOAD | EU | R5212-11 | VOC | 30 TAC Chapter 115, Loading and Unloading of VOC | § 115.217(b)(2) § 115.212(b)(2) § 115.214(b)(1)(B) § 115.214(b)(1)(D) § 115.214(b)(1)(D)(i) | Vapor pressure (at land-based operations). All land-based loading and unloading of VOC with a true vapor pressure less than 1.5 psia is exempt from the requirements of this division except as specified. | § 115.214(b)(1)(A) § 115.214(b)(1)(A)(i) § 115.215 § 115.215(4) | § 115.216 § 115.216(2) § 115.216(3)(B) | None |
| C-VENTGAS | EP | R5121-10 | VOC | 30 TAC Chapter 115, Vent Gas Controls | § 115.122(c)(1) § 115.121(c)(1) § 115.122(c)(1)(A) | For all persons in Aransas, Bexar, Calhoun, Matagorda, San Patricio, and Travis Counties, any vent gas streams affected by §115.121(c)(1) must be controlled properly using one of the control requirements specified in | [G]§ 115.125 § 115.126(2) ** See CAM Summary | § 115.126 § 115.126(2) | 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) |
|---------------------------|-------------------------|---------------|-----------|--|---|---|--|--|--|
| | | | | | | §115.122(c)(1)(A)-(C). | | | |
| C-VENTGAS | EP | R5121-16 | VOC | 30 TAC Chapter 115, Vent Gas Controls | § 115.122(c)(1) § 115.121(c)(1) § 115.122(c)(1)(B) § 60.18 | For all persons in Aransas, Bexar, Calhoun, Matagorda, San Patricio, and Travis Counties, any vent gas streams affected by §115.121(c)(1) must be controlled properly using one of the control requirements specified in §115.122(c)(1)(A)-(C). | [G]§ 115.125 § 115.126(2) ** See CAM Summary | § 115.126 § 115.126(2) | None |
| C-VENTGAS | EP | R5121-20 | VOC | 30 TAC Chapter 115, Vent Gas Controls | § 115.122(c)(1) § 115.121(c)(1) § 115.122(c)(1)(C) | For all persons in Aransas, Bexar, Calhoun, Matagorda, San Patricio, and Travis Counties, any vent gas streams affected by §115.121(c)(1) must be controlled properly using one of the control requirements specified in §115.122(c)(1)(A)-(C). | [G]§ 115.125 § 115.126(2) ** See CAM Summary | § 115.126 § 115.126(2) | None |
| DREFUSTN | EU | R5212-2 | VOC | 30 TAC Chapter 115, Loading and Unloading of VOC | § 115.217(b)(2) § 115.212(b)(2) § 115.214(b)(1)(B) § 115.214(b)(1)(D) § 115.214(b)(1)(D)(i) | Vapor pressure (at land-based operations). All land-based loading and unloading of VOC with a true vapor pressure less than 1.5 psia is exempt from the requirements of this division except as specified. | § 115.214(b)(1)(A) § 115.214(b)(1)(A)(i) § 115.215 § 115.215(4) | § 115.216 § 115.216(2) § 115.216(3)(B) | None |
| E_FUG | EU | 60DDD-ALL | VOC/TOC | 40 CFR Part 60, Subpart DDD | § 60.562-2(a) § 60.482-1(a) § 60.482-1(b) § 60.482-1(g) § 60.482-2(a)(2) § 60.482-2(b)(1) [G]§ 60.482-2(b)(2) § 60.482-2(c)(1) | Comply with the requirements as stated in §60.482-2 for pumps in light-liquid service. | § 60.482-1(f)(1) § 60.482-1(f)(2) [G]§ 60.482-1(f)(3) § 60.482-2(a)(1) [G]§ 60.482-2(b)(2) [G]§ 60.482-2(d)(4) § 60.485(a) [G]§ 60.485(b) | § 60.482-1(g) [G]§ 60.486(a) [G]§ 60.486(b) [G]§ 60.486(c) § 60.486(e) § 60.486(e)(1) [G]§ 60.486(e)(2) [G]§ 60.486(e)(4) | § 60.487(a) [G]§ 60.487(b) [G]§ 60.487(c) § 60.487(e) § 60.562-2(e) § 60.565(l) |

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) |
|---------------------------|-------------------------|---------------|-----------|---------------------------------------|--|--|---|--|--|
| | | | | | [G]§ 60.482-2(c)(2) § 60.482-2(d) [G]§ 60.482-2(d)(1) § 60.482-2(d)(2) § 60.482-2(d)(3) [G]§ 60.482-2(d)(4) [G]§ 60.482-2(d)(5) [G]§ 60.482-2(d)(6) [G]§ 60.482-2(e) § 60.482-2(f) [G]§ 60.482-2(g) § 60.482-2(h) § 60.482-9(a) § 60.482-9(b) [G]§ 60.482-9(d) § 60.482-9(f) § 60.486(k) § 60.562-2(d) § 60.562-2(e) | | [G]§ 60.485(c) [G]§ 60.485(d) [G]§ 60.485(e) § 60.485(f) § 60.562-2(d) | § 60.486(f) [G]§ 60.486(h) § 60.486(j) § 60.562-2(e) | |
| E_FUG | EU | 60DDD-ALL | VOC/TOC | 40 CFR Part 60, Subpart DDD | § 60.562-2(a) § 60.482-1(a) § 60.482-1(b) § 60.482-1(g) § 60.482-3(a) [G]§ 60.482-3(b) § 60.482-3(c) § 60.482-3(d) § 60.482-3(e)(1) § 60.482-3(e)(2) § 60.482-3(f) § 60.482-3(g)(1) § 60.482-3(g)(2) § 60.482-3(h) [G]§ 60.482-3(i) § 60.482-3(j) § 60.482-9(a) § 60.482-9(b) § 60.486(k) § 60.562-2(d) | Comply with the requirements as stated in §60.482-3 for compressors. | § 60.485(a) [G]§ 60.485(b) [G]§ 60.485(c) [G]§ 60.485(d) § 60.485(f) § 60.562-2(d) | § 60.482-1(g) [G]§ 60.486(a) [G]§ 60.486(b) [G]§ 60.486(c) § 60.486(e) § 60.486(e)(1) [G]§ 60.486(e)(2) [G]§ 60.486(e)(4) [G]§ 60.486(h) § 60.486(j) § 60.562-2(e) | § 60.487(a) [G]§ 60.487(b) [G]§ 60.487(c) § 60.487(e) § 60.562-2(e) § 60.565(l) |

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) |
|---------------------------|-------------------------|---------------|-----------|---------------------------------------|---|--|---|---|--|
| | | | | | § 60.562-2(e) | | | | |
| E_FUG | EU | 60DDD-ALL | VOC/TOC | 40 CFR Part 60, Subpart DDD | § 60.562-2(a) § 60.482-1(a) § 60.482-1(b) § 60.482-1(g) § 60.482-4(a) § 60.482-4(b)(1) § 60.482-4(c) § 60.482-4(d)(1) § 60.482-4(d)(2) § 60.482-9(a) § 60.482-9(b) § 60.486(k) § 60.562-2(d) § 60.562-2(e) | Comply with the requirements in as stated in §60.482-4 for pressure relief devices in gas/vapor service. | § 60.482-4(b)(2) § 60.485(a) [G]§ 60.485(b) [G]§ 60.485(c) [G]§ 60.485(d) § 60.485(f) § 60.562-2(d) | § 60.482-1(g) [G]§ 60.486(a) § 60.486(e) § 60.486(e)(1) § 60.486(e)(3) [G]§ 60.486(e)(4) § 60.486(j) § 60.562-2(e) | § 60.487(a) [G]§ 60.487(b) [G]§ 60.487(c) § 60.487(e) § 60.562-2(e) § 60.565(l) |
| E_FUG | EU | 60DDD-ALL | VOC/TOC | 40 CFR Part 60, Subpart DDD | § 60.562-2(a) § 60.482-1(a) § 60.482-1(b) § 60.482-1(g) § 60.482-5(a) [G]§ 60.482-5(b) § 60.482-5(c) § 60.486(k) § 60.562-2(d) § 60.562-2(e) | Comply with the requirements in as stated in §60.482-5 for sampling connection systems. | § 60.485(a) [G]§ 60.485(b) [G]§ 60.485(d) § 60.485(f) § 60.562-2(d) | § 60.482-1(g) [G]§ 60.486(a) § 60.486(e) § 60.486(e)(1) § 60.486(j) § 60.562-2(e) | § 60.487(a) [G]§ 60.487(b) [G]§ 60.487(c) § 60.487(e) § 60.562-2(e) § 60.565(l) |
| E_FUG | EU | 60DDD-ALL | VOC/TOC | 40 CFR Part 60, Subpart DDD | § 60.562-2(a) § 60.482-1(a) § 60.482-1(b) § 60.482-1(g) § 60.482-6(a)(1) § 60.482-6(a)(2) § 60.482-6(b) § 60.482-6(c) § 60.482-6(d) § 60.482-6(e) § 60.486(k) § 60.562-2(d) § 60.562-2(e) | Comply with the requirements in as stated in §60.482-6 for open-ended valves and lines. | § 60.485(a) [G]§ 60.485(b) [G]§ 60.485(d) § 60.485(f) § 60.562-2(d) | § 60.482-1(g) [G]§ 60.486(a) § 60.486(e) § 60.486(e)(1) § 60.486(j) § 60.562-2(e) | § 60.487(a) [G]§ 60.487(b) [G]§ 60.487(c) § 60.487(e) § 60.562-2(e) § 60.565(l) |

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) |
|---------------------------|-------------------------|---------------|-----------|---------------------------------------|--|---|--|--|--|
| E_FUG | EU | 60DDD-ALL | VOC/TOC | 40 CFR Part 60, Subpart DDD | § 60.562-2(a) § 60.482-1(a) § 60.482-1(b) § 60.482-1(g) § 60.482-7(b) § 60.482-7(d)(1) § 60.482-7(d)(2) [G]§ 60.482-7(e) [G]§ 60.482-7(f) [G]§ 60.482-7(g) [G]§ 60.482-7(h) § 60.482-9(a) § 60.482-9(b) [G]§ 60.482-9(c) § 60.482-9(e) § 60.482-9(f) § 60.486(k) § 60.562-2(d) § 60.562-2(e) | Comply with the requirements in as stated in §60.482-7 for valves in gas/vapor or light-liquid service. | § 60.482-1(f)(1) § 60.482-1(f)(2) [G]§ 60.482-1(f)(3) § 60.482-7(a)(1) [G]§ 60.482-7(a)(2) § 60.482-7(c)(1)(i) § 60.482-7(c)(1)(ii) § 60.482-7(c)(2) § 60.485(a) [G]§ 60.485(b) [G]§ 60.485(c) [G]§ 60.485(d) [G]§ 60.485(e) § 60.485(f) § 60.562-2(d) | § 60.482-1(g) [G]§ 60.486(a) [G]§ 60.486(b) [G]§ 60.486(c) § 60.486(e) § 60.486(e)(1) [G]§ 60.486(e)(2) [G]§ 60.486(e)(4) [G]§ 60.486(f) [G]§ 60.486(g) § 60.486(j) § 60.562-2(e) | § 60.487(a) [G]§ 60.487(b) [G]§ 60.487(c) § 60.487(e) § 60.562-2(e) § 60.565(l) |
| E_FUG | EU | 60DDD-ALL | VOC/TOC | 40 CFR Part 60, Subpart DDD | § 60.562-2(a) § 60.482-1(a) § 60.482-1(b) § 60.482-1(g) § 60.482-8(a) § 60.482-8(a)(2) § 60.482-8(b) § 60.482-8(c)(1) § 60.482-8(c)(2) § 60.482-8(d) § 60.482-9(a) § 60.482-9(b) § 60.482-9(f) § 60.486(k) § 60.562-2(d) § 60.562-2(e) | Comply with the requirements in as stated in §60.482-8 for flanges or other connectors. | § 60.482-8(a)(1) § 60.485(a) [G]§ 60.485(b) [G]§ 60.485(d) § 60.485(f) § 60.562-2(d) | § 60.482-1(g) [G]§ 60.486(a) [G]§ 60.486(b) [G]§ 60.486(c) § 60.486(e) § 60.486(e)(1) § 60.486(j) § 60.562-2(e) | § 60.487(a) [G]§ 60.487(b) [G]§ 60.487(c) § 60.487(e) § 60.562-2(e) § 60.565(l) |
| E_FUG | EU | 60DDD-ALL | VOC/TOC | 40 CFR Part 60, Subpart DDD | § 60.562-2(a) § 60.482-1(a) § 60.482-1(b) | Comply with the requirements in as stated in §60.482-8 for valves in | § 60.482-8(a)(1) § 60.485(a) [G]§ 60.485(b) | § 60.482-1(g) [G]§ 60.486(a) [G]§ 60.486(b) | § 60.487(a) [G]§ 60.487(b) [G]§ 60.487(c) |

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) |
|---------------------------|-------------------------|---------------|-----------|---------------------------------------|---|---|---|--|--|
| | | | | | § 60.482-1(g) § 60.482-8(a) § 60.482-8(a)(2) § 60.482-8(b) § 60.482-8(c)(1) § 60.482-8(c)(2) § 60.482-8(d) § 60.482-9(a) § 60.482-9(b) [G]§ 60.482-9(c) § 60.482-9(e) § 60.482-9(f) § 60.486(k) § 60.562-2(d) § 60.562-2(e) | heavy-liquid service. | [G]§ 60.485(d) § 60.485(f) § 60.562-2(d) | [G]§ 60.486(c) § 60.486(e) § 60.486(e)(1) § 60.486(j) § 60.562-2(e) | § 60.487(e) § 60.562-2(e) § 60.565(l) |
| E_FUG | EU | 60DDD-ALL | VOC/TOC | 40 CFR Part 60, Subpart DDD | § 60.562-2(a) § 60.482-1(a) § 60.482-1(b) § 60.482-1(g) § 60.482-8(a) § 60.482-8(a)(2) § 60.482-8(b) § 60.482-8(c)(1) § 60.482-8(c)(2) § 60.482-8(d) § 60.482-9(a) § 60.482-9(b) [G]§ 60.482-9(d) § 60.482-9(f) § 60.486(k) § 60.562-2(d) § 60.562-2(e) | Comply with the requirements in as stated in §60.482-8 for pumps in heavy-liquid service. | § 60.482-8(a)(1) § 60.485(a) [G]§ 60.485(b) [G]§ 60.485(d) § 60.485(f) § 60.562-2(d) | § 60.482-1(g) [G]§ 60.486(a) [G]§ 60.486(b) [G]§ 60.486(c) § 60.486(e) § 60.486(e)(1) § 60.486(j) § 60.562-2(e) | § 60.487(a) [G]§ 60.487(b) [G]§ 60.487(c) § 60.487(e) § 60.562-2(e) § 60.565(l) |
| E_FUG | EU | 60DDD-ALL | VOC/TOC | 40 CFR Part 60, Subpart DDD | § 60.562-2(a) § 60.482-1(d) § 60.486(k) § 60.562-2(e) | Comply with the requirements as stated in §60.482-1(d) for equipment in vacuum service. | None | [G]§ 60.486(a) § 60.486(e) § 60.486(e)(1) § 60.486(e)(5) § 60.486(j) § 60.562-2(e) | § 60.487(a) [G]§ 60.487(b) [G]§ 60.487(c) § 60.487(e) § 60.562-2(e) § 60.565(l) |

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) |
|---------------------------|-------------------------|---------------|-------------|---------------------------------------|---|---|--|--|---|
| E_FUG | EU | 60DDD-ALL | VOC/TOC | 40 CFR Part 60, Subpart DDD | § 60.562-2(a) § 60.482-1(a) § 60.482-1(b) § 60.482-1(g) § 60.482-8(a) § 60.482-8(a)(2) § 60.482-8(b) § 60.482-8(c)(1) § 60.482-8(c)(2) § 60.482-8(d) § 60.482-9(a) § 60.482-9(b) § 60.482-9(f) § 60.486(k) § 60.562-2(d) § 60.562-2(e) | Comply with the requirements in as stated in §60.482-8 for pressure relief devices in light-liquid or heavy-liquid service. | § 60.482-8(a)(1) § 60.485(a) [G]§ 60.485(b) [G]§ 60.485(d) [G]§ 60.485(e) § 60.485(f) § 60.562-2(d) | § 60.482-1(g) [G]§ 60.486(a) [G]§ 60.486(b) [G]§ 60.486(c) § 60.486(e) § 60.486(e)(1) § 60.486(j) § 60.562-2(e) | § 60.487(a) [G]§ 60.487(b) [G]§ 60.487(c) § 60.487(e) § 60.562-2(e) § 60.565(l) |
| E_FUG | EU | 60DDD-ALL | VOC/TOC | 40 CFR Part 60, Subpart DDD | § 60.562-2(a) [G]§ 60.482-1(e) § 60.486(k) | Comply with the requirements in as stated in §60.482-1(e) for equipment in VOC service < 300 hours/year. | None | [G]§ 60.486(a) § 60.486(e) § 60.486(e)(1) § 60.486(e)(6) § 60.486(j) | § 60.487(a) [G]§ 60.487(b) [G]§ 60.487(c) § 60.487(e) |
| E_FUG | EU | 63FFFF-ALL | 112(B) HAPS | 40 CFR Part 63, Subpart FFFF | § 63.2480(a) The permit holder shall comply with the applicable limitation, standard and/or equipment specification requirements of 40 CFR Part 63, Subpart FFFF | The permit holder shall comply with the applicable requirements of 40 CFR Part 63, Subpart FFFF | The permit holder shall comply with the applicable monitoring and testing requirements of 40 CFR Part 63, Subpart FFFF | The permit holder shall comply with the applicable recordkeeping requirements of 40 CFR Part 63, Subpart FFFF | The permit holder shall comply with the applicable reporting requirements of 40 CFR Part 63, Subpart FFFF |
| E-VENTGAS | EP | R5121-10 | VOC | 30 TAC Chapter 115, Vent Gas Controls | § 115.122(c)(1) § 115.121(c)(1) § 115.122(c)(1)(A) | For all persons in Aransas, Bexar, Calhoun, Matagorda, San Patricio, and Travis Counties, any vent gas streams affected by §115.121(c)(1) must be controlled properly using | [G]§ 115.125 § 115.126(2) ** See CAM Summary | § 115.126 § 115.126(2) | 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) |
|---------------------------|-------------------------|---------------|-----------|---------------------------------------|---|---|--|---|---|
| | | | | | | one of the control requirements specified in §115.122(c)(1)(A)-(C). | | | |
| E-VENTGAS | EP | R5121-16 | VOC | 30 TAC Chapter 115, Vent Gas Controls | § 115.122(c)(1) § 115.121(c)(1) § 115.122(c)(1)(B) § 60.18 | For all persons in Aransas, Bexar, Calhoun, Matagorda, San Patricio, and Travis Counties, any vent gas streams affected by §115.121(c)(1) must be controlled properly using one of the control requirements specified in §115.122(c)(1)(A)-(C). | [G]§ 115.125 § 115.126(2) ** See CAM Summary | § 115.126 § 115.126(2) | None |
| E-VENTGAS | EP | R5121-20 | VOC | 30 TAC Chapter 115, Vent Gas Controls | § 115.122(c)(1) § 115.121(c)(1) § 115.122(c)(1)(C) | For all persons in Aransas, Bexar, Calhoun, Matagorda, San Patricio, and Travis Counties, any vent gas streams affected by §115.121(c)(1) must be controlled properly using one of the control requirements specified in §115.122(c)(1)(A)-(C). | [G]§ 115.125 § 115.126(2) ** See CAM Summary | § 115.126 § 115.126(2) | None |
| G_FUG | EU | 60VVA-ALL | VOC | 40 CFR Part 60, Subpart VVa | § 60.482-1a(d) § 60.482-1a(a) § 60.482-1a(b) § 60.485a(b) § 60.486a(a)(1) § 60.486a(a)(2) § 60.486a(k) | Equipment that is in vacuum service is excluded from the requirements of §60.482-2a to §60.482-10a, if it is identified as required in §60.486a(e)(5). | [G]§ 60.485a(b)(1) § 60.485a(b)(2) | § 60.485a(b)(2) § 60.486a(e) § 60.486a(e)(1) § 60.486a(e)(5) | None |
| G_FUG | EU | 60VVA-ALL | VOC | 40 CFR Part 60, Subpart VVa | [G]§ 60.482-1a(e) § 60.482-1a(a) § 60.482-1a(b) § 60.485a(b) § 60.486a(a)(1) § 60.486a(a)(2) § 60.486a(k) | Equipment that an owner or operator designates as being in VOC service less than 300 hours (hr)/yr is excluded from the requirements of §§ 60.482-2a through 60.482-11a if it | [G]§ 60.485a(b)(1) § 60.485a(b)(2) | § 60.485a(b)(2) § 60.486a(e) § 60.486a(e)(1) § 60.486a(e)(6) | 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) |
|---------------------------|-------------------------|---------------|-----------|---------------------------------------|---|--|--|---|--|
| | | | | | | is identified as required in §60.486a(e)(6) and it meets any of the conditions specified in paragraphs (e)(1) through (3) of this section. §60.482-1a(e)(1)-(3) | | | |
| G_FUG | EU | 60VVA-ALL | VOC | 40 CFR Part 60, Subpart VVa | [G]§ 60.482-2a(b)(1) § 60.482-1a(a) § 60.482-1a(b) § 60.482-1a(g) § 60.482-2a(b)(2) § 60.482-2a(b)(2)(ii) § 60.482-2a(c)(1) [G]§ 60.482-2a(c)(2) § 60.482-2a(d) [G]§ 60.482-2a(d)(1) § 60.482-2a(d)(2) § 60.482-2a(d)(3) [G]§ 60.482-2a(d)(6) [G]§ 60.482-2a(e) § 60.482-2a(f) [G]§ 60.482-2a(g) § 60.482-2a(h) § 60.482-9a(a) § 60.482-9a(b) [G]§ 60.482-9a(d) § 60.482-9a(f) § 60.485a(b) § 60.485a(c) § 60.485a(c)(1) § 60.485a(f) § 60.486a(a)(1) § 60.486a(a)(2) | The instrument reading that defines a leak in a pump in light liquid service is 5,000 parts per million (ppm) or greater for pumps handling polymerizing monomers or 2,000 ppm or greater for all other pumps, as specified in paragraphs (b)(1)(i) and (ii) of this section. §60.482-2a(b)(1)(i)-(ii) | § 60.482-1a(f)(1) § 60.482-1a(f)(2) [G]§ 60.482-1a(f)(3) § 60.482-1a(g) § 60.482-2a(a)(1) § 60.482-2a(a)(2) § 60.482-2a(b)(2)(i) [G]§ 60.482-2a(d)(4) [G]§ 60.482-2a(d)(5) § 60.482-9a(a) § 60.485a(a) [G]§ 60.485a(b)(1) § 60.485a(b)(2) § 60.485a(c)(2) [G]§ 60.485a(d) [G]§ 60.485a(e) | § 60.482-1a(g) § 60.485a(b)(2) [G]§ 60.486a(a)(3) [G]§ 60.486a(b) [G]§ 60.486a(c) § 60.486a(e) § 60.486a(e)(1) [G]§ 60.486a(e)(2) [G]§ 60.486a(e)(4) § 60.486a(e)(7) [G]§ 60.486a(e)(8) § 60.486a(f) § 60.486a(f)(1) [G]§ 60.486a(h) | § 60.487a(a) § 60.487a(b) § 60.487a(b)(1) § 60.487a(b)(3) § 60.487a(c) § 60.487a(c)(1) § 60.487a(c)(2) § 60.487a(c)(2)(iii) § 60.487a(c)(2)(iv) § 60.487a(c)(2)(ix) § 60.487a(c)(3) § 60.487a(c)(4) § 60.487a(e) |

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) |
|---------------------------|-------------------------|---------------|-----------|---------------------------------------|---|---|--|---|--|
| | | | | | § 60.486a(k) | | | | |
| G_FUG | EU | 60VVA-ALL | VOC | 40 CFR Part 60, Subpart VVa | § 60.482-3a(a) § 60.482-1a(a) § 60.482-1a(b) § 60.482-1a(g) [G]§ 60.482-3a(b) § 60.482-3a(c) § 60.482-3a(d) § 60.482-3a(e)(2) § 60.482-3a(f) [G]§ 60.482-3a(g) § 60.482-3a(h) [G]§ 60.482-3a(i) § 60.482-3a(j) § 60.482-9a(a) § 60.482-9a(b) § 60.485a(b) § 60.485a(c) § 60.485a(c)(1) § 60.485a(f) § 60.486a(a)(1) § 60.486a(a)(2) § 60.486a(k) | Each compressor shall be equipped with a seal system that includes a barrier fluid system and that prevents leakage of VOC to the atmosphere, except as provided in §60.482-3a(c) and paragraphs (h), (i), and (j) of this section. | § 60.482-1a(g) § 60.482-3a(e)(1) § 60.482-9a(a) § 60.485a(a) [G]§ 60.485a(b)(1) § 60.485a(b)(2) § 60.485a(c)(2) [G]§ 60.485a(d) | § 60.482-1a(g) § 60.485a(b)(2) [G]§ 60.486a(a)(3) [G]§ 60.486a(b) [G]§ 60.486a(c) § 60.486a(e) § 60.486a(e)(1) [G]§ 60.486a(e)(2) [G]§ 60.486a(e)(4) [G]§ 60.486a(e)(8) [G]§ 60.486a(h) | § 60.487a(a) § 60.487a(b) § 60.487a(b)(1) § 60.487a(b)(4) § 60.487a(c) § 60.487a(c)(1) § 60.487a(c)(2) § 60.487a(c)(2)(ix) § 60.487a(c)(2)(v) § 60.487a(c)(2)(vi) § 60.487a(c)(3) § 60.487a(c)(4) § 60.487a(e) |
| G_FUG | EU | 60VVA-ALL | VOC | 40 CFR Part 60, Subpart VVa | § 60.482-4a(a) § 60.482-1a(a) § 60.482-1a(b) § 60.482-1a(g) § 60.482-4a(b)(1) § 60.482-4a(b)(2) § 60.482-4a(c) § 60.482-4a(d)(1) § 60.482-4a(d)(2) § 60.482-9a(a) § 60.482-9a(b) § 60.485a(b) § 60.485a(c) § 60.485a(c)(1) § 60.485a(f) | Except during pressure releases, each pressure relief device in gas/vapor service shall be operated with no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, as determined by the methods specified in §60.485a(c). | § 60.482-1a(g) § 60.482-4a(b)(2) § 60.482-9a(a) § 60.485a(a) [G]§ 60.485a(b)(1) § 60.485a(b)(2) § 60.485a(c)(2) [G]§ 60.485a(d) | § 60.482-1a(g) § 60.485a(b)(2) § 60.486a(e) § 60.486a(e)(1) § 60.486a(e)(10) § 60.486a(e)(3) [G]§ 60.486a(e)(4) [G]§ 60.486a(e)(8) | § 60.487a(a) § 60.487a(b) § 60.487a(b)(1) § 60.487a(c) § 60.487a(c)(1) § 60.487a(c)(2) § 60.487a(c)(2)(ix) § 60.487a(c)(3) § 60.487a(c)(4) § 60.487a(e) |

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) |
|---------------------------|-------------------------|---------------|-----------|---------------------------------------|--|--|--|--|--|
| | | | | | § 60.486a(a)(1) § 60.486a(a)(2) § 60.486a(k) | | | | |
| G_FUG | EU | 60VVA-ALL | VOC | 40 CFR Part 60, Subpart VVa | § 60.482-5a(a) § 60.482-1a(a) § 60.482-1a(b) § 60.482-1a(g) [G]§ 60.482-5a(b) § 60.482-5a(c) § 60.485a(b) § 60.485a(f) § 60.486a(a)(1) § 60.486a(a)(2) § 60.486a(k) | Each sampling connection system shall be equipped with a closed-purge, closed-loop, or closed-vent system, except as provided in §60.482-1a(c) and paragraph (c) of this section. | § 60.482-1a(g) § 60.485a(a) [G]§ 60.485a(b)(1) § 60.485a(b)(2) [G]§ 60.485a(d) | § 60.482-1a(g) § 60.485a(b)(2) § 60.486a(e) § 60.486a(e)(1) [G]§ 60.486a(e)(8) | § 60.487a(a) § 60.487a(b) § 60.487a(b)(1) § 60.487a(c) § 60.487a(c)(1) § 60.487a(c)(2) § 60.487a(c)(2)(ix) § 60.487a(c)(3) § 60.487a(c)(4) § 60.487a(e) |
| G_FUG | EU | 60VVA-ALL | VOC | 40 CFR Part 60, Subpart VVa | § 60.482-6a(a)(1) § 60.482-1a(a) § 60.482-1a(b) § 60.482-1a(g) § 60.482-6a(a)(2) § 60.482-6a(b) § 60.482-6a(c) § 60.482-6a(d) § 60.482-6a(e) § 60.485a(b) § 60.485a(f) § 60.486a(a)(1) § 60.486a(a)(2) § 60.486a(k) | Each open-ended valve or line shall be equipped with a cap, blind flange, plug, or a second valve, except as provided in §60.482-1a(c) and paragraphs (d) and (e) of this section. | § 60.482-1a(g) § 60.485a(a) [G]§ 60.485a(b)(1) § 60.485a(b)(2) [G]§ 60.485a(d) | § 60.482-1a(g) § 60.485a(b)(2) § 60.486a(e) § 60.486a(e)(1) [G]§ 60.486a(e)(8) | § 60.487a(a) § 60.487a(b) § 60.487a(b)(1) § 60.487a(c) § 60.487a(c)(1) § 60.487a(c)(2) § 60.487a(c)(2)(ix) § 60.487a(c)(3) § 60.487a(c)(4) § 60.487a(e) |
| G_FUG | EU | 60VVA-ALL | VOC | 40 CFR Part 60, Subpart VVa | § 60.482-7a(b) § 60.482-1a(a) § 60.482-1a(b) § 60.482-1a(g) § 60.482-7a(a)(1) [G]§ 60.482-7a(d) [G]§ 60.482-7a(e) [G]§ 60.482-7a(f) [G]§ 60.482-7a(g) [G]§ 60.482-7a(h) | At a valve in gas vapor service if an instrument reading of 500 ppm or greater is measured, a leak is detected. | § 60.482-1a(f)(1) § 60.482-1a(f)(2) [G]§ 60.482-1a(f)(3) § 60.482-1a(g) § 60.482-7a(a)(1) [G]§ 60.482-7a(a)(2) [G]§ 60.482-7a(c) § 60.485a(a) [G]§ 60.485a(b)(1) | § 60.482-1a(g) § 60.485a(b)(2) [G]§ 60.486a(a)(3) [G]§ 60.486a(b) [G]§ 60.486a(c) § 60.486a(e) § 60.486a(e)(1) [G]§ 60.486a(e)(2) [G]§ 60.486a(e)(4) [G]§ 60.486a(e)(8) | § 60.487a(a) § 60.487a(b) § 60.487a(b)(1) § 60.487a(b)(2) § 60.487a(c) § 60.487a(c)(1) § 60.487a(c)(2) § 60.487a(c)(2)(i) § 60.487a(c)(2)(ii) § 60.487a(c)(2)(ix) |

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) |
|---------------------------|-------------------------|---------------|-----------|---------------------------------------|--|--|---|--|--|
| | | | | | § 60.485a(b) § 60.485a(c) § 60.485a(c)(1) § 60.485a(f) § 60.486a(a)(1) § 60.486a(a)(2) § 60.486a(k) | | § 60.485a(b)(2) § 60.485a(c)(2) [G]§ 60.485a(d) [G]§ 60.485a(e) | § 60.486a(f) § 60.486a(f)(1) § 60.486a(f)(2) | § 60.487a(c)(3) § 60.487a(c)(4) § 60.487a(e) |
| G_FUG | EU | 60VVA-ALL | VOC | 40 CFR Part 60, Subpart VVa | § 60.482-8a(b) § 60.482-1a(a) § 60.482-1a(b) § 60.482-1a(g) [G]§ 60.482-2a(c)(2) [G]§ 60.482-7a(e) § 60.482-8a(a) § 60.482-8a(a)(2) [G]§ 60.482-8a(c) § 60.482-8a(d) § 60.482-9a(a) § 60.482-9a(b) [G]§ 60.482-9a(d) § 60.482-9a(f) § 60.485a(b) § 60.485a(f) § 60.486a(a)(1) § 60.486a(a)(2) § 60.486a(k) | At a pump in heavy liquid service, if an instrument reading of 10,000 ppm or greater is measured, a leak is detected. | § 60.482-1a(g) § 60.482-8a(a)(1) § 60.482-9a(a) § 60.485a(a) [G]§ 60.485a(b)(1) § 60.485a(b)(2) [G]§ 60.485a(d) | § 60.482-1a(g) § 60.485a(b)(2) [G]§ 60.486a(a)(3) [G]§ 60.486a(b) [G]§ 60.486a(c) § 60.486a(e) § 60.486a(e)(1) [G]§ 60.486a(e)(8) | § 60.487a(a) § 60.487a(b) § 60.487a(b)(1) § 60.487a(c) § 60.487a(c)(1) § 60.487a(c)(2) § 60.487a(c)(2)(ix) § 60.487a(c)(3) § 60.487a(c)(4) § 60.487a(e) |
| G_FUG | EU | 60VVA-ALL | VOC | 40 CFR Part 60, Subpart VVa | § 60.482-8a(b) § 60.482-1a(a) § 60.482-1a(b) § 60.482-1a(g) [G]§ 60.482-2a(c)(2) [G]§ 60.482-7a(e) § 60.482-8a(a) § 60.482-8a(a)(2) [G]§ 60.482-8a(c) § 60.482-8a(d) | At a valve in heavy liquid service, if an instrument reading of 10,000 ppm or greater is measured, a leak is detected. | § 60.482-1a(g) § 60.482-8a(a)(1) § 60.482-9a(a) § 60.485a(a) [G]§ 60.485a(b)(1) § 60.485a(b)(2) [G]§ 60.485a(d) | § 60.482-1a(g) § 60.485a(b)(2) [G]§ 60.486a(a)(3) [G]§ 60.486a(b) [G]§ 60.486a(c) § 60.486a(e) § 60.486a(e)(1) [G]§ 60.486a(e)(8) | § 60.487a(a) § 60.487a(b) § 60.487a(b)(1) § 60.487a(c) § 60.487a(c)(1) § 60.487a(c)(2) § 60.487a(c)(2)(ix) § 60.487a(c)(3) § 60.487a(c)(4) § 60.487a(e) |

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) |
|---------------------------|-------------------------|---------------|-----------|---------------------------------------|---|---|--|--|--|
| | | | | | § 60.482-9a(a) § 60.482-9a(b) § 60.482-9a(c) § 60.482-9a(c)(1) § 60.482-9a(e) § 60.482-9a(f) § 60.485a(b) § 60.485a(f) § 60.486a(a)(1) § 60.486a(a)(2) § 60.486a(k) | | | | |
| G_FUG | EU | 60VVA-ALL | VOC | 40 CFR Part 60, Subpart VVa | § 60.482-8a(b) § 60.482-1a(a) § 60.482-1a(b) § 60.482-1a(g) [G]§ 60.482-2a(c)(2) [G]§ 60.482-7a(e) § 60.482-8a(a) § 60.482-8a(a)(2) [G]§ 60.482-8a(c) § 60.482-8a(d) § 60.482-9a(a) § 60.482-9a(b) § 60.485a(b) § 60.485a(f) § 60.486a(a)(1) § 60.486a(a)(2) § 60.486a(k) | At a pressure relief device in light liquid or heavy liquid service, if an instrument reading of 10,000 ppm or greater is measured, a leak is detected. | § 60.482-1a(g) § 60.482-8a(a)(1) § 60.482-9a(a) § 60.485a(a) [G]§ 60.485a(b)(1) § 60.485a(b)(2) [G]§ 60.485a(d) [G]§ 60.485a(e) | § 60.482-1a(g) § 60.485a(b)(2) [G]§ 60.486a(a)(3) [G]§ 60.486a(b) [G]§ 60.486a(c) § 60.486a(e) § 60.486a(e)(1) [G]§ 60.486a(e)(8) | § 60.487a(a) § 60.487a(b) § 60.487a(b)(1) § 60.487a(c) § 60.487a(c)(1) § 60.487a(c)(2) § 60.487a(c)(2)(ix) § 60.487a(c)(3) § 60.487a(c)(4) § 60.487a(e) |
| G_FUG | EU | 60VVA-ALL | VOC | 40 CFR Part 60, Subpart VVa | § 60.482-8a(b) § 60.482-1a(a) § 60.482-1a(b) § 60.482-1a(g) [G]§ 60.482-2a(c)(2) [G]§ 60.482-7a(e) § 60.482-8a(a) § 60.482-8a(a)(2) [G]§ 60.482-8a(c) § 60.482-8a(d) § 60.482-9a(a) § 60.482-9a(b) § 60.485a(b) § 60.485a(f) § 60.486a(a)(1) § 60.486a(a)(2) § 60.486a(k) | At a connector in heavy liquid service, if an instrument reading of 10,000 ppm or greater is measured, a leak is detected. | § 60.482-1a(g) § 60.482-8a(a)(1) § 60.482-9a(a) § 60.485a(a) [G]§ 60.485a(b)(1) § 60.485a(b)(2) [G]§ 60.485a(d) | § 60.482-1a(g) § 60.485a(b)(2) [G]§ 60.486a(a)(3) [G]§ 60.486a(b) [G]§ 60.486a(c) § 60.486a(e) § 60.486a(e)(1) [G]§ 60.486a(e)(8) | § 60.487a(a) § 60.487a(b) § 60.487a(b)(1) § 60.487a(c) § 60.487a(c)(1) § 60.487a(c)(2) § 60.487a(c)(2)(ix) § 60.487a(c)(3) § 60.487a(c)(4) |

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) |
|---------------------------|-------------------------|---------------|-------------|---------------------------------------|--|---|---|---|--|
| | | | | | [G]§ 60.482-8a(c) § 60.482-8a(d) § 60.482-9a(a) § 60.482-9a(b) § 60.482-9a(c) § 60.482-9a(c)(1) § 60.482-9a(c)(2) § 60.482-9a(f) § 60.485a(b) § 60.485a(f) § 60.486a(a)(1) § 60.486a(a)(2) § 60.486a(k) | | | § 60.487a(e) | |
| G_FUG | EU | 60VVA-ALL | VOC | 40 CFR Part 60, Subpart VVa | § 60.482-11a(b)(2) § 60.482-11a(b)(3) § 60.482-11a(b)(3)(i) § 60.482-11a(d) [G]§ 60.482-11a(e) [G]§ 60.482-11a(f)(1) § 60.482-11a(f)(2) § 60.482-11a(g) § 60.485a(b) § 60.486a(a)(1) § 60.486a(a)(2) § 60.486a(k) | If an instrument reading greater than or equal to 500 ppm is measured in connectors in gas and vapor and light liquid service, a leak is detected. | § 60.482-11a(a) § 60.482-11a(b) § 60.482-11a(b)(1) § 60.482-11a(b)(3) § 60.482-11a(b)(3)(ii) [G]§ 60.482-11a(b)(3)(iii) § 60.482-11a(b)(3)(iv) § 60.482-11a(c) § 60.485a(a) [G]§ 60.485a(b)(1) § 60.485a(b)(2) [G]§ 60.485a(e) | § 60.482-11a(b)(3)(v) § 60.485a(b)(2) [G]§ 60.486a(a)(3) [G]§ 60.486a(b) [G]§ 60.486a(c) § 60.486a(e) § 60.486a(e)(1) [G]§ 60.486a(e)(8) § 60.486a(e)(9) § 60.486a(f) § 60.486a(f)(1) | § 60.487a(b) § 60.487a(b)(1) § 60.487a(b)(5) § 60.487a(c) § 60.487a(c)(1) § 60.487a(c)(2) § 60.487a(c)(2)(i) § 60.487a(c)(2)(ix) § 60.487a(c)(2)(vii) § 60.487a(c)(2)(viii) § 60.487a(c)(3) § 60.487a(c)(4) § 60.487a(e) |
| G_FUG | EU | 63H-ALL | 112(B) HAPS | 40 CFR Part 63, Subpart H | § 63.162(e) § 63.162(a) § 63.162(c) [G]§ 63.162(g) § 63.162(h) | Equipment that is in organic HAP service less than 300 hours per year is excluded from the requirements of §§63.163 - 63.174 and §63.178 if it is identified as required in §63.181(j). | [G]§ 63.180(d) | § 63.181(a) [G]§ 63.181(b) § 63.181(c) [G]§ 63.181(i) § 63.181(j) | [G]§ 63.182(a) [G]§ 63.182(b) |
| G_FUG | EU | 63H-ALL | 112(B) HAPS | 40 CFR Part 63, Subpart H | [G]§ 63.164 § 63.162(a) § 63.162(c) | Standards: Compressors. §63.164(a)-(i) | [G]§ 63.164 [G]§ 63.180(b) [G]§ 63.180(c) | § 63.181(a) [G]§ 63.181(b) § 63.181(c) | [G]§ 63.182(a) [G]§ 63.182(b) § 63.182(c) |

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) |
|---------------------------|-------------------------|---------------|----------------|---------------------------------------|---|--|---|--|--|
| | | | | | [G]§ 63.162(f) [G]§ 63.162(g) § 63.162(h) [G]§ 63.171 | | [G]§ 63.180(d) | [G]§ 63.181(d) [G]§ 63.181(f) | [G]§ 63.182(c)(1) § 63.182(c)(4) [G]§ 63.182(d) |
| G_FUG | EU | 63H-ALL | 112(B) HAPS | 40 CFR Part 63, Subpart H | [G]§ 63.165 § 63.162(a) § 63.162(c) [G]§ 63.162(g) § 63.162(h) [G]§ 63.171 | Standards: Pressure relief device in gas/vapor service. §63.165(a)-(d) | [G]§ 63.165 [G]§ 63.180(b) [G]§ 63.180(c) [G]§ 63.180(d) | § 63.181(a) [G]§ 63.181(b) § 63.181(c) [G]§ 63.181(f) | [G]§ 63.182(a) [G]§ 63.182(b) § 63.182(c) [G]§ 63.182(c)(1) § 63.182(c)(4) [G]§ 63.182(d) |
| G_FUG | EU | 63H-ALL | 112(B) HAPS | 40 CFR Part 63, Subpart H | [G]§ 63.166 § 63.162(a) § 63.162(c) [G]§ 63.162(g) § 63.162(h) [G]§ 63.171 | Standards: Sampling connection systems. §63.166(a)-(c) | [G]§ 63.180(b) [G]§ 63.180(d) | § 63.181(a) [G]§ 63.181(b) § 63.181(c) [G]§ 63.181(i) | [G]§ 63.182(a) [G]§ 63.182(b) § 63.182(c) [G]§ 63.182(c)(1) § 63.182(c)(4) [G]§ 63.182(d) |
| G_FUG | EU | 63H-ALL | 112(B) HAPS | 40 CFR Part 63, Subpart H | [G]§ 63.169 § 63.162(a) § 63.162(c) [G]§ 63.162(f) [G]§ 63.162(g) § 63.162(h) [G]§ 63.171 | Standards: Pumps in heavy liquid service. §63.169(a)-(d) | [G]§ 63.169 [G]§ 63.180(b) [G]§ 63.180(d) | § 63.181(a) [G]§ 63.181(b) § 63.181(c) [G]§ 63.181(d) [G]§ 63.181(i) | [G]§ 63.182(a) [G]§ 63.182(b) § 63.182(c) [G]§ 63.182(c)(1) § 63.182(c)(4) [G]§ 63.182(d) |
| G_FUG | EU | 63H-ALL | 112(B) HAPS | 40 CFR Part 63, Subpart H | [G]§ 63.169 § 63.162(a) § 63.162(c) [G]§ 63.162(f) [G]§ 63.162(g) § 63.162(h) [G]§ 63.171 | Standards: Valves in heavy liquid service. §63.169(a)-(d) | [G]§ 63.169 [G]§ 63.180(b) [G]§ 63.180(d) | § 63.181(a) [G]§ 63.181(b) § 63.181(c) [G]§ 63.181(d) [G]§ 63.181(i) | [G]§ 63.182(a) [G]§ 63.182(b) § 63.182(c) [G]§ 63.182(c)(1) § 63.182(c)(4) [G]§ 63.182(d) |
| G_FUG | EU | 63H-ALL | 112(B) HAPS | 40 CFR Part 63, Subpart H | [G]§ 63.169 § 63.162(a) § 63.162(c) [G]§ 63.162(f) [G]§ 63.162(g) § 63.162(h) | Standards: Connectors in heavy liquid service. §63.169(a)-(d) | [G]§ 63.169 [G]§ 63.180(b) [G]§ 63.180(d) | § 63.181(a) [G]§ 63.181(b) § 63.181(c) [G]§ 63.181(d) [G]§ 63.181(i) | [G]§ 63.182(a) [G]§ 63.182(b) § 63.182(c) [G]§ 63.182(c)(1) § 63.182(c)(4) [G]§ 63.182(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) |
|---------------------------|-------------------------|---------------|-------------|---------------------------------------|---|---|---|--|--|
| | | | | | [G]§ 63.171 | | | | |
| G_FUG | EU | 63H-ALL | 112(B) HAPS | 40 CFR Part 63, Subpart H | [G]§ 63.169 § 63.162(a) § 63.162(c) [G]§ 63.162(f) [G]§ 63.162(g) § 63.162(h) [G]§ 63.171 | Standards: Agitators in heavy liquid service. §63.169(a)-(d) | [G]§ 63.169 [G]§ 63.180(b) [G]§ 63.180(d) | § 63.181(a) [G]§ 63.181(b) § 63.181(c) [G]§ 63.181(d) [G]§ 63.181(i) | [G]§ 63.182(a) [G]§ 63.182(b) § 63.182(c) [G]§ 63.182(c)(1) § 63.182(c)(4) [G]§ 63.182(d) |
| G_FUG | EU | 63H-ALL | 112(B) HAPS | 40 CFR Part 63, Subpart H | [G]§ 63.169 § 63.162(a) § 63.162(c) [G]§ 63.162(f) [G]§ 63.162(g) § 63.162(h) [G]§ 63.171 | Standards: Instrumentation systems. §63.169(a)-(d) | [G]§ 63.169 [G]§ 63.180(b) [G]§ 63.180(d) | § 63.181(a) [G]§ 63.181(b) § 63.181(c) [G]§ 63.181(d) | [G]§ 63.182(a) [G]§ 63.182(b) § 63.182(c) [G]§ 63.182(c)(1) § 63.182(c)(4) [G]§ 63.182(d) |
| G_FUG | EU | 63H-ALL | 112(B) HAPS | 40 CFR Part 63, Subpart H | [G]§ 63.169 § 63.162(a) § 63.162(c) [G]§ 63.162(f) [G]§ 63.162(g) § 63.162(h) [G]§ 63.171 | Standards: Pressure relief devices in liquid service. §63.169(a)-(d) | [G]§ 63.169 [G]§ 63.180(b) [G]§ 63.180(d) | § 63.181(a) [G]§ 63.181(b) § 63.181(c) [G]§ 63.181(d) | [G]§ 63.182(a) [G]§ 63.182(b) § 63.182(c) [G]§ 63.182(c)(1) § 63.182(c)(4) [G]§ 63.182(d) |
| G_FUG | EU | 63H-ALL | 112(B) HAPS | 40 CFR Part 63, Subpart H | § 63.170 § 63.162(a) § 63.162(c) [G]§ 63.162(g) § 63.162(h) [G]§ 63.171 | Standards: Surge control vessels and bottom receivers. | [G]§ 63.180(b) [G]§ 63.180(d) | § 63.181(a) [G]§ 63.181(b) § 63.181(c) | [G]§ 63.182(a) [G]§ 63.182(b) § 63.182(c) [G]§ 63.182(c)(1) § 63.182(c)(4) [G]§ 63.182(d) |
| G_FUG | EU | 63H-ALL | 112(B) HAPS | 40 CFR Part 63, Subpart H | [G]§ 63.173 § 63.162(a) § 63.162(c) [G]§ 63.162(f) [G]§ 63.162(g) § 63.162(h) [G]§ 63.171 | Standards: Agitators gas/vapor service and in light liquid service. §63.173(a)-(j). | [G]§ 63.173 [G]§ 63.180(b) [G]§ 63.180(d) | § 63.181(a) [G]§ 63.181(b) § 63.181(c) [G]§ 63.181(d) | [G]§ 63.182(a) [G]§ 63.182(b) § 63.182(c) [G]§ 63.182(c)(1) § 63.182(c)(4) [G]§ 63.182(d) |
| G_FUG | EU | 63H-ALL | 112(B) | 40 CFR Part 63, | [G]§ 63.174 | Standards: Connectors in | [G]§ 63.174 | § 63.181(a) | [G]§ 63.182(a) |

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) |
|---------------------------|-------------------------|---------------|----------------|---------------------------------------|--|--|--|--|--|
| | | | HAPS | Subpart H | § 63.162(a) § 63.162(c) [G]§ 63.162(f) [G]§ 63.162(g) § 63.162(h) [G]§ 63.171 | gas/vapor service and in light liquid service. §63.174(a)-(j) | [G]§ 63.180(b) [G]§ 63.180(d) | [G]§ 63.181(b) § 63.181(c) [G]§ 63.181(d) | [G]§ 63.182(b) § 63.182(c) [G]§ 63.182(c)(1) § 63.182(c)(4) [G]§ 63.182(d) |
| G_FUG | EU | 63H-ALL | 112(B) HAPS | 40 CFR Part 63, Subpart H | [G]§ 63.163 § 63.162(a) § 63.162(c) [G]§ 63.162(f) [G]§ 63.162(g) § 63.162(h) [G]§ 63.171 [G]§ 63.176 | Standards: Pumps in light liquid service. §63.163(a)-(j) | [G]§ 63.163 [G]§ 63.176 [G]§ 63.180(b) [G]§ 63.180(d) | § 63.181(a) [G]§ 63.181(b) § 63.181(c) [G]§ 63.181(d) § 63.181(h) [G]§ 63.181(h)(3) § 63.181(h)(4) [G]§ 63.181(h)(5) § 63.181(h)(6) § 63.181(h)(7) § 63.181(h)(8) | [G]§ 63.182(a) [G]§ 63.182(b) § 63.182(c) [G]§ 63.182(c)(1) § 63.182(c)(4) [G]§ 63.182(d) |
| G_FUG | EU | 63H-ALL | 112(B) HAPS | 40 CFR Part 63, Subpart H | [G]§ 63.167 § 63.162(a) § 63.162(c) [G]§ 63.162(g) § 63.162(h) [G]§ 63.171 [G]§ 63.175 | Standards: Open-ended valves or lines. §63.167(a)-(e). | [G]§ 63.175 [G]§ 63.180(b) [G]§ 63.180(d) | § 63.181(a) [G]§ 63.181(b) § 63.181(c) § 63.181(h) [G]§ 63.181(h)(1) [G]§ 63.181(h)(2) § 63.181(h)(4) [G]§ 63.181(h)(5) § 63.181(h)(6) § 63.181(h)(7) [G]§ 63.181(i) | [G]§ 63.182(a) [G]§ 63.182(b) § 63.182(c) [G]§ 63.182(c)(1) § 63.182(c)(4) [G]§ 63.182(d) |
| G_FUG | EU | 63H-ALL | 112(B) HAPS | 40 CFR Part 63, Subpart H | [G]§ 63.168 § 63.162(a) § 63.162(c) [G]§ 63.162(f) [G]§ 63.162(g) § 63.162(h) [G]§ 63.171 [G]§ 63.175 | Standards: Valves in gas/vapor service and in light liquid service. §63.168(a)-(j) | [G]§ 63.168 [G]§ 63.175 [G]§ 63.180(b) [G]§ 63.180(d) | § 63.181(a) [G]§ 63.181(b) § 63.181(c) [G]§ 63.181(d) § 63.181(h) [G]§ 63.181(h)(1) [G]§ 63.181(h)(2) § 63.181(h)(4) [G]§ 63.181(h)(5) § 63.181(h)(6) | [G]§ 63.182(a) [G]§ 63.182(b) § 63.182(c) [G]§ 63.182(c)(1) § 63.182(c)(4) [G]§ 63.182(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) |
|---------------------------|-------------------------|---------------|-------------|---------------------------------------|---|---|---|---|--|
| | | | | | | | | § 63.181(h)(7) | |
| GAD03 | EU | R5112-14 | VOC | 30 TAC Chapter 115, Storage of VOCs | § 115.112(c)(1) | Tanks shall not store VOC, other than crude oil or condensate, unless the required pressure is maintained, or they are equipped with the appropriate control device specified in Table I(b). | ** See Periodic Monitoring Summary | None | None |
| GBD05 | EP | R5121-10 | VOC | 30 TAC Chapter 115, Vent Gas Controls | § 115.122(c)(1) § 115.121(c)(1) § 115.122(c)(1)(A) | For all persons in Aransas, Bexar, Calhoun, Matagorda, San Patricio, and Travis Counties, any vent gas streams affected by §115.121(c)(1) must be controlled properly using one of the control requirements specified in §115.122(c)(1)(A)-(C). | [G]§ 115.125 § 115.126(2) ** See CAM Summary | § 115.126 § 115.126(2) | None |
| GBD05 | EP | R5121-16 | VOC | 30 TAC Chapter 115, Vent Gas Controls | § 115.122(c)(1) § 115.121(c)(1) § 115.122(c)(1)(B) § 60.18 | For all persons in Aransas, Bexar, Calhoun, Matagorda, San Patricio, and Travis Counties, any vent gas streams affected by §115.121(c)(1) must be controlled properly using one of the control requirements specified in §115.122(c)(1)(A)-(C). | [G]§ 115.125 § 115.126(2) ** See CAM Summary | § 115.126 § 115.126(2) | None |
| GBD05 | EP | 63G-5A | 112(B) HAPS | 40 CFR Part 63, Subpart G | [G]§ 63.113(a)(1) § 63.11 § 63.113(h) [G]§ 63.115(f) | Reduce emissions of organic HAP using a flare. §63.113(a)(1)(i)-(ii) | § 63.114(a) § 63.114(a)(2) [G]§ 63.115(f) [G]§ 63.116(a) | [G]§ 63.117(a)(5) § 63.118(a)(1) § 63.118(a)(2) [G]§ 63.152(a) [G]§ 63.152(f) | [G]§ 63.117(a)(5) § 63.117(f) § 63.118(f)(2) § 63.118(f)(5) [G]§ 63.151(b) § 63.151(e) [G]§ 63.151(e)(1) § 63.151(e)(2) |

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) |
|---------------------------|-------------------------|---------------|----------------|---------------------------------------|---|---|---|---|--|
| | | | | | | | | | § 63.151(e)(3) [G]§ 63.151(j) [G]§ 63.152(a) § 63.152(b) [G]§ 63.152(b)(1) [G]§ 63.152(b)(2) § 63.152(c)(1) § 63.152(c)(2) § 63.152(c)(2)(i) [G]§ 63.152(c)(2)(ii) § 63.152(c)(2)(iii) § 63.152(c)(4)(ii) [G]§ 63.152(c)(6) |
| GBD05 | EP | 63G-5B | 112(B) HAPS | 40 CFR Part 63, Subpart G | [G]§ 63.113(a)(2) § 63.113(h) [G]§ 63.115(f) | Reduce emissions of total organic HAPs by 98 wt.% or to a concentration of 20 ppm by volume; whichever is less stringent or as specified. §63.113(a)(2)(i)-(ii) | § 63.114(a) § 63.114(a)(1)(i) § 63.114(e) [G]§ 63.115(f) [G]§ 63.116(c) | § 63.114(a)(1) § 63.117(a)(4) § 63.117(a)(4)(i) § 63.117(a)(4)(ii) § 63.118(a)(1) § 63.118(a)(2) [G]§ 63.152(a) [G]§ 63.152(f) | § 63.114(e) § 63.117(a)(4) § 63.117(a)(4)(i) § 63.117(a)(4)(ii) § 63.117(f) § 63.118(f)(1) § 63.118(f)(2) [G]§ 63.151(b) § 63.151(e) [G]§ 63.151(e)(1) § 63.151(e)(2) § 63.151(e)(3) [G]§ 63.151(j) [G]§ 63.152(a) § 63.152(b) [G]§ 63.152(b)(1) [G]§ 63.152(b)(2) § 63.152(c)(1) § 63.152(c)(2) § 63.152(c)(2)(i) [G]§ 63.152(c)(2)(ii) § 63.152(c)(2)(iii) § 63.152(c)(3) § 63.152(c)(3)(i) § 63.152(c)(3)(ii) § 63.152(c)(4)(ii) |

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) |
|---------------------------|-------------------------|---------------|----------------|---------------------------------------|--|--|---|---|---|
| | | | | | | | | | [G]§ 63.152(c)(6) |
| GBX02 | EP | R1111-1 | Opacity | 30 TAC Chapter 111, Visible Emissions | § 111.111(a)(1)(C) § 111.111(a)(1)(E) | Visible emissions from any stationary vent shall not exceed an opacity of 15% averaged over a six minute period for any source with a total flow rate of at least 100,000 acfm unless a CEMS is installed. | [G]§ 111.111(a)(1)(F) ** See Periodic Monitoring Summary | None | None |
| GED03 | EP | R5121-3 | VOC | 30 TAC Chapter 115, Vent Gas Controls | § 115.127(c)(1)(B) § 115.127(c)(1) | A vent gas stream having a combined weight of the VOC or classes of compounds specified in §115.121(c)(1)(B)-(C) of this title equal to or less than 100 lbs in a continuous 24-hour period is exempt from the requirements of §115.121(c)(1) of this title. | [G]§ 115.125 § 115.126(2) | § 115.126 § 115.126(2) § 115.126(4) | None |
| GED03 | EP | 63G-2A | 112(B) HAPS | 40 CFR Part 63, Subpart G | [G]§ 63.113(a)(1) § 60.662(b) § 63.11 § 63.113(h) [G]§ 63.115(f) | Reduce emissions of organic HAP using a flare. §63.113(a)(1)(i)-(iii) | § 63.114(a) § 63.114(a)(2) § 63.114(d)(1) [G]§ 63.115(f) [G]§ 63.116(a) | § 63.114(d)(1) [G]§ 63.117(a)(5) § 63.118(a)(1) § 63.118(a)(2) § 63.118(a)(3) [G]§ 63.152(a) [G]§ 63.152(f) | [G]§ 63.117(a)(5) § 63.117(f) § 63.118(f)(2) § 63.118(f)(3) § 63.118(f)(5) [G]§ 63.151(b) § 63.151(e) [G]§ 63.151(e)(1) § 63.151(e)(2) § 63.151(e)(3) [G]§ 63.151(j) [G]§ 63.152(a) § 63.152(b) [G]§ 63.152(b)(1) [G]§ 63.152(b)(2) § 63.152(c)(1) § 63.152(c)(2) § 63.152(c)(2)(i) [G]§ 63.152(c)(2)(ii) |

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) |
|---------------------------|-------------------------|---------------|-------------|---------------------------------------|---|---|---|--|---|
| | | | | | | | | | § 63.152(c)(2)(iii) § 63.152(c)(4)(ii) [G]§ 63.152(c)(6) |
| GED03 | EP | 63G-2B | 112(B) HAPS | 40 CFR Part 63, Subpart G | [G]§ 63.113(a)(2) § 60.662(a) § 63.113(h) [G]§ 63.115(f) | Reduce emissions of total organic HAPs by 98 wt.% or to a concentration of 20 ppm by volume; whichever is less stringent or as specified. §63.113(a)(2)(i)-(ii) | § 63.114(a) § 63.114(a)(1)(i) § 63.114(d)(1) § 63.114(e) [G]§ 63.115(f) [G]§ 63.116(c) | § 63.114(a)(1) § 63.114(d)(1) § 63.117(a)(4) § 63.117(a)(4)(i) § 63.117(a)(4)(ii) § 63.117(a)(4)(iii) § 63.118(a)(1) § 63.118(a)(2) § 63.118(a)(3) [G]§ 63.152(a) [G]§ 63.152(f) | § 63.114(e) § 63.117(a)(4) § 63.117(a)(4)(i) § 63.117(a)(4)(ii) § 63.117(f) § 63.118(f)(1) § 63.118(f)(2) § 63.118(f)(3) [G]§ 63.151(b) § 63.151(e) [G]§ 63.151(e)(1) § 63.151(e)(2) § 63.151(e)(3) [G]§ 63.151(j) [G]§ 63.152(a) § 63.152(b) [G]§ 63.152(b)(1) [G]§ 63.152(b)(2) § 63.152(c)(1) § 63.152(c)(2) § 63.152(c)(2)(i) [G]§ 63.152(c)(2)(ii) § 63.152(c)(2)(iii) § 63.152(c)(3) § 63.152(c)(3)(i) § 63.152(c)(3)(ii) § 63.152(c)(4)(ii) [G]§ 63.152(c)(6) |
| GFFLARE01 | CD | R1111-2 | 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 upset 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 |

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) |
|---------------------------|-------------------------|---------------|-----------|---------------------------------------|--|--|---|---|---|
| GFFLARE01 | CD | 60A-1 | Opacity | 40 CFR Part 60, Subpart A | § 60.18(b) § 60.18(c)(1) § 60.18(c)(2) § 60.18(c)(3)(ii) § 60.18(c)(4)(i) § 60.18(c)(6) § 60.18(e) | Flares shall comply with paragraphs (c)-(f) of § 60.18. | § 60.18(d) § 60.18(f)(1) § 60.18(f)(2) § 60.18(f)(3) § 60.18(f)(4) | None | None |
| GFFLARE01 | CD | 60A-2 | Opacity | 40 CFR Part 60, Subpart A | § 60.18(b) § 60.18(c)(1) § 60.18(c)(2) § 60.18(c)(3)(ii) § 60.18(c)(4)(iii) § 60.18(c)(6) § 60.18(e) | Flares shall comply with paragraphs (c)-(f) of § 60.18. | § 60.18(d) § 60.18(f)(1) § 60.18(f)(2) § 60.18(f)(3) § 60.18(f)(4) § 60.18(f)(5) | None | None |
| GFFLARE01 | CD | 60A-3 | Opacity | 40 CFR Part 60, Subpart A | § 60.18(b) § 60.18(c)(1) § 60.18(c)(2) § 60.18(c)(3)(ii) § 60.18(c)(4)(ii) § 60.18(c)(6) § 60.18(e) | Flares shall comply with paragraphs (c)-(f) of § 60.18. | § 60.18(d) § 60.18(f)(1) § 60.18(f)(2) § 60.18(f)(3) § 60.18(f)(4) | None | None |
| GFFLARE01 | CD | 63A-1 | Opacity | 40 CFR Part 63, Subpart A | § 63.11(b)(4) § 63.11(b)(1) § 63.11(b)(2) § 63.11(b)(3) § 63.11(b)(5) § 63.11(b)(6)(ii) § 63.11(b)(7)(i) | Flares shall be designed and operated with no visible emissions, except for periods of a total of 5 minutes or less during any 2 consecutive hrs. Test Method 22 in App. A of part 60 of this chapter shall be used. | § 63.11(b)(4) § 63.11(b)(5) § 63.11(b)(7)(i) | None | None |
| GFFLARE01 | CD | 63A-2 | Opacity | 40 CFR Part 63, Subpart A | § 63.11(b)(4) § 63.11(b)(1) § 63.11(b)(2) § 63.11(b)(3) § 63.11(b)(5) § 63.11(b)(6)(ii) § 63.11(b)(7)(iii) | Flares shall be designed and operated with no visible emissions, except for periods of a total of 5 minutes or less during any 2 consecutive hrs. Test Method 22 in App. A of part | § 63.11(b)(4) § 63.11(b)(5) § 63.11(b)(7)(i) | 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) |
|---------------------------|-------------------------|---------------|-------------|--|---|--|--|---|---|
| | | | | | | 60 of this chapter shall be used. | | | |
| GFFLARE01 | CD | 63A-3 | Opacity | 40 CFR Part 63, Subpart A | § 63.11(b)(4) § 63.11(b)(1) § 63.11(b)(2) § 63.11(b)(3) § 63.11(b)(5) § 63.11(b)(6)(ii) § 63.11(b)(7)(ii) | Flares shall be designed and operated with no visible emissions, except for periods of a total of 5 minutes or less during any 2 consecutive hrs. Test Method 22 in App. A of part 60 of this chapter shall be used. | § 63.11(b)(4) § 63.11(b)(5) § 63.11(b)(7)(i) | None | None |
| GLYUNLOAD | EU | R5212-2 | VOC | 30 TAC Chapter 115, Loading and Unloading of VOC | § 115.217(b)(2) § 115.212(b)(2) § 115.214(b)(1)(B) § 115.214(b)(1)(D) § 115.214(b)(1)(D)(i) | Vapor pressure (at land-based operations). All land-based loading and unloading of VOC with a true vapor pressure less than 1.5 psia is exempt from the requirements of this division except as specified. | § 115.214(b)(1)(A) § 115.214(b)(1)(A)(i) § 115.215 § 115.215(4) | § 115.216 § 115.216(2) § 115.216(3)(B) | None |
| GLYUNLOAD | EU | 63EEEE-1 | 112(B) HAPS | 40 CFR Part 63, Subpart EEEE | § 63.2338(b) The permit holder shall comply with the applicable limitation, standard and/or equipment specification requirements of 40 CFR Part 63, Subpart EEEE | The permit holder shall comply with the applicable requirements of 40 CFR Part 63, Subpart EEEE | The permit holder shall comply with the applicable monitoring and testing requirements of 40 CFR Part 63, Subpart EEEE | The permit holder shall comply with the applicable recordkeeping requirements of 40 CFR Part 63, Subpart EEEE | The permit holder shall comply with the applicable reporting requirements of 40 CFR Part 63, Subpart EEEE |
| GRPBLRSTK | EP | R1111-1 | Opacity | 30 TAC Chapter 111, Visible Emissions | § 111.111(a)(1)(C) § 111.111(a)(1)(E) | Visible emissions from any stationary vent shall not exceed an opacity of 15% averaged over a six minute period for any source with a total flow rate of at least 100,000 acfm unless a CEMS is installed. | [G]§ 111.111(a)(1)(F) ** See Periodic Monitoring Summary | 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) |
|---------------------------|-------------------------|---------------|-----------------|---------------------------------------|---|---|---|--|--|
| GRPBOILER | EU | 60Db-1 | SO ₂ | 40 CFR Part 60, Subpart Db | § 60.42b(k)(2) | Units firing only very low sulfur oil and/or a mixture of gaseous fuels with a potential SO ₂ emission rate of 140 ng/J (0.32 lb/MMBtu) heat input or less are exempt from the SO ₂ emissions limit in §60.42b(k)(1). | § 60.47b(f) | § 60.45b(k) § 60.49b(o) § 60.49b(r) [G]§ 60.49b(r)(2) | § 60.49b(a) § 60.49b(a)(1) § 60.49b(r) [G]§ 60.49b(r)(2) |
| GRPBOILER | EU | 60Db-1 | PM | 40 CFR Part 60, Subpart Db | § 60.40b(a) | This subpart applies to each steam generating unit constructed, modified, or reconstructed after 6/19/84, and that has a heat input capacity from fuels combusted in the unit > 29 MW (100 MMBtu/hr). | None | [G]§ 60.49b(d) § 60.49b(o) | § 60.49b(a) § 60.49b(a)(1) § 60.49b(a)(3) |
| GRPBOILER | EU | 60Db-1 | PM (Opacity) | 40 CFR Part 60, Subpart Db | § 60.40b(a) | This subpart applies to each steam generating unit constructed, modified, or reconstructed after 6/19/84, and that has a heat input capacity from fuels combusted in the unit > 29 MW (100 MMBtu/hr). | None | [G]§ 60.49b(d) § 60.49b(o) | § 60.49b(a) § 60.49b(a)(1) § 60.49b(a)(3) |
| GRPBOILER | EU | 60Db-1 | NO _x | 40 CFR Part 60, Subpart Db | § 60.44b(l)(2) § 60.44b(h) § 60.44b(i) § 60.46b(a) | Affected facilities with a low heat release rate and combusting natural gas or distillate oil in excess of 30% of the heat input from the combustion of all fuels, a limit determined by use of the specified formula. | § 60.46b(c) § 60.46b(e) § 60.46b(e)(1) § 60.46b(e)(3) [G]§ 60.48b(b) § 60.48b(c) § 60.48b(d) § 60.48b(e) [G]§ 60.48b(e)(2) § 60.48b(e)(3) § 60.48b(f) | [G]§ 60.48b(b) § 60.48b(c) [G]§ 60.49b(d) [G]§ 60.49b(g) § 60.49b(o) | § 60.49b(a) § 60.49b(a)(1) § 60.49b(a)(3) § 60.49b(b) § 60.49b(h) § 60.49b(i) § 60.49b(v) § 60.49b(w) |
| GRPBOILER | EU | 60Db-2 | SO ₂ | 40 CFR Part 60, | § 60.42b(k)(2) | Units firing only very low | § 60.47b(f) | § 60.45b(k) | § 60.49b(a) |

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) |
|---------------------------|-------------------------|---------------|-----------------|---------------------------------------|---|--|---|--|--|
| R | | | | Subpart Db | | sulfur oil and/or a mixture of gaseous fuels with a potential SO ₂ emission rate of 140 ng/J (0.32 lb/MMBtu) heat input or less are exempt from the SO ₂ emissions limit in §60.42b(k)(1). | | § 60.49b(o) § 60.49b(r) [G]§ 60.49b(r)(2) | § 60.49b(a)(1) § 60.49b(r) [G]§ 60.49b(r)(2) |
| GRPBOILER | EU | 60Db-2 | PM | 40 CFR Part 60, Subpart Db | § 60.40b(a) | This subpart applies to each steam generating unit constructed, modified, or reconstructed after 6/19/84, and that has a heat input capacity from fuels combusted in the unit > 29 MW (100 MMBtu/hr). | None | [G]§ 60.49b(d) § 60.49b(o) | § 60.49b(a) § 60.49b(a)(1) § 60.49b(a)(3) |
| GRPBOILER | EU | 60Db-2 | PM (Opacity) | 40 CFR Part 60, Subpart Db | § 60.40b(a) | This subpart applies to each steam generating unit constructed, modified, or reconstructed after 6/19/84, and that has a heat input capacity from fuels combusted in the unit > 29 MW (100 MMBtu/hr). | None | [G]§ 60.49b(d) § 60.49b(o) | § 60.49b(a) § 60.49b(a)(1) § 60.49b(a)(3) |
| GRPBOILER | EU | 60Db-2 | NO _x | 40 CFR Part 60, Subpart Db | § 60.44b(l)(1) § 60.44b(h) § 60.44b(i) § 60.46b(a) | Affected facilities combusting coal, oil, or natural gas, or a mixture of these fuels, or any other fuels: a limit of 86 ng/JI (0.20 lb/million Btu) heat input unless the affected facility meets the specified requirements. | § 60.46b(c) § 60.46b(e) § 60.46b(e)(1) § 60.46b(e)(3) [G]§ 60.48b(b) § 60.48b(c) § 60.48b(d) § 60.48b(e) [G]§ 60.48b(e)(2) § 60.48b(e)(3) § 60.48b(f) | [G]§ 60.48b(b) § 60.48b(c) [G]§ 60.49b(d) [G]§ 60.49b(g) § 60.49b(o) | § 60.49b(a) § 60.49b(a)(1) § 60.49b(a)(3) § 60.49b(b) § 60.49b(h) § 60.49b(i) § 60.49b(v) § 60.49b(w) |
| GRPBOILER | EU | 63DDDD-1 | 112(B) HAPS | 40 CFR Part 63, Subpart DDDDD | § 63.7500(a)(1)-Table 3.1 | For a new or existing boiler or process heater with a | § 63.7510(g) § 63.7515(d) | [G]§ 63.7540(a)(10)(vi) § 63.7555(a) | [G]§ 63.7540(a)(10)(vi) § 63.7540(b) |

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) |
|---------------------------|-------------------------|---------------|-------------|---------------------------------------|--|---|--|---|---|
| | | | | | § 63.7500(a) § 63.7500(a)(1) § 63.7500(a)(3) § 63.7500(f) § 63.7505(a) § 63.7540(a) [G]§ 63.7540(a)(10) § 63.7540(a)(12) § 63.7540(a)(13) | continuous oxygen trim system that maintains an optimum air to fuel ratio, conduct a tune-up of the boiler or process heater every 5 years as specified in § 63.7540. | [G]§ 63.7521(f) § 63.7540(a) [G]§ 63.7540(a)(10) § 63.7540(a)(12) § 63.7540(a)(13) | § 63.7555(a)(1) § 63.7555(a)(2) [G]§ 63.7560 | § 63.7545(a) § 63.7545(c) § 63.7545(e) § 63.7545(e)(1) § 63.7545(e)(8)(i) § 63.7550(a) [G]§ 63.7550(b) § 63.7550(c) § 63.7550(c)(1) § 63.7550(c)(5)(i) § 63.7550(c)(5)(ii) § 63.7550(c)(5)(iii) § 63.7550(c)(5)(xiv) § 63.7550(c)(5)(xvii) § 63.7550(h) § 63.7550(h)(3) |
| GRPBOILER | EU | 63DDDD-2 | 112(B) HAPS | 40 CFR Part 63, Subpart DDDDD | § 63.7500(a)(1)-Table 3.3 § 63.7500(a) § 63.7500(a)(1) § 63.7500(a)(3) § 63.7500(f) § 63.7505(a) § 63.7540(a) [G]§ 63.7540(a)(10) § 63.7540(a)(13) | For a new or existing boiler or process heater without a continuous oxygen trim system and with heat input capacity of 10 million Btu per hour or greater, conduct of tune-up of the boiler or process heater annually as specified in § 63.7540. | § 63.7510(g) § 63.7515(d) [G]§ 63.7521(f) § 63.7540(a) [G]§ 63.7540(a)(10) § 63.7540(a)(13) | [G]§ 63.7540(a)(10)(vi) § 63.7555(a) § 63.7555(a)(1) § 63.7555(a)(2) [G]§ 63.7560 | [G]§ 63.7540(a)(10)(vi) § 63.7540(b) § 63.7545(a) § 63.7545(c) § 63.7545(e) § 63.7545(e)(1) § 63.7545(e)(8)(i) § 63.7550(a) [G]§ 63.7550(b) § 63.7550(c) § 63.7550(c)(1) § 63.7550(c)(5)(i) § 63.7550(c)(5)(ii) § 63.7550(c)(5)(iii) § 63.7550(c)(5)(xiv) § 63.7550(c)(5)(xvii) § 63.7550(h) § 63.7550(h)(3) |
| GRPCPEBP V | EP | R5121-10 | VOC | 30 TAC Chapter 115, Vent Gas Controls | § 115.122(c)(1) § 115.121(c)(1) § 115.122(c)(1)(A) | For all persons in Aransas, Bexar, Calhoun, Matagorda, San Patricio, and Travis Counties, any vent gas | [G]§ 115.125 § 115.126(2) ** See CAM Summary | § 115.126 § 115.126(2) | 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) |
|---------------------------|-------------------------|---------------|-------------|---------------------------------------|---|---|--|---|---|
| | | | | | | streams affected by §115.121(c)(1) must be controlled properly using one of the control requirements specified in §115.122(c)(1)(A)-(C). | | | |
| GRPCPEBP V | EP | R5121-16 | VOC | 30 TAC Chapter 115, Vent Gas Controls | § 115.122(c)(1) § 115.121(c)(1) § 115.122(c)(1)(B) § 60.18 | For all persons in Aransas, Bexar, Calhoun, Matagorda, San Patricio, and Travis Counties, any vent gas streams affected by §115.121(c)(1) must be controlled properly using one of the control requirements specified in §115.122(c)(1)(A)-(C). | [G]§ 115.125 § 115.126(2) ** See CAM Summary | § 115.126 § 115.126(2) | None |
| GRPCPEBP V | EP | R5121-20 | VOC | 30 TAC Chapter 115, Vent Gas Controls | § 115.122(c)(1) § 115.121(c)(1) § 115.122(c)(1)(C) | For all persons in Aransas, Bexar, Calhoun, Matagorda, San Patricio, and Travis Counties, any vent gas streams affected by §115.121(c)(1) must be controlled properly using one of the control requirements specified in §115.122(c)(1)(A)-(C). | [G]§ 115.125 § 115.126(2) ** See CAM Summary | § 115.126 § 115.126(2) | None |
| GRPCPEBP V | EP | 63FFFF-10 | 112(B) HAPS | 40 CFR Part 63, Subpart FFFF | § 63.2460(a) § 63.11(b) § 63.2450(b) § 63.2460(a)-Table 2.1.c § 63.2460(b) § 63.2460(c)(7) § 63.982(b) § 63.983(a)(1) § 63.983(a)(2) § 63.983(d)(1) § 63.983(d)(1)(i) | You must meet each emission limit in Table 2 to this subpart that applies to you, and you must meet each applicable requirement specified in §63.2460(b) and (c). | [G]§ 63.115(d)(2)(v) § 63.115(d)(3)(iii) § 63.2460(c)(2)(i) § 63.2460(c)(2)(ii) § 63.2460(c)(2)(vi) § 63.2460(c)(3) § 63.2460(c)(3)(i) § 63.2460(c)(4) § 63.2460(c)(6) § 63.983(b) [G]§ 63.983(d)(2) § 63.987(b)(1) § 63.987(c) § 63.998(a)(1) [G]§ 63.983(b)(2) | § 63.2450(f)(2) § 63.2450(f)(2)(i) § 63.2450(f)(2)(ii) § 63.2460(c)(3)(ii) § 63.2460(c)(6) § 63.2525(g) § 63.983(b) [G]§ 63.983(d)(2) § 63.987(b)(1) § 63.987(c) § 63.998(a)(1) [G]§ 63.998(a)(1)(i) | § 63.2450(f)(2)(ii) § 63.2450(q) § 63.2460(c)(3)(i) § 63.987(b)(1) § 63.997(c)(3) § 63.998(a)(1)(iii)(A) [G]§ 63.998(b)(3) [G]§ 63.999(a)(1) [G]§ 63.999(a)(2) § 63.999(b)(5) § 63.999(c)(1) § 63.999(c)(2)(i) |

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) |
|---------------------------|-------------------------|---------------|-------------|---------------------------------------|---|---|---|--|--|
| | | | | | [G]§ 63.983(d)(2) § 63.983(d)(3) § 63.987(a) § 63.987(b)(1) § 63.987(b)(3) [G]§ 63.997(c)(1) § 63.997(c)(3) | | [G]§ 63.983(b)(3) [G]§ 63.983(c)(1) § 63.983(c)(2) § 63.983(c)(3) § 63.983(d)(1) § 63.983(d)(1)(ii) [G]§ 63.987(b)(3)(i) § 63.987(b)(3)(iii) § 63.987(b)(3)(iii) § 63.987(b)(3)(iv) § 63.987(c) § 63.997(a) [G]§ 63.997(c)(1) § 63.997(c)(2) § 63.997(c)(3) § 63.997(c)(3)(i) § 63.997(c)(3)(ii) | § 63.998(a)(1)(ii) § 63.998(a)(1)(iii)(A) § 63.998(a)(1)(iii)(B) [G]§ 63.998(b)(1) [G]§ 63.998(b)(2) [G]§ 63.998(b)(3) [G]§ 63.998(b)(5) [G]§ 63.998(c)(1) [G]§ 63.998(d)(1) § 63.998(d)(3)(i) § 63.998(d)(3)(ii) § 63.998(d)(5) | § 63.999(c)(3) § 63.999(c)(6) [G]§ 63.999(c)(6)(i) § 63.999(c)(6)(iv) [G]§ 63.999(d)(1) [G]§ 63.999(d)(2) |
| GRPCPEBP V | EP | 63FFFF-11 | 112(B) HAPS | 40 CFR Part 63, Subpart FFFF | § 63.2460(a) § 63.2450(b) § 63.2450(i)(1) § 63.2450(i)(2) § 63.2460(a)-Table 2.1.c § 63.2460(b) § 63.2460(c)(7) § 63.982(c) § 63.982(c)(2) § 63.983(a)(1) § 63.983(a)(2) § 63.983(d)(1) § 63.983(d)(1)(i) [G]§ 63.983(d)(2) § 63.983(d)(3) § 63.988(a)(1) § 63.988(a)(2) § 63.996(c)(1) § 63.996(c)(2) § 63.996(c)(2)(i) § 63.996(c)(3) | You must meet each emission limit in Table 2 to this subpart that applies to you, and you must meet each applicable requirement specified in §63.2460(b) and (c). | [G]§ 63.115(d)(2)(v) § 63.115(d)(3)(iii) § 63.2450(g) § 63.2450(g)(1) § 63.2450(g)(2) [G]§ 63.2450(g)(3) § 63.2450(g)(4) § 63.2450(k)(6) § 63.2460(c)(2)(i) § 63.2460(c)(2)(ii) § 63.2460(c)(2)(vi) § 63.2460(c)(3) § 63.2460(c)(3)(i) § 63.2460(c)(4) § 63.2460(c)(6) § 63.983(b) [G]§ 63.983(b)(1) [G]§ 63.983(b)(2) [G]§ 63.983(b)(3) [G]§ 63.983(c)(1) § 63.983(c)(2) § 63.983(c)(3) | § 63.2450(k)(6) § 63.2460(c)(3)(ii) § 63.2460(c)(6) § 63.2525(g) § 63.983(b) [G]§ 63.983(d)(2) § 63.988(b)(1) § 63.996(c)(2)(ii) § 63.998(a)(2)(i) § 63.998(a)(2)(ii)(A) § 63.998(a)(2)(ii)(B)(1) § 63.998(a)(2)(ii)(B)(4) [G]§ 63.998(b)(1) [G]§ 63.998(b)(2) [G]§ 63.998(b)(3) [G]§ 63.998(b)(5) [G]§ 63.998(c)(1) § 63.998(c)(2)(iii) § 63.998(c)(3)(iii) [G]§ 63.998(d)(1) § 63.998(d)(3)(i) § 63.998(d)(3)(ii) | § 63.2450(q) § 63.2460(c)(3)(i) § 63.988(b)(1) § 63.996(b)(2) § 63.996(c)(6) § 63.997(c)(3) § 63.998(a)(2)(ii)(A) [G]§ 63.998(b)(3) [G]§ 63.999(a)(1) [G]§ 63.999(a)(2) [G]§ 63.999(b)(3) § 63.999(b)(5) § 63.999(c)(1) § 63.999(c)(2)(i) § 63.999(c)(6) [G]§ 63.999(c)(6)(i) § 63.999(c)(6)(iv) |

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) |
|---------------------------|-------------------------|---------------|-------------|---------------------------------------|---|---|---|---|--|
| | | | | | § 63.996(c)(4) § 63.996(c)(5) § 63.996(c)(6) [G]§ 63.997(c)(1) § 63.997(c)(3) [G]§ 63.997(d) | | § 63.983(d)(1) § 63.983(d)(1)(ii) § 63.988(b)(1) § 63.988(c)(1) § 63.996(b)(1) § 63.996(b)(1)(i) § 63.996(b)(2) § 63.997(a) [G]§ 63.997(c)(1) § 63.997(c)(2) § 63.997(c)(3) § 63.997(c)(3)(iii) [G]§ 63.997(d) § 63.997(e) § 63.997(e)(1)(i) [G]§ 63.997(e)(1)(iv) [G]§ 63.997(e)(1)(v) § 63.997(e)(2) § 63.997(e)(2)(i) § 63.997(e)(2)(i)(B) § 63.997(e)(2)(ii) § 63.997(e)(2)(iii) § 63.997(e)(2)(iii)(A) [G]§ 63.997(e)(2)(iii)(B) [G]§ 63.997(e)(2)(iii)(C) [G]§ 63.997(e)(2)(iii)(D) [G]§ 63.997(e)(2)(iii)(E) | § 63.998(d)(5) | |
| GRPCPEBP V | EP | 63FFFF-12 | 112(B) HAPS | 40 CFR Part 63, Subpart FFFF | § 63.2460(a) § 63.2450(b) § 63.2460(a)-Table 2.1.c § 63.2460(b) § 63.2460(c)(7) § 63.982(c) | You must meet each emission limit in Table 2 to this subpart that applies to you, and you must meet each applicable requirement specified in §63.2460(b) and (c). | [G]§ 63.115(d)(2)(v) § 63.115(d)(3)(iii) § 63.2450(g) § 63.2450(g)(1) § 63.2450(g)(2) [G]§ 63.2450(g)(3) § 63.2450(g)(4) | § 63.2450(k)(6) § 63.2460(c)(3)(ii) § 63.2460(c)(6) § 63.2525(g) § 63.983(b) [G]§ 63.983(d)(2) § 63.996(c)(2)(ii) | § 63.2450(q) § 63.2460(c)(3)(i) § 63.996(b)(2) § 63.996(c)(6) § 63.997(c)(3) [G]§ 63.998(b)(3) [G]§ 63.999(a)(1) |

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) |
|---------------------------|-------------------------|---------------|-----------|---------------------------------------|---|---|---|---|--|
| | | | | | § 63.982(c)(2) § 63.983(a)(1) § 63.983(a)(2) § 63.983(d)(1) § 63.983(d)(1)(i) [G]§ 63.983(d)(2) § 63.983(d)(3) § 63.988(a)(1) § 63.988(a)(2) § 63.988(a)(3) § 63.988(b)(2) § 63.996(c)(1) § 63.996(c)(2) § 63.996(c)(2)(i) § 63.996(c)(3) § 63.996(c)(4) § 63.996(c)(5) § 63.996(c)(6) § 63.997(c)(3) | | § 63.2450(k)(6) § 63.2460(c)(2)(i) § 63.2460(c)(2)(ii) § 63.2460(c)(2)(vi) § 63.2460(c)(3) § 63.2460(c)(3)(i) § 63.2460(c)(4) § 63.2460(c)(6) § 63.983(b) [G]§ 63.983(b)(1) [G]§ 63.983(b)(2) [G]§ 63.983(b)(3) [G]§ 63.983(c)(1) § 63.983(c)(2) § 63.983(c)(3) § 63.983(d)(1) § 63.983(d)(1)(ii) § 63.996(b)(1) § 63.996(b)(1)(i) § 63.996(b)(2) § 63.997(c)(2) § 63.997(c)(3) § 63.997(c)(3)(iii) | § 63.998(a)(2)(ii)(B)(5) [G]§ 63.998(b)(1) [G]§ 63.998(b)(2) [G]§ 63.998(b)(3) [G]§ 63.998(b)(5) [G]§ 63.998(c)(1) § 63.998(c)(2)(iii) § 63.998(c)(3)(iii) [G]§ 63.998(d)(1) § 63.998(d)(3)(i) § 63.998(d)(3)(ii) § 63.998(d)(5) | [G]§ 63.999(b)(3) § 63.999(b)(5) § 63.999(c)(1) § 63.999(c)(2)(i) § 63.999(c)(6) [G]§ 63.999(c)(6)(i) § 63.999(c)(6)(iv) |
| GRPCPECP V | EP | R5121-10 | VOC | 30 TAC Chapter 115, Vent Gas Controls | § 115.122(c)(1) § 115.121(c)(1) § 115.122(c)(1)(A) | For all persons in Aransas, Bexar, Calhoun, Matagorda, San Patricio, and Travis Counties, any vent gas streams affected by §115.121(c)(1) must be controlled properly using one of the control requirements specified in §115.122(c)(1)(A)-(C). | [G]§ 115.125 § 115.126(2) ** See CAM Summary | § 115.126 § 115.126(2) | None |
| GRPCPECP V | EP | R5121-16 | VOC | 30 TAC Chapter 115, Vent Gas Controls | § 115.122(c)(1) § 115.121(c)(1) § 115.122(c)(1)(B) § 60.18 | For all persons in Aransas, Bexar, Calhoun, Matagorda, San Patricio, and Travis Counties, any vent gas streams affected by | [G]§ 115.125 § 115.126(2) ** See CAM Summary | § 115.126 § 115.126(2) | 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) |
|---------------------------|-------------------------|---------------|-------------|---------------------------------------|---|---|---|--|---|
| | | | | | | §115.121(c)(1) must be controlled properly using one of the control requirements specified in §115.122(c)(1)(A)-(C). | | | |
| GRPCPECP V | EP | R5121-20 | VOC | 30 TAC Chapter 115, Vent Gas Controls | § 115.122(c)(1) § 115.121(c)(1) § 115.122(c)(1)(C) | For all persons in Aransas, Bexar, Calhoun, Matagorda, San Patricio, and Travis Counties, any vent gas streams affected by §115.121(c)(1) must be controlled properly using one of the control requirements specified in §115.122(c)(1)(A)-(C). | [G]§ 115.125 § 115.126(2) ** See CAM Summary | § 115.126 § 115.126(2) | None |
| GRPCPECP V | EP | 63FFFF-1 | 112(B) HAPS | 40 CFR Part 63, Subpart FFFF | § 63.2455(a)-Table 1.1.a.ii § 63.11(b) § 63.2450(b) § 63.2455(a) § 63.2455(b) § 63.2455(b)(1) § 63.982(b) § 63.983(a)(1) § 63.983(a)(2) § 63.983(d)(1) § 63.983(d)(1)(i) [G]§ 63.983(d)(2) § 63.983(d)(3) § 63.987(a) § 63.987(b)(1) § 63.987(b)(3) [G]§ 63.997(c)(1) § 63.997(c)(3) | For each Group 1 continuous process vent, the owner or operator must reduce emissions of total organic HAP by venting emissions through a closed vent system to a flare. | [G]§ 63.115(d)(2)(v) § 63.115(d)(3)(iii) § 63.983(b) [G]§ 63.983(b)(1) [G]§ 63.983(b)(2) [G]§ 63.983(b)(3) [G]§ 63.983(c)(1) § 63.983(c)(2) § 63.983(c)(3) § 63.983(d)(1) § 63.983(d)(1)(ii) [G]§ 63.987(b)(3)(i) § 63.987(b)(3)(ii) § 63.987(b)(3)(iii) § 63.987(b)(3)(iv) § 63.987(c) § 63.997(a) [G]§ 63.997(c)(1) § 63.997(c)(2) § 63.997(c)(3) § 63.997(c)(3)(i) § 63.997(c)(3)(ii) | § 63.2450(f)(2) § 63.2450(f)(2)(i) § 63.2450(f)(2)(ii) § 63.983(b) [G]§ 63.983(d)(2) § 63.987(b)(1) § 63.987(c) § 63.998(a)(1) [G]§ 63.998(a)(1)(i) § 63.998(a)(1)(ii) § 63.998(a)(1)(iii)(A) § 63.998(a)(1)(iii)(B) [G]§ 63.998(b)(1) [G]§ 63.998(b)(2) [G]§ 63.998(b)(3) [G]§ 63.998(b)(5) § 63.998(d)(3)(i) § 63.998(d)(3)(ii) § 63.998(d)(5) | § 63.2450(f)(2)(ii) § 63.2450(q) § 63.987(b)(1) § 63.997(c)(3) § 63.998(a)(1)(iii)(A) [G]§ 63.998(b)(3) [G]§ 63.999(a)(1) [G]§ 63.999(a)(2) § 63.999(b)(5) § 63.999(c)(1) § 63.999(c)(2)(i) § 63.999(c)(3) § 63.999(c)(6) [G]§ 63.999(c)(6)(i) § 63.999(c)(6)(iv) [G]§ 63.999(d)(1) [G]§ 63.999(d)(2) |
| GRPCPECP | EP | 63FFFF-2 | 112(B) | 40 CFR Part 63, | § 63.2455(a)-Table | For each Group 1 | [G]§ 63.115(d)(2)(v) | § 63.2450(k)(6) | § 63.2450(q) |

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) |
|---------------------------|-------------------------|---------------|-----------|---------------------------------------|---|--|--|---|--|
| V | | | HAPS | Subpart FFFF | 1.1.a.i § 63.2450(b) § 63.2455(a) § 63.2455(b) § 63.2455(b)(1) § 63.982(c) § 63.982(c)(2) § 63.983(a)(1) § 63.983(a)(2) § 63.983(d)(1) § 63.983(d)(1)(i) [G]§ 63.983(d)(2) § 63.983(d)(3) § 63.988(a)(1) § 63.988(a)(2) § 63.996(c)(1) § 63.996(c)(2) § 63.996(c)(2)(i) § 63.996(c)(3) § 63.996(c)(4) § 63.996(c)(5) § 63.996(c)(6) [G]§ 63.997(c)(1) § 63.997(c)(3) [G]§ 63.997(d) | continuous process vent, the owner or operator must reduce emissions of total organic HAP by greater than or equal to 98 percent by weight by venting emissions through a closed-vent system to any combination of control devices (except flare). | § 63.115(d)(3)(iii) § 63.2450(g) § 63.2450(g)(1) § 63.2450(g)(2) [G]§ 63.2450(g)(3) § 63.2450(g)(4) § 63.2450(k)(6) § 63.983(b) [G]§ 63.983(b)(1) [G]§ 63.983(b)(2) [G]§ 63.983(b)(3) [G]§ 63.983(c)(1) § 63.983(c)(2) § 63.983(c)(3) § 63.983(d)(1) § 63.983(d)(1)(iii) § 63.988(b)(1) § 63.988(c)(1) § 63.996(b)(1) § 63.996(b)(1)(i) § 63.996(b)(2) § 63.997(a) [G]§ 63.997(c)(1) § 63.997(c)(2) § 63.997(c)(3) § 63.997(c)(3)(iii) [G]§ 63.997(d) § 63.997(e) § 63.997(e)(1)(i) [G]§ 63.997(e)(1)(iv) [G]§ 63.997(e)(1)(v) § 63.997(e)(2) § 63.997(e)(2)(i) [G]§ 63.997(e)(2)(i)(A) § 63.997(e)(2)(ii) § 63.997(e)(2)(iv) § 63.997(e)(2)(iv)(A) | § 63.2525(g) § 63.983(b) [G]§ 63.983(d)(2) § 63.988(b)(1) § 63.996(c)(2)(ii) § 63.998(a)(2)(i) § 63.998(a)(2)(ii)(A) § 63.998(a)(2)(ii)(B)(1) § 63.998(a)(2)(ii)(B)(4) [G]§ 63.998(b)(1) [G]§ 63.998(b)(2) [G]§ 63.998(b)(3) [G]§ 63.998(b)(5) [G]§ 63.998(c)(1) § 63.998(c)(2)(iii) § 63.998(c)(3)(iii) [G]§ 63.998(d)(1) § 63.998(d)(3)(i) § 63.998(d)(3)(ii) § 63.998(d)(5) | § 63.988(b)(1) § 63.996(b)(2) § 63.996(c)(6) § 63.997(c)(3) § 63.998(a)(2)(ii)(A) [G]§ 63.998(b)(3) [G]§ 63.999(a)(1) [G]§ 63.999(a)(2) [G]§ 63.999(b)(3) § 63.999(b)(5) § 63.999(c)(1) § 63.999(c)(2)(i) § 63.999(c)(6) [G]§ 63.999(c)(6)(i) § 63.999(c)(6)(iv) |

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) |
|---------------------------|-------------------------|---------------|-------------|---------------------------------------|---|---|--|--|--|
| | | | | | | | [G]§ 63.997(e)(2)(iv)(B) § 63.997(e)(2)(iv)(C) § 63.997(e)(2)(iv)(D) § 63.997(e)(2)(iv)(F) § 63.997(e)(2)(iv)(G) [G]§ 63.997(e)(2)(iv)(H) | | |
| GRPCPECP V | EP | 63FFFF-3 | 112(B) HAPS | 40 CFR Part 63, Subpart FFFF | § 63.2455(a)-Table 1.1.a.i § 63.2450(b) § 63.2455(a) § 63.2455(b) § 63.2455(b)(1) § 63.982(c) § 63.982(c)(2) § 63.983(a)(1) § 63.983(a)(2) § 63.983(d)(1) § 63.983(d)(1)(i) [G]§ 63.983(d)(2) § 63.983(d)(3) § 63.988(a)(1) § 63.988(a)(2) § 63.988(a)(3) § 63.988(b)(2) § 63.996(c)(1) § 63.996(c)(2) § 63.996(c)(2)(i) § 63.996(c)(3) § 63.996(c)(4) § 63.996(c)(5) § 63.996(c)(6) § 63.997(c)(3) | For each Group 1 continuous process vent, the owner or operator must reduce emissions of total organic HAP by greater than or equal to 98 percent by weight by venting emissions through a closed-vent system to any combination of control devices (except flare). | [G]§ 63.115(d)(2)(v) § 63.115(d)(3)(iii) § 63.2450(g) § 63.2450(g)(1) § 63.2450(g)(2) [G]§ 63.2450(g)(3) § 63.2450(g)(4) § 63.2450(k)(6) § 63.983(b) [G]§ 63.983(b)(1) [G]§ 63.983(b)(2) [G]§ 63.983(b)(3) [G]§ 63.983(c)(1) § 63.983(c)(2) § 63.983(c)(3) § 63.983(d)(1) § 63.983(d)(1)(ii) § 63.996(b)(1) § 63.996(b)(1)(i) § 63.996(b)(2) § 63.997(c)(2) § 63.997(c)(3) § 63.997(c)(3)(iii) | § 63.2450(k)(6) § 63.2525(g) § 63.983(b) [G]§ 63.983(d)(2) § 63.996(c)(2)(ii) § 63.998(a)(2)(ii)(B)(5) [G]§ 63.998(b)(1) [G]§ 63.998(b)(2) [G]§ 63.998(b)(3) [G]§ 63.998(b)(5) [G]§ 63.998(c)(1) § 63.998(c)(2)(iii) § 63.998(c)(3)(iii) [G]§ 63.998(d)(1) § 63.998(d)(3)(i) § 63.998(d)(3)(ii) § 63.998(d)(5) | § 63.2450(q) § 63.996(b)(2) § 63.996(c)(6) § 63.997(c)(3) [G]§ 63.998(b)(3) [G]§ 63.999(a)(1) [G]§ 63.999(b)(3) § 63.999(b)(5) § 63.999(c)(1) § 63.999(c)(2)(i) § 63.999(c)(6) [G]§ 63.999(c)(6)(i) § 63.999(c)(6)(iv) |
| GRPEMPEB | EP | R5121-10 | VOC | 30 TAC Chapter | § 115.122(c)(1) | For all persons in Aransas, | [G]§ 115.125 | § 115.126 | 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) |
|---------------------------|-------------------------|---------------|-------------|---------------------------------------|--|---|--|--|--|
| PV | | | | 115, Vent Gas Controls | § 115.121(c)(1) § 115.122(c)(1)(A) | Bexar, Calhoun, Matagorda, San Patricio, and Travis Counties, any vent gas streams affected by §115.121(c)(1) must be controlled properly using one of the control requirements specified in §115.122(c)(1)(A)-(C). | § 115.126(2) ** See CAM Summary | § 115.126(2) | |
| GRPEMPEB PV | EP | R5121-16 | VOC | 30 TAC Chapter 115, Vent Gas Controls | § 115.122(c)(1) § 115.121(c)(1) § 115.122(c)(1)(B) § 60.18 | For all persons in Aransas, Bexar, Calhoun, Matagorda, San Patricio, and Travis Counties, any vent gas streams affected by §115.121(c)(1) must be controlled properly using one of the control requirements specified in §115.122(c)(1)(A)-(C). | [G]§ 115.125 § 115.126(2) ** See CAM Summary | § 115.126 § 115.126(2) | None |
| GRPEMPEB PV | EP | R5121-20 | VOC | 30 TAC Chapter 115, Vent Gas Controls | § 115.122(c)(1) § 115.121(c)(1) § 115.122(c)(1)(C) | For all persons in Aransas, Bexar, Calhoun, Matagorda, San Patricio, and Travis Counties, any vent gas streams affected by §115.121(c)(1) must be controlled properly using one of the control requirements specified in §115.122(c)(1)(A)-(C). | [G]§ 115.125 § 115.126(2) ** See CAM Summary | § 115.126 § 115.126(2) | None |
| GRPEMPEB PV | EP | 63FFFF-10 | 112(B) HAPS | 40 CFR Part 63, Subpart FFFF | § 63.2460(a) § 63.11(b) § 63.2450(b) § 63.2460(a)-Table 2.1.c § 63.2460(b) § 63.2460(c)(7) § 63.982(b) § 63.983(a)(1) | You must meet each emission limit in Table 2 to this subpart that applies to you, and you must meet each applicable requirement specified in §63.2460(b) and (c). | [G]§ 63.115(d)(2)(v) § 63.115(d)(3)(iii) § 63.2460(c)(2)(i) § 63.2460(c)(2)(ii) § 63.2460(c)(2)(vi) § 63.2460(c)(3) § 63.2460(c)(3)(i) § 63.2460(c)(4) § 63.2460(c)(6) | § 63.2450(f)(2) § 63.2450(f)(2)(i) § 63.2450(f)(2)(ii) § 63.2460(c)(3)(ii) § 63.2460(c)(6) § 63.2525(g) § 63.983(b) [G]§ 63.983(d)(2) § 63.987(b)(1) | § 63.2450(f)(2)(ii) § 63.2450(q) § 63.2460(c)(3)(i) § 63.987(b)(1) § 63.997(c)(3) § 63.998(a)(1)(iii)(A) [G]§ 63.998(b)(3) [G]§ 63.999(a)(1) [G]§ 63.999(a)(2) |

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) |
|---------------------------|-------------------------|---------------|-------------|---------------------------------------|--|---|--|--|--|
| | | | | | § 63.983(a)(2) § 63.983(d)(1) § 63.983(d)(1)(i) [G]§ 63.983(d)(2) § 63.983(d)(3) § 63.987(a) § 63.987(b)(1) § 63.987(b)(3) [G]§ 63.997(c)(1) § 63.997(c)(3) | | § 63.983(b) [G]§ 63.983(b)(1) [G]§ 63.983(b)(2) [G]§ 63.983(b)(3) [G]§ 63.983(c)(1) § 63.983(c)(2) § 63.983(c)(3) § 63.983(d)(1) § 63.983(d)(1)(ii) [G]§ 63.987(b)(3)(i) § 63.987(b)(3)(ii) § 63.987(b)(3)(iii) § 63.987(b)(3)(iv) § 63.987(c) § 63.997(a) [G]§ 63.997(c)(1) § 63.997(c)(2) § 63.997(c)(3) § 63.997(c)(3)(i) § 63.997(c)(3)(ii) | § 63.987(c) § 63.998(a)(1) [G]§ 63.998(a)(1)(i) § 63.998(a)(1)(ii) § 63.998(a)(1)(iii)(A) § 63.998(a)(1)(iii)(B) [G]§ 63.998(b)(1) [G]§ 63.998(b)(2) [G]§ 63.998(b)(3) [G]§ 63.998(b)(5) [G]§ 63.998(c)(1) [G]§ 63.998(d)(1) § 63.998(d)(3)(i) § 63.998(d)(3)(ii) § 63.998(d)(5) | § 63.999(b)(5) § 63.999(c)(1) § 63.999(c)(2)(i) § 63.999(c)(3) § 63.999(c)(6) [G]§ 63.999(c)(6)(i) § 63.999(c)(6)(iv) [G]§ 63.999(d)(1) [G]§ 63.999(d)(2) |
| GRPEMPEB PV | EP | 63FFFF-11 | 112(B) HAPS | 40 CFR Part 63, Subpart FFFF | § 63.2460(a) § 63.2450(b) § 63.2450(i)(1) § 63.2450(i)(2) § 63.2460(a)-Table 2.1.c § 63.2460(b) § 63.2460(c)(7) § 63.982(c) § 63.982(c)(2) § 63.983(a)(1) § 63.983(a)(2) § 63.983(d)(1) § 63.983(d)(1)(i) [G]§ 63.983(d)(2) § 63.983(d)(3) § 63.988(a)(1) § 63.988(a)(2) § 63.996(c)(1) | You must meet each emission limit in Table 2 to this subpart that applies to you, and you must meet each applicable requirement specified in §63.2460(b) and (c). | [G]§ 63.115(d)(2)(v) § 63.115(d)(3)(iii) § 63.2450(g) § 63.2450(g)(1) § 63.2450(g)(2) [G]§ 63.2450(g)(3) § 63.2450(g)(4) § 63.2450(k)(6) § 63.2460(c)(2)(i) § 63.2460(c)(2)(ii) § 63.2460(c)(2)(vi) § 63.2460(c)(3) § 63.2460(c)(3)(i) § 63.2460(c)(4) § 63.2460(c)(6) § 63.983(b) [G]§ 63.983(b)(1) [G]§ 63.983(b)(2) [G]§ 63.983(b)(3) | § 63.2450(k)(6) § 63.2460(c)(3)(ii) § 63.2460(c)(6) § 63.2525(g) § 63.983(b) [G]§ 63.983(d)(2) § 63.988(b)(1) § 63.996(c)(2)(ii) § 63.998(a)(2)(i) § 63.998(a)(2)(ii)(A) § 63.998(a)(2)(ii)(B)(1) § 63.998(a)(2)(ii)(B)(4) [G]§ 63.998(b)(1) [G]§ 63.998(b)(2) [G]§ 63.998(b)(3) [G]§ 63.998(b)(5) [G]§ 63.998(c)(1) § 63.998(c)(2)(iii) § 63.998(c)(3)(iii) | § 63.2450(q) § 63.2460(c)(3)(i) § 63.988(b)(1) § 63.996(b)(2) § 63.996(c)(6) § 63.997(c)(3) § 63.998(a)(2)(ii)(A) [G]§ 63.998(b)(3) [G]§ 63.999(a)(1) [G]§ 63.999(a)(2) [G]§ 63.999(b)(3) § 63.999(b)(5) § 63.999(c)(1) § 63.999(c)(2)(i) § 63.999(c)(6) [G]§ 63.999(c)(6)(i) § 63.999(c)(6)(iv) |

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) |
|---------------------------|-------------------------|---------------|-------------|---------------------------------------|--|---|--|--|--|
| | | | | | § 63.996(c)(2) § 63.996(c)(2)(i) § 63.996(c)(3) § 63.996(c)(4) § 63.996(c)(5) § 63.996(c)(6) [G]§ 63.997(c)(1) § 63.997(c)(3) [G]§ 63.997(d) | | [G]§ 63.983(c)(1) § 63.983(c)(2) § 63.983(c)(3) § 63.983(d)(1) § 63.983(d)(1)(ii) § 63.988(b)(1) § 63.988(c)(1) § 63.996(b)(1) § 63.996(b)(1)(i) § 63.996(b)(2) § 63.997(a) [G]§ 63.997(c)(1) § 63.997(c)(2) § 63.997(c)(3) § 63.997(c)(3)(iii) [G]§ 63.997(d) § 63.997(e) § 63.997(e)(1)(i) [G]§ 63.997(e)(1)(iv) [G]§ 63.997(e)(1)(v) § 63.997(e)(2) § 63.997(e)(2)(i) § 63.997(e)(2)(i)(B) § 63.997(e)(2)(ii) § 63.997(e)(2)(iii) § 63.997(e)(2)(iii)(A) [G]§ 63.997(e)(2)(iii)(B) [G]§ 63.997(e)(2)(iii)(C) [G]§ 63.997(e)(2)(iii)(D) [G]§ 63.997(e)(2)(iii)(E) | [G]§ 63.998(d)(1) § 63.998(d)(3)(i) § 63.998(d)(3)(ii) § 63.998(d)(5) | |
| GRPEMPEB PV | EP | 63FFFF-12 | 112(B) HAPS | 40 CFR Part 63, Subpart FFFF | § 63.2460(a) § 63.2450(b) § 63.2460(a)-Table 2.1.c | You must meet each emission limit in Table 2 to this subpart that applies to you, and you must meet | [G]§ 63.115(d)(2)(v) § 63.115(d)(3)(iii) § 63.2450(g) § 63.2450(g)(1) | § 63.2450(k)(6) § 63.2460(c)(3)(ii) § 63.2460(c)(6) § 63.2525(g) | § 63.2450(q) § 63.2460(c)(3)(i) § 63.996(b)(2) § 63.996(c)(6) |

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) |
|---------------------------|-------------------------|---------------|-----------|---------------------------------------|---|---|---|---|--|
| | | | | | § 63.2460(b) § 63.2460(c)(7) § 63.982(c) § 63.982(c)(2) § 63.983(a)(1) § 63.983(a)(2) § 63.983(d)(1) § 63.983(d)(1)(i) [G]§ 63.983(d)(2) § 63.983(d)(3) § 63.988(a)(1) § 63.988(a)(2) § 63.988(a)(3) § 63.988(b)(2) § 63.996(c)(1) § 63.996(c)(2) § 63.996(c)(2)(i) § 63.996(c)(3) § 63.996(c)(4) § 63.996(c)(5) § 63.996(c)(6) § 63.997(c)(3) | each applicable requirement specified in §63.2460(b) and (c). | § 63.2450(g)(2) [G]§ 63.2450(g)(3) § 63.2450(g)(4) § 63.2450(k)(6) § 63.2460(c)(2)(i) § 63.2460(c)(2)(ii) § 63.2460(c)(2)(vi) § 63.2460(c)(3) § 63.2460(c)(3)(i) § 63.2460(c)(4) § 63.2460(c)(6) § 63.983(b) [G]§ 63.983(b)(1) [G]§ 63.983(b)(2) [G]§ 63.983(b)(3) [G]§ 63.983(c)(1) § 63.983(c)(2) § 63.983(c)(3) § 63.983(d)(1) § 63.983(d)(1)(ii) § 63.996(b)(1) § 63.996(b)(1)(i) § 63.996(b)(2) § 63.997(c)(2) § 63.997(c)(3) § 63.997(c)(3)(iii) | § 63.983(b) [G]§ 63.983(d)(2) § 63.996(c)(2)(ii) § 63.998(a)(2)(ii)(B)(5) [G]§ 63.998(b)(1) [G]§ 63.998(b)(2) [G]§ 63.998(b)(3) [G]§ 63.998(b)(5) [G]§ 63.998(c)(1) § 63.998(c)(2)(iii) § 63.998(c)(3)(iii) [G]§ 63.998(d)(1) § 63.998(d)(3)(i) § 63.998(d)(3)(ii) § 63.998(d)(5) | § 63.997(c)(3) [G]§ 63.998(b)(3) [G]§ 63.999(a)(1) [G]§ 63.999(b)(3) § 63.999(b)(5) § 63.999(c)(1) § 63.999(c)(2)(i) § 63.999(c)(6) [G]§ 63.999(c)(6)(i) § 63.999(c)(6)(iv) |
| GRPEMPEC PV | EP | R5121-10 | VOC | 30 TAC Chapter 115, Vent Gas Controls | § 115.122(c)(1) § 115.121(c)(1) § 115.122(c)(1)(A) | For all persons in Aransas, Bexar, Calhoun, Matagorda, San Patricio, and Travis Counties, any vent gas streams affected by §115.121(c)(1) must be controlled properly using one of the control requirements specified in §115.122(c)(1)(A)-(C). | [G]§ 115.125 § 115.126(2) ** See CAM Summary | § 115.126 § 115.126(2) | None |
| GRPEMPEC PV | EP | R5121-16 | VOC | 30 TAC Chapter 115, Vent Gas | § 115.122(c)(1) § 115.121(c)(1) | For all persons in Aransas, Bexar, Calhoun, Matagorda, | [G]§ 115.125 § 115.126(2) | § 115.126 § 115.126(2) | 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) |
|---------------------------|-------------------------|---------------|-------------|---------------------------------------|---|---|--|---|---|
| | | | | Controls | § 115.122(c)(1)(B) § 60.18 | San Patricio, and Travis Counties, any vent gas streams affected by §115.121(c)(1) must be controlled properly using one of the control requirements specified in §115.122(c)(1)(A)-(C). | ** See CAM Summary | | |
| GRPEMPEC PV | EP | R5121-20 | VOC | 30 TAC Chapter 115, Vent Gas Controls | § 115.122(c)(1) § 115.121(c)(1) § 115.122(c)(1)(C) | For all persons in Aransas, Bexar, Calhoun, Matagorda, San Patricio, and Travis Counties, any vent gas streams affected by §115.121(c)(1) must be controlled properly using one of the control requirements specified in §115.122(c)(1)(A)-(C). | [G]§ 115.125 § 115.126(2) ** See CAM Summary | § 115.126 § 115.126(2) | None |
| GRPEMPEC PV | EP | 63FFFF-1 | 112(B) HAPS | 40 CFR Part 63, Subpart FFFF | § 63.2455(a)-Table 1.1.a.ii § 63.11(b) § 63.2450(b) § 63.2455(a) § 63.2455(b) § 63.2455(b)(1) § 63.982(b) § 63.983(a)(1) § 63.983(a)(2) § 63.983(d)(1) § 63.983(d)(1)(i) [G]§ 63.983(d)(2) § 63.983(d)(3) § 63.987(a) § 63.987(b)(1) § 63.987(b)(3) [G]§ 63.997(c)(1) § 63.997(c)(3) | For each Group 1continuous process vent, the owner or operator must reduce emissions of total organic HAP by venting emissions through a closed vent system to a flare. | [G]§ 63.115(d)(2)(v) § 63.115(d)(3)(iii) § 63.983(b) [G]§ 63.983(b)(1) [G]§ 63.983(b)(2) [G]§ 63.983(b)(3) [G]§ 63.983(c)(1) § 63.983(c)(2) § 63.983(c)(3) § 63.983(d)(1) § 63.983(d)(1)(ii) [G]§ 63.987(b)(3)(i) § 63.987(b)(3)(ii) § 63.987(b)(3)(iii) § 63.987(b)(3)(iv) § 63.987(c) § 63.997(a) [G]§ 63.997(c)(1) § 63.997(c)(2) § 63.997(c)(3) | § 63.2450(f)(2) § 63.2450(f)(2)(i) § 63.2450(f)(2)(ii) § 63.983(b) [G]§ 63.983(d)(2) § 63.987(b)(1) § 63.987(c) § 63.998(a)(1) [G]§ 63.998(a)(1)(i) § 63.998(a)(1)(ii) § 63.998(a)(1)(iii)(A) § 63.998(a)(1)(iii)(B) [G]§ 63.998(b)(1) [G]§ 63.998(b)(2) [G]§ 63.998(b)(3) [G]§ 63.998(b)(5) [G]§ 63.998(d)(1) § 63.998(d)(3)(i) § 63.998(d)(3)(ii) § 63.998(d)(5) | § 63.2450(f)(2)(ii) § 63.2450(q) § 63.987(b)(1) § 63.997(c)(3) § 63.998(a)(1)(iii)(A) [G]§ 63.998(b)(3) [G]§ 63.999(a)(1) [G]§ 63.999(a)(2) § 63.999(b)(5) § 63.999(c)(1) § 63.999(c)(2)(i) § 63.999(c)(3) § 63.999(c)(6) [G]§ 63.999(c)(6)(i) § 63.999(c)(6)(iv) [G]§ 63.999(d)(1) [G]§ 63.999(d)(2) |

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) |
|---------------------------|-------------------------|---------------|-------------|---------------------------------------|--|---|---|--|--|
| | | | | | | | § 63.997(c)(3)(i) § 63.997(c)(3)(ii) | | |
| GRPEMPEC PV | EP | 63FFFF-2 | 112(B) HAPS | 40 CFR Part 63, Subpart FFFF | § 63.2455(a)-Table 1.1.a.i § 63.2450(b) § 63.2455(a) § 63.2455(b) § 63.2455(b)(1) § 63.982(c) § 63.982(c)(2) § 63.983(a)(1) § 63.983(d)(1) § 63.983(d)(1)(i) [G]§ 63.983(d)(2) § 63.983(d)(3) § 63.988(a)(1) § 63.988(a)(2) § 63.996(c)(1) § 63.996(c)(2) § 63.996(c)(2)(i) § 63.996(c)(3) § 63.996(c)(4) § 63.996(c)(5) § 63.996(c)(6) [G]§ 63.997(c)(1) § 63.997(c)(3) [G]§ 63.997(d) | For each Group 1 continuous process vent, the owner or operator must reduce emissions of total organic HAP by greater than or equal to 98 percent by weight by venting emissions through a closed-vent system to any combination of control devices (except flare). | [G]§ 63.115(d)(2)(v) § 63.115(d)(3)(iii) § 63.2450(g) § 63.2450(g)(1) § 63.2450(g)(2) [G]§ 63.2450(g)(3) § 63.2450(g)(4) § 63.2450(k)(6) § 63.983(b) [G]§ 63.983(b)(1) [G]§ 63.983(b)(2) [G]§ 63.983(b)(3) [G]§ 63.983(c)(1) § 63.983(c)(2) § 63.983(c)(3) § 63.983(d)(1) § 63.983(d)(1)(ii) § 63.988(b)(1) § 63.988(c)(1) § 63.996(b)(1) § 63.996(b)(1)(i) § 63.996(b)(2) § 63.997(a) [G]§ 63.997(c)(1) § 63.997(c)(2) § 63.997(c)(3) § 63.997(c)(3)(iii) [G]§ 63.997(d) § 63.997(e) § 63.997(e)(1)(i) [G]§ 63.997(e)(1)(iv) [G]§ 63.997(e)(1)(v) § 63.997(e)(2) § 63.997(e)(2)(i) [G]§ 63.997(e)(2)(i)(A) | § 63.2450(k)(6) § 63.2525(g) § 63.983(b) [G]§ 63.983(d)(2) § 63.988(b)(1) § 63.996(c)(2)(ii) § 63.998(a)(2)(i) § 63.998(a)(2)(ii)(A) § 63.998(a)(2)(ii)(B)(1) § 63.998(a)(2)(ii)(B)(4) [G]§ 63.998(b)(1) [G]§ 63.998(b)(2) [G]§ 63.998(b)(3) [G]§ 63.998(b)(5) [G]§ 63.998(c)(1) § 63.998(c)(2)(iii) § 63.998(c)(3)(iii) [G]§ 63.998(d)(1) § 63.998(d)(3)(i) § 63.998(d)(3)(ii) § 63.998(d)(5) | § 63.2450(q) § 63.988(b)(1) § 63.996(b)(2) § 63.996(c)(6) § 63.997(c)(3) § 63.998(a)(2)(ii)(A) [G]§ 63.998(b)(3) [G]§ 63.999(a)(1) [G]§ 63.999(a)(2) [G]§ 63.999(b)(3) § 63.999(b)(5) § 63.999(c)(1) § 63.999(c)(2)(i) § 63.999(c)(6) [G]§ 63.999(c)(6)(i) § 63.999(c)(6)(iv) |

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) |
|---------------------------|-------------------------|---------------|-------------|---------------------------------------|---|---|--|--|--|
| | | | | | | | § 63.997(e)(2)(ii) § 63.997(e)(2)(iv) § 63.997(e)(2)(iv)(A) [G]§ 63.997(e)(2)(iv)(B) § 63.997(e)(2)(iv)(C) § 63.997(e)(2)(iv)(D) § 63.997(e)(2)(iv)(F) § 63.997(e)(2)(iv)(G) [G]§ 63.997(e)(2)(iv)(H) | | |
| GRPEMPEC PV | EP | 63FFFF-3 | 112(B) HAPS | 40 CFR Part 63, Subpart FFFF | § 63.2455(a)-Table 1.1.a.i § 63.2450(b) § 63.2455(a) § 63.2455(b) § 63.2455(b)(1) § 63.982(c) § 63.982(c)(2) § 63.983(a)(1) § 63.983(a)(2) § 63.983(d)(1) § 63.983(d)(1)(i) [G]§ 63.983(d)(2) § 63.983(d)(3) § 63.988(a)(1) § 63.988(a)(2) § 63.988(a)(3) § 63.988(b)(2) § 63.996(c)(1) § 63.996(c)(2) § 63.996(c)(2)(i) § 63.996(c)(3) § 63.996(c)(4) § 63.996(c)(5) | For each Group 1 continuous process vent, the owner or operator must reduce emissions of total organic HAP by greater than or equal to 98 percent by weight by venting emissions through a closed-vent system to any combination of control devices (except flare). | [G]§ 63.115(d)(2)(v) § 63.115(d)(3)(iii) § 63.2450(g) § 63.2450(g)(1) § 63.2450(g)(2) [G]§ 63.2450(g)(3) § 63.2450(g)(4) § 63.2450(k)(6) § 63.983(b) [G]§ 63.983(b)(1) [G]§ 63.983(b)(2) [G]§ 63.983(b)(3) [G]§ 63.983(c)(1) § 63.983(c)(2) § 63.983(c)(3) § 63.983(d)(1) § 63.983(d)(1)(ii) § 63.996(b)(1) § 63.996(b)(1)(i) § 63.996(b)(2) § 63.997(c)(2) § 63.997(c)(3) § 63.997(c)(3)(iii) | § 63.2450(k)(6) § 63.2525(g) § 63.983(b) [G]§ 63.983(d)(2) § 63.996(c)(2)(ii) § 63.998(a)(2)(ii)(B)(5) [G]§ 63.998(b)(1) [G]§ 63.998(b)(2) [G]§ 63.998(b)(3) [G]§ 63.998(b)(5) [G]§ 63.998(c)(1) § 63.998(c)(2)(iii) § 63.998(c)(3)(iii) [G]§ 63.998(d)(1) § 63.998(d)(3)(i) § 63.998(d)(3)(ii) § 63.998(d)(5) | § 63.2450(q) § 63.996(b)(2) § 63.996(c)(6) § 63.997(c)(3) [G]§ 63.998(b)(3) [G]§ 63.999(a)(1) [G]§ 63.999(b)(3) § 63.999(b)(5) § 63.999(c)(1) § 63.999(c)(2)(i) § 63.999(c)(6) [G]§ 63.999(c)(6)(i) § 63.999(c)(6)(iv) |

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) |
|---------------------------|-------------------------|---------------|--------------------------|---------------------------------------|--|--|-------------------------------------|---|---|
| | | | | | § 63.996(c)(6) § 63.997(c)(3) | | | | |
| GRPEMRG GEN | EU | 60III-2 | CO | 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 CO emission limit of 3.5 g/KW-hr, as stated in 40 CFR 60.4202(a)(2) and 40 CFR 89.112(a). | § 60.4209(a) | § 60.4214(b) | [G]§ 60.4214(d) |
| GRPEMRG GEN | EU | 60III-2 | NMHC and NO _x | 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 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 _x emission limit of 4.0 g/KW-hr, as stated in 40 CFR 60.4202(a)(2) and 40 CFR 89.112(a). | § 60.4209(a) | § 60.4214(b) | [G]§ 60.4214(d) |
| GRPEMRG GEN | EU | 60III-2 | PM | 40 CFR Part 60, Subpart IIII | § 60.4205(b) § 60.4202(a)(2) § 60.4206 § 60.4207(b) [G]§ 60.4211(a) | Owners and operators of emergency stationary CI ICE, that are not fire pump engines, with a maximum engine power greater than | § 60.4209(a) | § 60.4214(b) | [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) |
|---------------------------|-------------------------|---------------|-------------|---------------------------------------|--|--|-------------------------------------|---|---|
| | | | | | § 60.4211(c) [G]§ 60.4211(f) § 60.4218 § 89.112(a) | 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). | | | |
| GRPEMRG GEN | EU | 63ZZZZ-10 | 112(B) HAPS | 40 CFR Part 63, Subpart ZZZZ | § 63.6590(b)(1) § 63.6595(c) § 63.6640(f)(1) § 63.6640(f)(2) § 63.6640(f)(2)(i) § 63.6640(f)(3) | An affected source which meets either of the criteria in paragraphs §63.6590(b)(1)(i)-(ii) of this section does not have to meet the requirements of this subpart and of subpart A of this part except for the initial notification requirements of §63.6645(f). | None | None | § 63.6645(f) |
| GRPEQTAN K | EP | R5121-3 | VOC | 30 TAC Chapter 115, Vent Gas Controls | § 115.127(c)(1)(B) § 115.127(c)(1) | A vent gas stream having a combined weight of the VOC or classes of compounds specified in §115.121(c)(1)(B)-(C) of this title equal to or less than 100 lbs in a continuous 24-hour period is exempt from the requirements of §115.121(c)(1) of this title. | [G]§ 115.125 § 115.126(2) | § 115.126 § 115.126(2) § 115.126(4) | None |
| GRPEXTRU D | EP | R5121-4 | VOC | 30 TAC Chapter 115, Vent Gas Controls | § 115.127(c)(1)(C) § 115.127(c)(1) | A vent gas stream having a concentration of the VOC specified in §115.121(c)(1)(B) and (C) of this title less than 30,000 ppmv is exempt from the requirements of | [G]§ 115.125 § 115.126(2) | § 115.126 § 115.126(2) § 115.126(4) | 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) |
|---------------------------|-------------------------|---------------|--------------------------|---------------------------------------|--|--|--|---|---|
| | | | | | | §115.121(c)(1) of this title. | | | |
| GRPFURNA CE | EU | 63YY-1 | 112(B) HAPS | 40 CFR Part 63, Subpart YY | § 63.1100 The permit holder shall comply with the applicable limitation, standard and/or equipment specification requirements of 40 CFR Part 63, Subpart YY | The permit holder shall comply with the applicable requirements of 40 CFR Part 63, Subpart YY | The permit holder shall comply with the applicable monitoring and testing requirements of 40 CFR Part 63, Subpart YY | The permit holder shall comply with the applicable recordkeeping requirements of 40 CFR Part 63, Subpart YY | The permit holder shall comply with the applicable reporting requirements of 40 CFR Part 63, Subpart YY |
| GRPFURNS TK | EP | R1111-1 | Opacity | 30 TAC Chapter 111, Visible Emissions | § 111.111(a)(1)(C) § 111.111(a)(1)(E) | Visible emissions from any stationary vent shall not exceed an opacity of 15% averaged over a six minute period for any source with a total flow rate of at least 100,000 acfm unless a CEMS is installed. | [G]§ 111.111(a)(1)(F) ** See Periodic Monitoring Summary | None | None |
| GRPFWP | EU | 60III-1 | NMHC and NO _x | 40 CFR Part 60, Subpart IIII | § 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 _x emission limit of 4.0 g/KW-hr, as listed in Table 4 to this subpart. | § 60.4209(a) | § 60.4214(b) | [G]§ 60.4214(d) |
| GRPFWP | EU | 60III-1 | PM | 40 CFR Part 60, Subpart IIII | § 60.4205(c)-Table 4 § 60.4206 § 60.4207(b) | Owners and operators of emergency stationary fire pump CI ICE with a maximum engine power | § 60.4209(a) | § 60.4214(b) | [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) |
|---------------------------|-------------------------|---------------|-------------|--|--|--|--|--|---|
| | | | | | [G]§ 60.4211(a) § 60.4211(c) [G]§ 60.4211(f) § 60.4218 | 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. | | | |
| GRPFWP | EU | 63ZZZ-10 | 112(B) HAPS | 40 CFR Part 63, Subpart ZZZZ | § 63.6590(b)(1) § 63.6595(c) § 63.6640(f)(1) § 63.6640(f)(2) § 63.6640(f)(2)(i) § 63.6640(f)(3) | An affected source which meets either of the criteria in paragraphs §63.6590(b)(1)(i)-(ii) of this section does not have to meet the requirements of this subpart and of subpart A of this part except for the initial notification requirements of §63.6645(f). | None | None | § 63.6645(f) |
| GRPGLYLO AD | EU | R5212-4 | VOC | 30 TAC Chapter 115, Loading and Unloading of VOC | § 115.217(b)(2) § 115.214(b)(1)(B) § 115.214(b)(1)(D) § 115.214(b)(1)(D)(i) | Vapor pressure (at land-based operations). All land-based loading and unloading of VOC with a true vapor pressure less than 1.5 psia is exempt from the requirements of this division except as specified. | § 115.214(b)(1)(A) § 115.214(b)(1)(A)(i) § 115.215 § 115.215(4) | § 115.216 § 115.216(2) § 115.216(3)(B) | None |
| GRPGLYLO AD | EU | 63G-10 | 112(B) HAPS | 40 CFR Part 63, Subpart G | § 63.126(c) | For each Group 2 transfer rack, maintain records as required in § 63.130(f). No other provisions for transfer racks apply to the Group 2 transfer rack. | None | § 63.130(f) § 63.130(f)(1) § 63.130(f)(2) § 63.130(f)(3) § 63.130(f)(3)(i) § 63.130(f)(3)(ii) | § 63.152(c)(4)(iii) |
| GRPGLYTA NK | EU | 63G-1 | 112(B) HAPS | 40 CFR Part 63, Subpart G | § 63.119(a)(3) | Group 2 tanks not using emissions averaging as | None | § 63.123(a) | § 63.152(c)(4)(iii) |

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) |
|---------------------------|-------------------------|---------------|-----------|---------------------------------------|---|---|-------------------------------------|---|---|
| | | | | | | prescribed by §63.150 shall use record keeping methods in §63.123(a). Not required to comply with §63.119 to §63.123. | | | |
| GRPGRANULE | EP | R5121-4 | VOC | 30 TAC Chapter 115, Vent Gas Controls | § 115.127(c)(1)(C) § 115.127(c)(1) | A vent gas stream having a concentration of the VOC specified in §115.121(c)(1)(B) and (C) of this title less than 30,000 ppmv is exempt from the requirements of §115.121(c)(1) of this title. | [G]§ 115.125 § 115.126(2) | § 115.126 § 115.126(2) § 115.126(4) | None |
| GRPHFOTANK | EU | R5112-21 | VOC | 30 TAC Chapter 115, Storage of VOCs | § 115.112(c)(1) | Tanks shall not store VOC, other than crude oil or condensate, unless the required pressure is maintained, or they are equipped with the appropriate control device specified in Table I(b). | ** See Periodic Monitoring Summary | None | None |
| GRPHFOTANK | EU | R5112-22 | VOC | 30 TAC Chapter 115, Storage of VOCs | § 115.112(c)(1) | Tanks shall not store VOC, other than crude oil or condensate, unless the required pressure is maintained, or they are equipped with the appropriate control device specified in Table I(b). | ** See Periodic Monitoring Summary | None | None |
| GRPHFOTANK | EU | R5112-25 | VOC | 30 TAC Chapter 115, Storage of VOCs | § 115.112(c)(1) | Tanks shall not store VOC, other than crude oil or condensate, unless the required pressure is maintained, or they are equipped with the appropriate control device specified in Table I(b). | ** See Periodic Monitoring Summary | 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) |
|---------------------------|-------------------------|---------------|-------------|---------------------------------------|--|--|--|---|---|
| GRPHFOTANK | EU | 63YY-BLR | 112(B) HAPS | 40 CFR Part 63, Subpart YY | § 63.1103 The permit holder shall comply with the applicable limitation, standard and/or equipment specification requirements of 40 CFR Part 63, Subpart YY | The permit holder shall comply with the applicable requirements of 40 CFR Part 63, Subpart YY | The permit holder shall comply with the applicable monitoring and testing requirements of 40 CFR Part 63, Subpart YY | The permit holder shall comply with the applicable recordkeeping requirements of 40 CFR Part 63, Subpart YY | The permit holder shall comply with the applicable reporting requirements of 40 CFR Part 63, Subpart YY |
| GRPHFOTANK | EU | 63YY-INC | 112(B) HAPS | 40 CFR Part 63, Subpart YY | § 63.1103 The permit holder shall comply with the applicable limitation, standard and/or equipment specification requirements of 40 CFR Part 63, Subpart YY | The permit holder shall comply with the applicable requirements of 40 CFR Part 63, Subpart YY | The permit holder shall comply with the applicable monitoring and testing requirements of 40 CFR Part 63, Subpart YY | The permit holder shall comply with the applicable recordkeeping requirements of 40 CFR Part 63, Subpart YY | The permit holder shall comply with the applicable reporting requirements of 40 CFR Part 63, Subpart YY |
| GRPHFOTANK | EU | 63YY-FL | 112(B) HAPS | 40 CFR Part 63, Subpart YY | § 63.1103 The permit holder shall comply with the applicable limitation, standard and/or equipment specification requirements of 40 CFR Part 63, Subpart YY | The permit holder shall comply with the applicable requirements of 40 CFR Part 63, Subpart YY | The permit holder shall comply with the applicable monitoring and testing requirements of 40 CFR Part 63, Subpart YY | The permit holder shall comply with the applicable recordkeeping requirements of 40 CFR Part 63, Subpart YY | The permit holder shall comply with the applicable reporting requirements of 40 CFR Part 63, Subpart YY |
| GRPHON-PV | EP | R5121-10 | VOC | 30 TAC Chapter 115, Vent Gas Controls | § 115.122(c)(1) § 115.121(c)(1) § 115.122(c)(1)(A) | For all persons in Aransas, Bexar, Calhoun, Matagorda, San Patricio, and Travis Counties, any vent gas streams affected by §115.121(c)(1) must be controlled properly using one of the control | [G]§ 115.125 § 115.126(2) ** See CAM Summary | § 115.126 § 115.126(2) | 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) |
|---------------------------|-------------------------|---------------|-------------|---------------------------------------|--|---|---|---|--|
| | | | | | | requirements specified in §115.122(c)(1)(A)-(C). | | | |
| GRPHON-PV | EP | R5121-16 | VOC | 30 TAC Chapter 115, Vent Gas Controls | § 115.122(c)(1) § 115.121(c)(1) § 115.122(c)(1)(B) § 60.18 | For all persons in Aransas, Bexar, Calhoun, Matagorda, San Patricio, and Travis Counties, any vent gas streams affected by §115.121(c)(1) must be controlled properly using one of the control requirements specified in §115.122(c)(1)(A)-(C). | [G]§ 115.125 § 115.126(2) ** See CAM Summary | § 115.126 § 115.126(2) | None |
| GRPHON-PV | EP | 63G-3A | 112(B) HAPS | 40 CFR Part 63, Subpart G | [G]§ 63.113(a)(1) § 60.702(b) § 63.11 § 63.113(h) [G]§ 63.115(f) | Reduce emissions of organic HAP using a flare. §63.113(a)(1)(i)-(ii) | § 63.114(a) § 63.114(a)(2) [G]§ 63.115(f) [G]§ 63.116(a) | [G]§ 63.117(a)(5) § 63.118(a)(1) § 63.118(a)(2) [G]§ 63.152(a) [G]§ 63.152(f) | [G]§ 63.117(a)(5) § 63.117(f) § 63.118(f)(2) § 63.118(f)(5) [G]§ 63.151(b) § 63.151(e) [G]§ 63.151(e)(1) § 63.151(e)(2) § 63.151(e)(3) [G]§ 63.151(j) [G]§ 63.152(a) § 63.152(b) [G]§ 63.152(b)(1) [G]§ 63.152(b)(2) § 63.152(c)(1) § 63.152(c)(2) § 63.152(c)(2)(i) [G]§ 63.152(c)(2)(iii) § 63.152(c)(2)(iii) § 63.152(c)(4)(ii) [G]§ 63.152(c)(6) |
| GRPHON-PV | EP | 63G-3B | 112(B) HAPS | 40 CFR Part 63, Subpart G | [G]§ 63.113(a)(2) § 60.702(a) § 63.113(h) [G]§ 63.115(f) | Reduce emissions of total organic HAPs by 98 wt.% or to a concentration of 20 ppm by volume; whichever is less stringent or as | § 63.114(a) § 63.114(a)(1)(i) § 63.114(e) [G]§ 63.115(f) [G]§ 63.116(c) | § 63.114(a)(1) § 63.117(a)(4) § 63.117(a)(4)(i) § 63.117(a)(4)(ii) § 63.118(a)(1) | § 63.114(e) § 63.117(a)(4) § 63.117(a)(4)(i) § 63.117(a)(4)(ii) § 63.117(f) |

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) |
|---------------------------|-------------------------|---------------|-----------|---------------------------------------|---|---|-------------------------------------|--|--|
| | | | | | | specified. §63.113(a)(2)(i)-(ii) | | § 63.118(a)(2) [G]§ 63.152(a) [G]§ 63.152(f) | § 63.118(f)(1) § 63.118(f)(2) [G]§ 63.151(b) § 63.151(e) [G]§ 63.151(e)(1) § 63.151(e)(2) § 63.151(e)(3) [G]§ 63.151(j) [G]§ 63.152(a) § 63.152(b) [G]§ 63.152(b)(1) [G]§ 63.152(b)(2) § 63.152(c)(1) § 63.152(c)(2) § 63.152(c)(2)(i) [G]§ 63.152(c)(2)(ii) § 63.152(c)(2)(iii) § 63.152(c)(3) § 63.152(c)(3)(i) § 63.152(c)(3)(ii) § 63.152(c)(4)(ii) [G]§ 63.152(c)(6) |
| GRPLOADOUT | EP | R5121-4 | VOC | 30 TAC Chapter 115, Vent Gas Controls | § 115.127(c)(1)(C) § 115.127(c)(1) | A vent gas stream having a concentration of the VOC specified in §115.121(c)(1)(B) and (C) of this title less than 30,000 ppmv is exempt from the requirements of §115.121(c)(1) of this title. | [G]§ 115.125 § 115.126(2) | § 115.126 § 115.126(2) § 115.126(4) | None |
| GRPPELLE T | EP | R5121-4 | VOC | 30 TAC Chapter 115, Vent Gas Controls | § 115.127(c)(1)(C) § 115.127(c)(1) | A vent gas stream having a concentration of the VOC specified in §115.121(c)(1)(B) and (C) of this title less than 30,000 ppmv is exempt from the requirements of §115.121(c)(1) of this title. | [G]§ 115.125 § 115.126(2) | § 115.126 § 115.126(2) § 115.126(4) | 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) |
|---------------------------|-------------------------|---------------|-----------|--|--|---|---|--|---|
| GRPSKIMMER | EU | R5131-2 | VOC | 30 TAC Chapter 115, Water Separation | § 115.132(c)(3) § 115.131(c) | VOC water separator compartments must be equipped with a vapor recovery system which satisfies the provisions of §115.131(c) of this title. | ** See Periodic Monitoring Summary | None | None |
| GRPUNLOAD | EU | R5212-3 | VOC | 30 TAC Chapter 115, Loading and Unloading of VOC | § 115.212(b)(3) § 115.212(b)(2) § 115.212(b)(3)(A) § 115.212(b)(3)(A)(i) § 115.212(b)(3)(B) [G]§ 115.212(b)(3)(C) § 115.212(b)(3)(D) § 115.214(b)(1)(B) § 115.214(b)(1)(C) | All land-based VOC transfer to or from transport vessels shall be conducted in the manner specified for leak-free operations. | § 115.212(b)(3)(B) [G]§ 115.212(b)(3)(C) § 115.214(b)(1)(A) § 115.214(b)(1)(A)(i) § 115.214(b)(1)(A)(ii) § 115.214(b)(1)(A)(iii) | § 115.216 § 115.216(3)(A) § 115.216(3)(A)(i) § 115.216(3)(A)(iii) | None |
| G-VENTGAS | EP | R5121-10 | VOC | 30 TAC Chapter 115, Vent Gas Controls | § 115.122(c)(1) § 115.121(c)(1) § 115.122(c)(1)(A) | For all persons in Aransas, Bexar, Calhoun, Matagorda, San Patricio, and Travis Counties, any vent gas streams affected by §115.121(c)(1) must be controlled properly using one of the control requirements specified in §115.122(c)(1)(A)-(C). | [G]§ 115.125 § 115.126(2) ** See CAM Summary | § 115.126 § 115.126(2) | None |
| G-VENTGAS | EP | R5121-16 | VOC | 30 TAC Chapter 115, Vent Gas Controls | § 115.122(c)(1) § 115.121(c)(1) § 115.122(c)(1)(B) § 60.18 | For all persons in Aransas, Bexar, Calhoun, Matagorda, San Patricio, and Travis Counties, any vent gas streams affected by §115.121(c)(1) must be controlled properly using one of the control requirements specified in §115.122(c)(1)(A)-(C). | [G]§ 115.125 § 115.126(2) ** See CAM Summary | § 115.126 § 115.126(2) | 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) |
|---------------------------|-------------------------|---------------|-------------|--|--|--|---|---|---|
| MEOHUNLO AD | EU | R5212-3 | VOC | 30 TAC Chapter 115, Loading and Unloading of VOC | § 115.212(b)(3) § 115.212(b)(2) § 115.212(b)(3)(A) § 115.212(b)(3)(A)(i) § 115.212(b)(3)(B) [G]§ 115.212(b)(3)(C) § 115.212(b)(3)(D) § 115.214(b)(1)(B) § 115.214(b)(1)(C) | All land-based VOC transfer to or from transport vessels shall be conducted in the manner specified for leak-free operations. | § 115.212(b)(3)(B) [G]§ 115.212(b)(3)(C) § 115.214(b)(1)(A) § 115.214(b)(1)(A)(i) § 115.214(b)(1)(A)(ii) § 115.214(b)(1)(A)(iii) | § 115.216 § 115.216(3)(A) § 115.216(3)(A)(i) § 115.216(3)(A)(iii) | None |
| MEOHUNLO AD | EU | 63EEEE-1 | 112(B) HAPS | 40 CFR Part 63, Subpart EEEE | § 63.2338(b) The permit holder shall comply with the applicable limitation, standard and/or equipment specification requirements of 40 CFR Part 63, Subpart EEEE | The permit holder shall comply with the applicable requirements of 40 CFR Part 63, Subpart EEEE | The permit holder shall comply with the applicable monitoring and testing requirements of 40 CFR Part 63, Subpart EEEE | The permit holder shall comply with the applicable recordkeeping requirements of 40 CFR Part 63, Subpart EEEE | The permit holder shall comply with the applicable reporting requirements of 40 CFR Part 63, Subpart EEEE |
| O_FUG | EU | 60VVA-ALL | VOC | 40 CFR Part 60, Subpart VVa | § 60.482-1a(d) § 60.482-1a(a) § 60.482-1a(b) § 60.485a(b) § 60.486a(a)(1) § 60.486a(a)(2) § 60.486a(k) | Equipment that is in vacuum service is excluded from the requirements of §60.482-2a to §60.482-10a, if it is identified as required in §60.486a(e)(5). | [G]§ 60.485a(b)(1) § 60.485a(b)(2) | § 60.485a(b)(2) § 60.486a(e) § 60.486a(e)(1) § 60.486a(e)(5) | None |
| O_FUG | EU | 60VVA-ALL | VOC | 40 CFR Part 60, Subpart VVa | [G]§ 60.482-1a(e) § 60.482-1a(a) § 60.482-1a(b) § 60.485a(b) § 60.486a(a)(1) § 60.486a(a)(2) § 60.486a(k) | Equipment that an owner or operator designates as being in VOC service less than 300 hours (hr)/yr is excluded from the requirements of §§ 60.482-2a through 60.482-11a if it is identified as required in §60.486a(e)(6) and it meets any of the conditions | [G]§ 60.485a(b)(1) § 60.485a(b)(2) | § 60.485a(b)(2) § 60.486a(e) § 60.486a(e)(1) § 60.486a(e)(6) | 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) |
|---------------------------|-------------------------|---------------|-----------|---------------------------------------|---|--|--|---|--|
| | | | | | | specified in paragraphs (e)(1) through (3) of this section. §60.482-1a(e)(1)-(3) | | | |
| O_FUG | EU | 60VVA-ALL | VOC | 40 CFR Part 60, Subpart VVa | [G]§ 60.482-2a(b)(1) § 60.482-1a(a) § 60.482-1a(b) § 60.482-1a(g) § 60.482-2a(b)(2) § 60.482-2a(b)(2)(ii) § 60.482-2a(c)(1) [G]§ 60.482-2a(c)(2) § 60.482-2a(d) [G]§ 60.482-2a(d)(1) § 60.482-2a(d)(2) § 60.482-2a(d)(3) [G]§ 60.482-2a(d)(6) [G]§ 60.482-2a(e) § 60.482-2a(f) [G]§ 60.482-2a(g) § 60.482-2a(h) § 60.482-9a(a) § 60.482-9a(b) [G]§ 60.482-9a(d) § 60.482-9a(f) § 60.485a(b) § 60.485a(c) § 60.485a(c)(1) § 60.485a(f) § 60.486a(a)(1) § 60.486a(a)(2) § 60.486a(k) | The instrument reading that defines a leak in a pump in light liquid service is 5,000 parts per million (ppm) or greater for pumps handling polymerizing monomers or 2,000 ppm or greater for all other pumps, as specified in paragraphs (b)(1)(i) and (ii) of this section. §60.482-2a(b)(1)(i)-(ii) | § 60.482-1a(f)(1) § 60.482-1a(f)(2) [G]§ 60.482-1a(f)(3) § 60.482-1a(g) § 60.482-2a(a)(1) § 60.482-2a(a)(2) § 60.482-2a(b)(2)(i) [G]§ 60.482-2a(d)(4) [G]§ 60.482-2a(d)(5) § 60.482-9a(a) § 60.485a(a) [G]§ 60.485a(b)(1) § 60.485a(b)(2) § 60.485a(c)(2) [G]§ 60.485a(d) [G]§ 60.485a(e) | § 60.482-1a(g) § 60.485a(b)(2) [G]§ 60.486a(a)(3) [G]§ 60.486a(b) [G]§ 60.486a(c) § 60.486a(e) § 60.486a(e)(1) [G]§ 60.486a(e)(2) [G]§ 60.486a(e)(4) § 60.486a(e)(7) [G]§ 60.486a(e)(8) § 60.486a(f) § 60.486a(f)(1) [G]§ 60.486a(h) | § 60.487a(a) § 60.487a(b) § 60.487a(b)(1) § 60.487a(b)(3) § 60.487a(c) § 60.487a(c)(1) § 60.487a(c)(2) § 60.487a(c)(2)(iii) § 60.487a(c)(2)(iv) § 60.487a(c)(2)(ix) § 60.487a(c)(3) § 60.487a(c)(4) § 60.487a(e) |
| O_FUG | EU | 60VVA- | VOC | 40 CFR Part 60, | § 60.482-3a(a) | Each compressor shall be | § 60.482-1a(g) | § 60.482-1a(g) | § 60.487a(a) |

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) |
|---------------------------|-------------------------|---------------|-----------|---------------------------------------|---|---|--|---|--|
| | | ALL | | Subpart VVa | § 60.482-1a(a) § 60.482-1a(b) § 60.482-1a(g) [G]§ 60.482-3a(b) § 60.482-3a(c) § 60.482-3a(d) § 60.482-3a(e)(2) § 60.482-3a(f) [G]§ 60.482-3a(g) § 60.482-3a(h) [G]§ 60.482-3a(i) § 60.482-3a(j) § 60.482-9a(a) § 60.482-9a(b) § 60.485a(b) § 60.485a(c) § 60.485a(c)(1) § 60.485a(f) § 60.486a(a)(1) § 60.486a(a)(2) § 60.486a(k) | equipped with a seal system that includes a barrier fluid system and that prevents leakage of VOC to the atmosphere, except as provided in §60.482-3a(c) and paragraphs (h), (i), and (j) of this section. | § 60.482-3a(e)(1) § 60.482-9a(a) § 60.485a(a) [G]§ 60.485a(b)(1) § 60.485a(b)(2) § 60.485a(c)(2) [G]§ 60.485a(d) | § 60.485a(b)(2) [G]§ 60.486a(a)(3) [G]§ 60.486a(b) [G]§ 60.486a(c) § 60.486a(e) § 60.486a(e)(1) [G]§ 60.486a(e)(2) [G]§ 60.486a(e)(4) [G]§ 60.486a(e)(8) [G]§ 60.486a(h) | § 60.487a(b) § 60.487a(b)(1) § 60.487a(b)(4) § 60.487a(c) § 60.487a(c)(1) § 60.487a(c)(2) § 60.487a(c)(2)(ix) § 60.487a(c)(2)(v) § 60.487a(c)(2)(vi) § 60.487a(c)(3) § 60.487a(c)(4) § 60.487a(e) |
| O_FUG | EU | 60VVA-ALL | VOC | 40 CFR Part 60, Subpart VVa | § 60.482-4a(a) § 60.482-1a(a) § 60.482-1a(b) § 60.482-1a(g) § 60.482-4a(b)(1) § 60.482-4a(b)(2) § 60.482-4a(c) § 60.482-4a(d)(1) § 60.482-4a(d)(2) § 60.482-9a(a) § 60.482-9a(b) § 60.485a(b) § 60.485a(c) § 60.485a(c)(1) § 60.485a(f) § 60.486a(a)(1) § 60.486a(a)(2) § 60.486a(k) | Except during pressure releases, each pressure relief device in gas/vapor service shall be operated with no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, as determined by the methods specified in §60.485a(c). | § 60.482-1a(g) § 60.482-4a(b)(2) § 60.482-9a(a) § 60.485a(a) [G]§ 60.485a(b)(1) § 60.485a(b)(2) § 60.485a(c)(2) [G]§ 60.485a(d) | § 60.482-1a(g) § 60.485a(b)(2) § 60.486a(e) § 60.486a(e)(1) § 60.486a(e)(10) § 60.486a(e)(3) [G]§ 60.486a(e)(4) [G]§ 60.486a(e)(8) | § 60.487a(a) § 60.487a(b) § 60.487a(b)(1) § 60.487a(c) § 60.487a(c)(1) § 60.487a(c)(2) § 60.487a(c)(2)(ix) § 60.487a(c)(3) § 60.487a(c)(4) § 60.487a(e) |

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) |
|---------------------------|-------------------------|---------------|-----------|---------------------------------------|--|--|---|--|--|
| O_FUG | EU | 60VVA-ALL | VOC | 40 CFR Part 60, Subpart VVa | § 60.482-5a(a) § 60.482-1a(a) § 60.482-1a(b) § 60.482-1a(g) [G]§ 60.482-5a(b) § 60.482-5a(c) § 60.485a(b) § 60.485a(f) § 60.486a(a)(1) § 60.486a(a)(2) § 60.486a(k) | Each sampling connection system shall be equipped with a closed-purge, closed-loop, or closed-vent system, except as provided in §60.482-1a(c) and paragraph (c) of this section. | § 60.482-1a(g) § 60.485a(a) [G]§ 60.485a(b)(1) § 60.485a(b)(2) [G]§ 60.485a(d) | § 60.482-1a(g) § 60.485a(b)(2) § 60.486a(e) § 60.486a(e)(1) [G]§ 60.486a(e)(8) | § 60.487a(a) § 60.487a(b) § 60.487a(b)(1) § 60.487a(c) § 60.487a(c)(1) § 60.487a(c)(2) § 60.487a(c)(2)(ix) § 60.487a(c)(3) § 60.487a(c)(4) § 60.487a(e) |
| O_FUG | EU | 60VVA-ALL | VOC | 40 CFR Part 60, Subpart VVa | § 60.482-6a(a)(1) § 60.482-1a(a) § 60.482-1a(b) § 60.482-1a(g) § 60.482-6a(a)(2) § 60.482-6a(b) § 60.482-6a(c) § 60.482-6a(d) § 60.482-6a(e) § 60.485a(b) § 60.485a(f) § 60.486a(a)(1) § 60.486a(a)(2) § 60.486a(k) | Each open-ended valve or line shall be equipped with a cap, blind flange, plug, or a second valve, except as provided in §60.482-1a(c) and paragraphs (d) and (e) of this section. | § 60.482-1a(g) § 60.485a(a) [G]§ 60.485a(b)(1) § 60.485a(b)(2) [G]§ 60.485a(d) | § 60.482-1a(g) § 60.485a(b)(2) § 60.486a(e) § 60.486a(e)(1) [G]§ 60.486a(e)(8) | § 60.487a(a) § 60.487a(b) § 60.487a(b)(1) § 60.487a(c) § 60.487a(c)(1) § 60.487a(c)(2) § 60.487a(c)(2)(ix) § 60.487a(c)(3) § 60.487a(c)(4) § 60.487a(e) |
| O_FUG | EU | 60VVA-ALL | VOC | 40 CFR Part 60, Subpart VVa | § 60.482-7a(b) § 60.482-1a(a) § 60.482-1a(b) § 60.482-1a(g) § 60.482-7a(a)(1) [G]§ 60.482-7a(d) [G]§ 60.482-7a(e) [G]§ 60.482-7a(f) [G]§ 60.482-7a(g) [G]§ 60.482-7a(h) § 60.485a(b) § 60.485a(c) § 60.485a(c)(1) | At a valve in gas vapor service if an instrument reading of 500 ppm or greater is measured, a leak is detected. | § 60.482-1a(f)(1) § 60.482-1a(f)(2) [G]§ 60.482-1a(f)(3) § 60.482-1a(g) § 60.482-7a(a)(1) [G]§ 60.482-7a(a)(2) [G]§ 60.482-7a(c) § 60.485a(a) [G]§ 60.485a(b)(1) § 60.485a(b)(2) § 60.485a(c)(2) [G]§ 60.485a(d) | § 60.482-1a(g) § 60.485a(b)(2) [G]§ 60.486a(a)(3) [G]§ 60.486a(b) [G]§ 60.486a(c) § 60.486a(e) § 60.486a(e)(1) [G]§ 60.486a(e)(2) [G]§ 60.486a(e)(4) [G]§ 60.486a(e)(8) § 60.486a(f) § 60.486a(f)(1) § 60.486a(f)(2) | § 60.487a(a) § 60.487a(b) § 60.487a(b)(1) § 60.487a(b)(2) § 60.487a(c) § 60.487a(c)(1) § 60.487a(c)(2) § 60.487a(c)(2)(i) § 60.487a(c)(2)(ii) § 60.487a(c)(2)(ix) § 60.487a(c)(3) § 60.487a(c)(4) § 60.487a(e) |

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) |
|---------------------------|-------------------------|---------------|-----------|---------------------------------------|--|--|---|--|--|
| | | | | | § 60.485a(f) § 60.486a(a)(1) § 60.486a(a)(2) § 60.486a(k) | | [G]§ 60.485a(e) | | |
| O_FUG | EU | 60VVA-ALL | VOC | 40 CFR Part 60, Subpart VVa | § 60.482-8a(b) § 60.482-1a(a) § 60.482-1a(b) § 60.482-1a(g) [G]§ 60.482-2a(c)(2) [G]§ 60.482-7a(e) § 60.482-8a(a) § 60.482-8a(a)(2) [G]§ 60.482-8a(c) § 60.482-8a(d) § 60.482-9a(a) § 60.482-9a(b) [G]§ 60.482-9a(d) § 60.482-9a(f) § 60.485a(b) § 60.485a(f) § 60.486a(a)(1) § 60.486a(a)(2) § 60.486a(k) | At a pump in heavy liquid service, if an instrument reading of 10,000 ppm or greater is measured, a leak is detected. | § 60.482-1a(g) § 60.482-8a(a)(1) § 60.482-9a(a) § 60.485a(a) [G]§ 60.485a(b)(1) § 60.485a(b)(2) [G]§ 60.485a(d) | § 60.482-1a(g) § 60.485a(b)(2) [G]§ 60.486a(a)(3) [G]§ 60.486a(b) [G]§ 60.486a(c) § 60.486a(e) § 60.486a(e)(1) [G]§ 60.486a(e)(8) | § 60.487a(a) § 60.487a(b) § 60.487a(b)(1) § 60.487a(c) § 60.487a(c)(1) § 60.487a(c)(2) § 60.487a(c)(2)(ix) § 60.487a(c)(3) § 60.487a(c)(4) § 60.487a(e) |
| O_FUG | EU | 60VVA-ALL | VOC | 40 CFR Part 60, Subpart VVa | § 60.482-8a(b) § 60.482-1a(a) § 60.482-1a(b) § 60.482-1a(g) [G]§ 60.482-2a(c)(2) [G]§ 60.482-7a(e) § 60.482-8a(a) § 60.482-8a(a)(2) [G]§ 60.482-8a(c) § 60.482-8a(d) § 60.482-9a(a) § 60.482-9a(b) § 60.482-9a(c) | At a valve in heavy liquid service, if an instrument reading of 10,000 ppm or greater is measured, a leak is detected. | § 60.482-1a(g) § 60.482-8a(a)(1) § 60.482-9a(a) § 60.485a(a) [G]§ 60.485a(b)(1) § 60.485a(b)(2) [G]§ 60.485a(d) | § 60.482-1a(g) § 60.485a(b)(2) [G]§ 60.486a(a)(3) [G]§ 60.486a(b) [G]§ 60.486a(c) § 60.486a(e) § 60.486a(e)(1) [G]§ 60.486a(e)(8) | § 60.487a(a) § 60.487a(b) § 60.487a(b)(1) § 60.487a(c) § 60.487a(c)(1) § 60.487a(c)(2) § 60.487a(c)(2)(ix) § 60.487a(c)(3) § 60.487a(c)(4) § 60.487a(e) |

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) |
|---------------------------|-------------------------|---------------|-----------|---------------------------------------|---|---|--|--|--|
| | | | | | § 60.482-9a(c)(1) § 60.482-9a(e) § 60.482-9a(f) § 60.485a(b) § 60.485a(f) § 60.486a(a)(1) § 60.486a(a)(2) § 60.486a(k) | | | | |
| O_FUG | EU | 60VVA-ALL | VOC | 40 CFR Part 60, Subpart VVa | § 60.482-8a(b) § 60.482-1a(a) § 60.482-1a(b) § 60.482-1a(g) [G]§ 60.482-2a(c)(2) [G]§ 60.482-7a(e) § 60.482-8a(a) § 60.482-8a(a)(2) [G]§ 60.482-8a(c) § 60.482-8a(d) § 60.482-9a(a) § 60.482-9a(b) § 60.485a(b) § 60.485a(f) § 60.486a(a)(1) § 60.486a(a)(2) § 60.486a(k) | At a pressure relief device in light liquid or heavy liquid service, if an instrument reading of 10,000 ppm or greater is measured, a leak is detected. | § 60.482-1a(g) § 60.482-8a(a)(1) § 60.482-9a(a) § 60.485a(a) [G]§ 60.485a(b)(1) § 60.485a(b)(2) [G]§ 60.485a(d) [G]§ 60.485a(e) | § 60.482-1a(g) § 60.485a(b)(2) [G]§ 60.486a(a)(3) [G]§ 60.486a(b) [G]§ 60.486a(c) § 60.486a(e) § 60.486a(e)(1) [G]§ 60.486a(e)(8) | § 60.487a(a) § 60.487a(b) § 60.487a(b)(1) § 60.487a(c) § 60.487a(c)(1) § 60.487a(c)(2) § 60.487a(c)(2)(ix) § 60.487a(c)(3) § 60.487a(c)(4) § 60.487a(e) |
| O_FUG | EU | 60VVA-ALL | VOC | 40 CFR Part 60, Subpart VVa | § 60.482-8a(b) § 60.482-1a(a) § 60.482-1a(b) § 60.482-1a(g) [G]§ 60.482-2a(c)(2) [G]§ 60.482-7a(e) § 60.482-8a(a) § 60.482-8a(a)(2) [G]§ 60.482-8a(c) § 60.482-8a(d) § 60.482-9a(a) § 60.482-9a(b) § 60.485a(b) § 60.485a(f) § 60.486a(a)(1) § 60.486a(a)(2) § 60.486a(k) | At a connector in heavy liquid service, if an instrument reading of 10,000 ppm or greater is measured, a leak is detected. | § 60.482-1a(g) § 60.482-8a(a)(1) § 60.482-9a(a) § 60.485a(a) [G]§ 60.485a(b)(1) § 60.485a(b)(2) [G]§ 60.485a(d) | § 60.482-1a(g) § 60.485a(b)(2) [G]§ 60.486a(a)(3) [G]§ 60.486a(b) [G]§ 60.486a(c) § 60.486a(e) § 60.486a(e)(1) [G]§ 60.486a(e)(8) | § 60.487a(a) § 60.487a(b) § 60.487a(b)(1) § 60.487a(c) § 60.487a(c)(1) § 60.487a(c)(2) § 60.487a(c)(2)(ix) § 60.487a(c)(3) § 60.487a(c)(4) § 60.487a(e) |

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) |
|---------------------------|-------------------------|---------------|-------------|---------------------------------------|--|--|---|---|--|
| | | | | | § 60.482-9a(b) § 60.482-9a(c) § 60.482-9a(c)(1) § 60.482-9a(c)(2) § 60.482-9a(f) § 60.485a(b) § 60.485a(f) § 60.486a(a)(1) § 60.486a(a)(2) § 60.486a(k) | | | | |
| O_FUG | EU | 60VVA-ALL | VOC | 40 CFR Part 60, Subpart VVa | § 60.482-11a(b)(2) § 60.482-11a(b)(3) § 60.482-11a(b)(3)(i) § 60.482-11a(d) [G]§ 60.482-11a(e) [G]§ 60.482-11a(f)(1) § 60.482-11a(f)(2) § 60.482-11a(g) § 60.485a(b) § 60.486a(a)(1) § 60.486a(a)(2) § 60.486a(k) | If an instrument reading greater than or equal to 500 ppm is measured in connectors in gas and vapor and light liquid service, a leak is detected. | § 60.482-11a(a) § 60.482-11a(b) § 60.482-11a(b)(1) § 60.482-11a(b)(3) § 60.482-11a(b)(3)(ii) [G]§ 60.482-11a(b)(3)(iii) § 60.482-11a(b)(3)(iv) § 60.482-11a(c) § 60.485a(a) [G]§ 60.485a(b)(1) § 60.485a(b)(2) [G]§ 60.485a(e) | § 60.482-11a(b)(3)(v) § 60.485a(b)(2) [G]§ 60.486a(a)(3) [G]§ 60.486a(b) [G]§ 60.486a(c) § 60.486a(e) § 60.486a(e)(1) [G]§ 60.486a(e)(8) § 60.486a(e)(9) § 60.486a(f) § 60.486a(f)(1) | § 60.487a(b) § 60.487a(b)(1) § 60.487a(b)(5) § 60.487a(c) § 60.487a(c)(1) § 60.487a(c)(2) § 60.487a(c)(2)(i) § 60.487a(c)(2)(ix) § 60.487a(c)(2)(vii) § 60.487a(c)(2)(viii) § 60.487a(c)(3) § 60.487a(c)(4) § 60.487a(e) |
| O_FUG | EU | 63YY-ALL | 112(B) HAPS | 40 CFR Part 63, Subpart YY | § 63.1103 The permit holder shall comply with the applicable limitation, standard and/or equipment specification requirements of 40 CFR Part 63, Subpart YY | The permit holder shall comply with the applicable requirements of 40 CFR Part 63, Subpart YY | The permit holder shall comply with the applicable monitoring and testing requirements of 40 CFR Part 63, Subpart YY | The permit holder shall comply with the applicable recordkeeping requirements of 40 CFR Part 63, Subpart YY | The permit holder shall comply with the applicable reporting requirements of 40 CFR Part 63, Subpart YY |
| O-REGEN | EP | R5121-5 | VOC | 30 TAC Chapter 115, Vent Gas Controls | § 115.127(c)(2) | A vent gas stream specified in §115.121(c)(2) which emits less than or equal to | [G]§ 115.125 § 115.126(2) | § 115.126 § 115.126(2) | 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) |
|---------------------------|-------------------------|---------------|-----------|---------------------------------------|---|---|--|---|---|
| | | | | | | five tons of total uncontrolled VOC in any one calendar year is exempt from the requirements of §115.121(c)(2) of this title. | | | |
| O-VENTGAS | EP | R5121-10 | VOC | 30 TAC Chapter 115, Vent Gas Controls | § 115.122(c)(1) § 115.121(c)(1) § 115.122(c)(1)(A) | For all persons in Aransas, Bexar, Calhoun, Matagorda, San Patricio, and Travis Counties, any vent gas streams affected by §115.121(c)(1) must be controlled properly using one of the control requirements specified in §115.122(c)(1)(A)-(C). | [G]§ 115.125 § 115.126(2) ** See CAM Summary | § 115.126 § 115.126(2) | None |
| O-VENTGAS | EP | R5121-16 | VOC | 30 TAC Chapter 115, Vent Gas Controls | § 115.122(c)(1) § 115.121(c)(1) § 115.122(c)(1)(B) § 60.18 | For all persons in Aransas, Bexar, Calhoun, Matagorda, San Patricio, and Travis Counties, any vent gas streams affected by §115.121(c)(1) must be controlled properly using one of the control requirements specified in §115.122(c)(1)(A)-(C). | [G]§ 115.125 § 115.126(2) ** See CAM Summary | § 115.126 § 115.126(2) | None |
| O-VENTGAS | EP | R5121-20 | VOC | 30 TAC Chapter 115, Vent Gas Controls | § 115.122(c)(1) § 115.121(c)(1) § 115.122(c)(1)(C) | For all persons in Aransas, Bexar, Calhoun, Matagorda, San Patricio, and Travis Counties, any vent gas streams affected by §115.121(c)(1) must be controlled properly using one of the control requirements specified in §115.122(c)(1)(A)-(C). | [G]§ 115.125 § 115.126(2) ** See CAM Summary | § 115.126 § 115.126(2) | None |
| PE-REGEN | EP | R5121-3 | VOC | 30 TAC Chapter 115, Vent Gas | § 115.127(c)(1)(B) § 115.127(c)(1) | A vent gas stream having a combined weight of the | [G]§ 115.125 § 115.126(2) | § 115.126 § 115.126(2) | 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) |
|---------------------------|-------------------------|---------------|-------------|---------------------------------------|---|--|-------------------------------------|---|---|
| | | | | Controls | | VOC or classes of compounds specified in §115.121(c)(1)(B)-(C) of this title equal to or less than 100 lbs in a continuous 24-hour period is exempt from the requirements of §115.121(c)(1) of this title. | | § 115.126(4) | |
| PROEXTRUD | PRO | 60DDD-02 | VOC/TOC | 40 CFR Part 60, Subpart DDD | § 60.560(g) | Vent streams emitting continuous emissions with uncontrolled annual emissions of < 1.6 Mg/yr (1.76 Tons/yr) or with weight % TOC of < 0.10 % from facilities as specified, exempted from §60.562-1(a)(1). | [G]§ 60.564(d) | § 60.565(a) § 60.565(a)(10) § 60.565(h) | § 60.565(a) § 60.565(a)(10) § 60.565(k) § 60.565(k)(6) § 60.565(k)(7) |
| PROGRANULE | PRO | 60DDD-02 | VOC/TOC | 40 CFR Part 60, Subpart DDD | § 60.560(g) | Vent streams emitting continuous emissions with uncontrolled annual emissions of < 1.6 Mg/yr (1.76 Tons/yr) or with weight % TOC of < 0.10 % from facilities as specified, exempted from §60.562-1(a)(1). | [G]§ 60.564(d) | § 60.565(a) § 60.565(a)(10) § 60.565(h) | § 60.565(a) § 60.565(a)(10) § 60.565(k) § 60.565(k)(6) § 60.565(k)(7) |
| PROLOADOUT | PRO | 60DDD-02 | VOC/TOC | 40 CFR Part 60, Subpart DDD | § 60.560(g) | Vent streams emitting continuous emissions with uncontrolled annual emissions of < 1.6 Mg/yr (1.76 Tons/yr) or with weight % TOC of < 0.10 % from facilities as specified, exempted from §60.562-1(a)(1). | [G]§ 60.564(d) | § 60.565(a) § 60.565(a)(10) § 60.565(h) | § 60.565(a) § 60.565(a)(10) § 60.565(k) § 60.565(k)(6) § 60.565(k)(7) |
| PROMEGC MPU | PRO | 63F-1 | 112(B) HAPS | 40 CFR Part 63, Subpart F | § 63.100(b) [G]§ 63.102(a) | Except as provided in paragraphs (b)(4) and (c) of | § 63.103(b)(1) § 63.103(b)(3) | [G]§ 63.103(c) [G]§ 63.104(e)(2) | § 63.103(b)(2) [G]§ 63.103(b)(5) |

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) |
|---------------------------|-------------------------|---------------|-----------|---------------------------------------|---|---|--|---|---|
| | | | | | [G]§ 63.102(c) § 63.104(a) [G]§ 63.104(d) § 63.104(e) § 63.104(e)(1) [G]§ 63.104(e)(2) § 63.105(d) | this section, the provisions of subparts F, G, and H apply to chemical manufacturing process units that meet the criteria. | § 63.103(b)(4) [G]§ 63.103(b)(5) § 63.103(b)(6) [G]§ 63.104(b) | [G]§ 63.104(f)(1) [G]§ 63.105(b) § 63.105(c) § 63.105(e) | [G]§ 63.103(d) [G]§ 63.104(f)(2) |
| PROPELLET | PRO | 60DDD-02 | VOC/TOC | 40 CFR Part 60, Subpart DDD | § 60.560(g) | Vent streams emitting continuous emissions with uncontrolled annual emissions of < 1.6 Mg/yr (1.76 Tons/yr) or with weight % TOC of < 0.10 % from facilities as specified, exempted from §60.562-1(a)(1). | [G]§ 60.564(d) | § 60.565(a) § 60.565(a)(10) § 60.565(h) | § 60.565(a) § 60.565(a)(10) § 60.565(k) § 60.565(k)(6) § 60.565(k)(7) |
| PRO-RJT01 | PRO | 61FF-2 | Benzene | 40 CFR Part 61, Subpart FF | § 61.348(a)(1) § 61.348(a)(1)(i) § 61.348(a)(2) § 61.348(a)(3) § 61.348(a)(4) § 61.348(f) § 61.349(a) § 61.349(a)(1)(i) § 61.349(a)(1)(iii) § 61.349(a)(1)(iv) § 61.349(a)(2)(i)(A) § 61.349(b) § 61.349(e) § 61.349(f) § 61.349(g) | The owner or operator shall design, install, operate and maintain a treatment process that removes or destroys benzene as specified. | § 61.348(f) § 61.349(a)(1)(i) § 61.349(e) § 61.349(f) § 61.354(a)(2) § 61.354(c) § 61.354(c)(1) [G]§ 61.355(h) § 61.355(i)(1) § 61.355(i)(2) § 61.355(i)(3)(i) § 61.355(i)(3)(ii) § 61.355(i)(3)(ii)(A) § 61.355(i)(3)(ii)(B) § 61.355(i)(3)(ii)(C) § 61.355(i)(3)(iii) § 61.355(i)(3)(iv) § 61.355(i)(4) | § 61.354(a)(2) § 61.354(c) § 61.354(c)(1) § 61.355(i)(1) § 61.355(i)(3)(ii)(A) § 61.356(e) § 61.356(e)(1) § 61.356(e)(2) § 61.356(f) § 61.356(f)(1) [G]§ 61.356(f)(3) § 61.356(h) [G]§ 61.356(i) § 61.356(j) § 61.356(j)(1) § 61.356(j)(2) § 61.356(j)(3) § 61.356(j)(4) | § 61.357(d)(7) § 61.357(d)(7)(ii) § 61.357(d)(7)(iv) § 61.357(d)(7)(iv)(A) |
| PRO-RJT01 | PRO | 61FF-3 | Benzene | 40 CFR Part 61, Subpart FF | § 61.348(a)(1) § 61.348(a)(1)(i) § 61.348(a)(2) § 61.348(a)(3) | The owner or operator shall design, install, operate and maintain a treatment process that removes or | § 61.348(f) § 61.349(a)(1)(i) § 61.349(e) § 61.349(f) | § 61.354(c) § 61.354(c)(1) § 61.355(i)(1) § 61.355(i)(3)(ii)(A) | § 61.357(d)(7) § 61.357(d)(7)(i) § 61.357(d)(7)(iv) § 61.357(d)(7)(iv)(A) |

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) |
|---------------------------|-------------------------|---------------|-----------|---------------------------------------|--|--|--|---|---|
| | | | | | § 61.348(a)(4) § 61.348(f) § 61.349(a) § 61.349(a)(1)(i) § 61.349(a)(1)(iii) § 61.349(a)(1)(iv) § 61.349(a)(2)(i)(A) § 61.349(b) § 61.349(e) § 61.349(f) § 61.349(g) | destroys benzene as specified. | § 61.354(a)(1) § 61.354(c) § 61.354(c)(1) [G]§ 61.355(h) § 61.355(i)(1) § 61.355(i)(2) § 61.355(i)(3)(i) § 61.355(i)(3)(ii) § 61.355(i)(3)(ii)(A) § 61.355(i)(3)(ii)(B) § 61.355(i)(3)(ii)(C) § 61.355(i)(3)(iii) § 61.355(i)(3)(iv) § 61.355(i)(4) | § 61.356(e) § 61.356(e)(1) § 61.356(e)(2) § 61.356(f) § 61.356(f)(1) [G]§ 61.356(f)(3) § 61.356(h) [G]§ 61.356(i) § 61.356(j) § 61.356(j)(1) § 61.356(j)(2) § 61.356(j)(3) § 61.356(j)(4) | |
| PRO-RJT01 | PRO | 61FF-4 | Benzene | 40 CFR Part 61, Subpart FF | § 61.348(a)(1) § 60.18 § 61.348(a)(1)(i) § 61.348(a)(2) § 61.348(a)(3) § 61.348(a)(4) § 61.348(f) § 61.349(a) § 61.349(a)(1)(i) § 61.349(a)(1)(iii) § 61.349(a)(1)(iv) § 61.349(b) § 61.349(e) § 61.349(f) § 61.349(g) | The owner or operator shall design, install, operate and maintain a treatment process that removes or destroys benzene as specified. | § 60.18(f)(2) § 61.348(f) § 61.349(a)(1)(i) § 61.349(e) § 61.349(f) § 61.354(a)(2) § 61.354(c) § 61.354(c)(3) [G]§ 61.355(h) | § 61.354(a)(2) § 61.354(c) § 61.354(c)(3) § 61.356(e) § 61.356(e)(1) § 61.356(e)(2) § 61.356(f) § 61.356(f)(1) § 61.356(h) [G]§ 61.356(i) § 61.356(j) § 61.356(j)(1) § 61.356(j)(2) § 61.356(j)(3) § 61.356(j)(7) | § 61.357(d)(7) § 61.357(d)(7)(ii) § 61.357(d)(7)(iv) § 61.357(d)(7)(iv)(F) |
| PRO-RJT01 | PRO | 61FF-5 | Benzene | 40 CFR Part 61, Subpart FF | § 61.348(a)(1) § 60.18 § 61.348(a)(1)(i) § 61.348(a)(2) § 61.348(a)(3) § 61.348(a)(4) § 61.348(f) § 61.349(a) § 61.349(a)(1)(i) | The owner or operator shall design, install, operate and maintain a treatment process that removes or destroys benzene as specified. | § 60.18(f)(2) § 61.348(f) § 61.349(a)(1)(i) § 61.349(e) § 61.349(f) § 61.354(a)(1) § 61.354(c) § 61.354(c)(3) [G]§ 61.355(h) | § 61.354(c) § 61.354(c)(3) § 61.356(e) § 61.356(e)(1) § 61.356(e)(2) § 61.356(f) § 61.356(f)(1) § 61.356(h) [G]§ 61.356(i) | § 61.357(d)(7) § 61.357(d)(7)(i) § 61.357(d)(7)(iv) § 61.357(d)(7)(iv)(F) |

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) |
|---------------------------|-------------------------|---------------|-----------|---------------------------------------|---|---|-------------------------------------|---|---|
| | | | | | § 61.349(a)(1)(iii) § 61.349(a)(1)(iv) § 61.349(b) § 61.349(e) § 61.349(f) § 61.349(g) | | | § 61.356(j) § 61.356(j)(1) § 61.356(j)(2) § 61.356(j)(3) § 61.356(j)(7) | |
| PRO-RJT01 | PRO | 61FF-6 | Benzene | 40 CFR Part 61, Subpart FF | § 61.348(a)(1) § 61.340(d) § 61.348(a)(1)(i) § 61.348(a)(2) § 61.348(a)(3) § 61.348(a)(4) § 61.348(f) | The owner or operator shall design, install, operate and maintain a treatment process that removes or destroys benzene as specified. | § 61.348(f) § 61.354(a)(2) | § 61.354(a)(2) § 61.356(e) § 61.356(e)(1) § 61.356(e)(2) [G]§ 61.356(i) | § 61.357(d)(7) § 61.357(d)(7)(ii) |
| PRO-RJT01 | PRO | 61FF-7 | Benzene | 40 CFR Part 61, Subpart FF | § 61.348(a)(1) § 61.340(d) § 61.348(a)(1)(i) § 61.348(a)(2) § 61.348(a)(3) § 61.348(a)(4) § 61.348(f) | The owner or operator shall design, install, operate and maintain a treatment process that removes or destroys benzene as specified. | § 61.348(f) § 61.354(a)(1) | § 61.356(e) § 61.356(e)(1) § 61.356(e)(2) [G]§ 61.356(i) | § 61.357(d)(7) § 61.357(d)(7)(i) |
| RAD02 | EU | R5112-11 | VOC | 30 TAC Chapter 115, Storage of VOCs | § 115.112(c)(1) | Tanks shall not store VOC, other than crude oil or condensate, unless the required pressure is maintained, or they are equipped with the appropriate control device specified in Table I(b). | ** See Periodic Monitoring Summary | None | None |
| RJT01 | EP | 60NNN-1 | VOC/TOC | 40 CFR Part 60, Subpart NNN | § 60.660(d)(1) | Owners or operators of process vents that are subject to this subpart may choose to comply with the provisions of 40 CFR part 65, subpart D, to satisfy the requirements of §§60.662 through 60.665 and 60.668. | 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) |
|---------------------------|-------------------------|---------------|-----------|---------------------------------------|---|--|--|---|---|
| RJT01 | EP | 65CAR-BLR | VOC | 40 CFR Part 65, Subpart D | § 65.63(a)(2) § 65.1(d) § 65.1(e) § 65.140 § 65.142(b)(2) § 65.143(a)(1) § 65.143(a)(2) [G]§ 65.149(a) § 65.149(b)(2) § 65.149(b)(2)(iii) § 65.3(a)(1) § 65.3(a)(3) § 65.3(a)(4) § 65.3(a)(5) § 65.3(b)(3) [G]§ 65.3(b)(5) § 65.3(c) [G]§ 65.3(d) [G]§ 65.6(b) § 65.62(a) § 65.62(b)(1) § 65.63(a) | For a Group 1 process vent, reduce emissions of regulated material or TOC by at least 98 weight-percent or to a concentration of less than 20 parts per million by volume. | None | § 65.163(c)(1) § 65.163(c)(2) § 65.4(a)(1) § 65.4(b) § 65.4(c) § 65.4(c)(1) § 65.4(c)(3) [G]§ 65.6(b) | § 65.165(f) § 65.166(a) [G]§ 65.166(b) § 65.167(b) [G]§ 65.5(a) [G]§ 65.5(b) [G]§ 65.5(d) [G]§ 65.5(e) [G]§ 65.5(f) [G]§ 65.5(g) [G]§ 65.5(h) [G]§ 65.5(i) [G]§ 65.6(c) § 65.67(b)(3) |
| RJT01 | EP | 65CAR-FL | VOC | 40 CFR Part 65, Subpart D | § 65.63(a)(1) § 65.1(d) § 65.1(e) § 65.140 § 65.142(b)(1) § 65.143(a)(1) § 65.143(a)(2) [G]§ 65.147(a) § 65.3(a)(1) § 65.3(a)(3) § 65.3(a)(4) § 65.3(a)(5) § 65.3(b)(3) [G]§ 65.3(b)(5) § 65.3(c) [G]§ 65.3(d) [G]§ 65.6(b) | For a Group 1 process vent, reduce emissions of regulated material using a flare meeting the applicable requirements of § 65.142(b). | § 65.147(b)(1) § 65.147(b)(2) [G]§ 65.147(b)(3) § 65.147(c) [G]§ 65.157(b) [G]§ 65.157(c) | § 65.147(b)(1) § 65.147(c) § 65.159(a) [G]§ 65.159(b) § 65.159(c) § 65.159(d)(1) § 65.159(d)(2) § 65.161(a)(1) § 65.163(c)(1) § 65.163(c)(2) § 65.4(a)(1) § 65.4(b) § 65.4(c) § 65.4(c)(1) § 65.4(c)(3) [G]§ 65.6(b) | § 65.147(b)(1) § 65.147(b)(2) § 65.159(d)(1) [G]§ 65.164(a) [G]§ 65.164(b) § 65.166(a) [G]§ 65.166(b) § 65.166(c) § 65.167(b) [G]§ 65.5(a) [G]§ 65.5(b) [G]§ 65.5(d) [G]§ 65.5(e) [G]§ 65.5(f) [G]§ 65.5(g) [G]§ 65.5(h) [G]§ 65.5(i) |

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) |
|---------------------------|-------------------------|---------------|-----------|--|--|---|--|---|---|
| | | | | | § 65.62(a) § 65.62(b)(1) § 65.63(a) | | | | [G]§ 65.6(c) § 65.67(b)(3) |
| RJT01 | EP | 65CAR-INC | VOC | 40 CFR Part 65, Subpart D | § 65.63(a)(2) § 65.1(d) § 65.1(e) § 65.140 § 65.142(b)(2) § 65.143(a)(1) § 65.143(a)(2) § 65.148(a)(1) § 65.148(a)(2) § 65.3(a)(1) § 65.3(a)(3) § 65.3(a)(4) § 65.3(a)(5) § 65.3(b)(3) [G]§ 65.3(b)(5) § 65.3(c) [G]§ 65.3(d) [G]§ 65.6(b) § 65.62(a) § 65.62(b)(1) § 65.63(a) | For a Group 1 process vent, reduce emissions of regulated material or TOC by at least 98 weight-percent or to a concentration of less than 20 parts per million by volume. | § 65.148(b)(1) § 65.148(c)(1) § 65.148(c)(1)(i) § 65.148(c)(2) [G]§ 65.158(a) [G]§ 65.158(b) | § 65.148(c)(1) § 65.160(a) § 65.160(b) § 65.160(b)(1)(i) § 65.161(a)(1) [G]§ 65.161(c) [G]§ 65.162(a) [G]§ 65.162(b) § 65.163(c)(1) § 65.163(c)(2) § 65.4(a)(1) § 65.4(b) § 65.4(c) § 65.4(c)(1) § 65.4(c)(3) [G]§ 65.6(b) | § 65.160(b) § 65.160(b)(1)(i) [G]§ 65.164(a) [G]§ 65.164(b) [G]§ 65.165(c) § 65.166(a) [G]§ 65.166(b) § 65.166(f)(1) § 65.167(b) [G]§ 65.5(a) [G]§ 65.5(b) [G]§ 65.5(d) [G]§ 65.5(e) [G]§ 65.5(f) [G]§ 65.5(g) [G]§ 65.5(h) [G]§ 65.5(i) [G]§ 65.6(c) § 65.67(b)(3) |
| RLOAD-C3 | EU | R5212-7 | VOC | 30 TAC Chapter 115, Loading and Unloading of VOC | § 115.212(b)(1) § 115.212(b)(1)(B) § 115.212(b)(3)(A) § 115.212(b)(3)(A)(i) § 115.212(b)(3)(B) [G]§ 115.212(b)(3)(C) § 115.212(b)(3)(E) § 115.214(b)(1)(B) § 115.214(b)(1)(C) | In Aransas, Bexar, Calhoun, Gregg, Matagorda, Nueces, San Patricio, Travis, and Victoria Counties, vapors caused by the loading of VOC with a TVP greater than or equal to 1.5 psia must be controlled using one of the methods specified in §115.212(b)(1)(A)-(C). | § 115.212(b)(3)(B) [G]§ 115.212(b)(3)(C) § 115.214(b)(1)(A) § 115.214(b)(1)(A)(i) § 115.214(b)(1)(A)(ii) § 115.214(b)(1)(A)(iii) § 115.215 § 115.215(1) § 115.215(10) [G]§ 115.215(2) | § 115.216 § 115.216(2) § 115.216(3)(A) § 115.216(3)(A)(i) § 115.216(3)(A)(ii) § 115.216(3)(A)(iii) § 115.216(3)(B) | 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) |
|---------------------------|-------------------------|---------------|-------------|--|--|--|---|---|---|
| | | | | | | | § 115.215(4) § 115.215(5) § 115.215(8) § 115.215(9) | | |
| RLOAD-HFO | EU | R5212-5 | VOC | 30 TAC Chapter 115, Loading and Unloading of VOC | § 115.217(b)(3)(A) § 115.214(b)(1)(B) § 115.214(b)(1)(D) § 115.214(b)(1)(D)(i) | Plants, excluding gasoline bulk plants, which load <20,000 gallons of VOC into transport vessels per day with a true vapor pressure of 1.5 psia or greater are exempt from this division, except for the specified requirements. | § 115.214(b)(1)(A) § 115.214(b)(1)(A)(i) § 115.215 § 115.215(4) | § 115.216 § 115.216(2) § 115.216(3)(B) § 115.216(3)(D) | None |
| SLOPUNLO AD | EU | R5212-3 | VOC | 30 TAC Chapter 115, Loading and Unloading of VOC | § 115.212(b)(3) § 115.212(b)(2) § 115.212(b)(3)(A) § 115.212(b)(3)(A)(i) § 115.212(b)(3)(B) [G]§ 115.212(b)(3)(C) § 115.212(b)(3)(D) § 115.214(b)(1)(B) § 115.214(b)(1)(C) | All land-based VOC transfer to or from transport vessels shall be conducted in the manner specified for leak-free operations. | § 115.212(b)(3)(B) [G]§ 115.212(b)(3)(C) § 115.214(b)(1)(A) § 115.214(b)(1)(A)(i) § 115.214(b)(1)(A)(ii) § 115.214(b)(1)(A)(iii) | § 115.216 § 115.216(3)(A) § 115.216(3)(A)(i) § 115.216(3)(A)(iii) | None |
| SLOPUNLO AD | EU | 63EEEE-1 | 112(B) HAPS | 40 CFR Part 63, Subpart EEEE | § 63.2338(b) The permit holder shall comply with the applicable limitation, standard and/or equipment specification requirements of 40 CFR Part 63, Subpart EEEE | The permit holder shall comply with the applicable requirements of 40 CFR Part 63, Subpart EEEE | The permit holder shall comply with the applicable monitoring and testing requirements of 40 CFR Part 63, Subpart EEEE | The permit holder shall comply with the applicable recordkeeping requirements of 40 CFR Part 63, Subpart EEEE | The permit holder shall comply with the applicable reporting requirements of 40 CFR Part 63, Subpart EEEE |
| TLOAD-SLOP | EU | R5212-5 | VOC | 30 TAC Chapter 115, Loading and Unloading of VOC | § 115.217(b)(3)(A) § 115.214(b)(1)(B) § 115.214(b)(1)(D) | Plants, excluding gasoline bulk plants, which load <20,000 gallons of VOC into | § 115.214(b)(1)(A) § 115.214(b)(1)(A)(i) | § 115.216 § 115.216(2) § 115.216(3)(B) | 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) |
|---------------------------|-------------------------|---------------|-----------|---------------------------------------|---|---|--|---|--|
| | | | | | § 115.214(b)(1)(D)(i) | transport vessels per day with a true vapor pressure of 1.5 psia or greater are exempt from this division, except for the specified requirements. | § 115.215 § 115.215(4) | § 115.216(3)(D) | |
| U_FUG | EU | 60DDD-ALL | VOC/TOC | 40 CFR Part 60, Subpart DDD | § 60.562-2(a) § 60.482-1(a) § 60.482-1(b) § 60.482-1(g) § 60.482-2(a)(2) § 60.482-2(b)(1) [G]§ 60.482-2(b)(2) § 60.482-2(c)(1) [G]§ 60.482-2(c)(2) § 60.482-2(d) [G]§ 60.482-2(d)(1) § 60.482-2(d)(2) § 60.482-2(d)(3) [G]§ 60.482-2(d)(4) [G]§ 60.482-2(d)(5) [G]§ 60.482-2(d)(6) [G]§ 60.482-2(e) § 60.482-2(f) [G]§ 60.482-2(g) § 60.482-2(h) § 60.482-9(a) § 60.482-9(b) [G]§ 60.482-9(d) § 60.482-9(f) § 60.486(k) § 60.562-2(d) § 60.562-2(e) | Comply with the requirements as stated in §60.482-2 for pumps in light-liquid service. | § 60.482-1(f)(1) § 60.482-1(f)(2) [G]§ 60.482-1(f)(3) § 60.482-2(a)(1) [G]§ 60.482-2(b)(2) [G]§ 60.482-2(d)(4) § 60.485(a) [G]§ 60.485(b) [G]§ 60.485(c) [G]§ 60.485(d) [G]§ 60.485(e) § 60.485(f) § 60.562-2(d) | § 60.482-1(g) [G]§ 60.486(a) [G]§ 60.486(b) [G]§ 60.486(c) § 60.486(e) § 60.486(e)(1) [G]§ 60.486(e)(2) [G]§ 60.486(e)(4) § 60.486(f) [G]§ 60.486(h) § 60.486(j) § 60.562-2(e) | § 60.487(a) [G]§ 60.487(b) [G]§ 60.487(c) § 60.487(e) § 60.562-2(e) § 60.565(l) |
| U_FUG | EU | 60DDD-ALL | VOC/TOC | 40 CFR Part 60, Subpart DDD | § 60.562-2(a) § 60.482-1(a) § 60.482-1(b) § 60.482-1(g) § 60.482-3(a) | Comply with the requirements as stated in §60.482-3 for compressors. | § 60.485(a) [G]§ 60.485(b) [G]§ 60.485(c) [G]§ 60.485(d) § 60.485(f) | § 60.482-1(g) [G]§ 60.486(a) [G]§ 60.486(b) [G]§ 60.486(c) § 60.486(e) | § 60.487(a) [G]§ 60.487(b) [G]§ 60.487(c) § 60.487(e) § 60.562-2(e) |

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) |
|---------------------------|-------------------------|---------------|-----------|---------------------------------------|--|--|---|---|--|
| | | | | | [G]§ 60.482-3(b) § 60.482-3(c) § 60.482-3(d) § 60.482-3(e)(1) § 60.482-3(e)(2) § 60.482-3(f) § 60.482-3(g)(1) § 60.482-3(g)(2) § 60.482-3(h) [G]§ 60.482-3(i) § 60.482-3(j) § 60.482-9(a) § 60.482-9(b) § 60.486(k) § 60.562-2(d) § 60.562-2(e) | | § 60.562-2(d) | § 60.486(e)(1) [G]§ 60.486(e)(2) [G]§ 60.486(e)(4) [G]§ 60.486(h) § 60.486(j) § 60.562-2(e) | § 60.565(l) |
| U_FUG | EU | 60DDD-ALL | VOC/TOC | 40 CFR Part 60, Subpart DDD | § 60.562-2(a) § 60.482-1(a) § 60.482-1(b) § 60.482-1(g) § 60.482-4(a) § 60.482-4(b)(1) § 60.482-4(c) § 60.482-4(d)(1) § 60.482-4(d)(2) § 60.482-9(a) § 60.482-9(b) § 60.486(k) § 60.562-2(d) § 60.562-2(e) | Comply with the requirements in as stated in §60.482-4 for pressure relief devices in gas/vapor service. | § 60.482-4(b)(2) § 60.485(a) [G]§ 60.485(b) [G]§ 60.485(c) [G]§ 60.485(d) § 60.485(f) § 60.562-2(d) | § 60.482-1(g) [G]§ 60.486(a) § 60.486(e) § 60.486(e)(1) § 60.486(e)(3) [G]§ 60.486(e)(4) § 60.486(j) § 60.562-2(e) | § 60.487(a) [G]§ 60.487(b) [G]§ 60.487(c) § 60.487(e) § 60.562-2(e) § 60.565(l) |
| U_FUG | EU | 60DDD-ALL | VOC/TOC | 40 CFR Part 60, Subpart DDD | § 60.562-2(a) § 60.482-1(a) § 60.482-1(b) § 60.482-1(g) § 60.482-5(a) [G]§ 60.482-5(b) § 60.482-5(c) § 60.486(k) | Comply with the requirements in as stated in §60.482-5 for sampling connection systems. | § 60.485(a) [G]§ 60.485(b) [G]§ 60.485(d) § 60.485(f) § 60.562-2(d) | § 60.482-1(g) [G]§ 60.486(a) § 60.486(e) § 60.486(e)(1) § 60.486(j) § 60.562-2(e) | § 60.487(a) [G]§ 60.487(b) [G]§ 60.487(c) § 60.487(e) § 60.562-2(e) § 60.565(l) |

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) |
|---------------------------|-------------------------|---------------|-----------|---------------------------------------|--|---|--|--|--|
| | | | | | § 60.562-2(d) § 60.562-2(e) | | | | |
| U_FUG | EU | 60DDD-ALL | VOC/TOC | 40 CFR Part 60, Subpart DDD | § 60.562-2(a) § 60.482-1(a) § 60.482-1(b) § 60.482-1(g) § 60.482-6(a)(1) § 60.482-6(a)(2) § 60.482-6(b) § 60.482-6(c) § 60.482-6(d) § 60.482-6(e) § 60.486(k) § 60.562-2(d) § 60.562-2(e) | Comply with the requirements in as stated in §60.482-6 for open-ended valves and lines. | § 60.485(a) [G]§ 60.485(b) [G]§ 60.485(d) § 60.485(f) § 60.562-2(d) | § 60.482-1(g) [G]§ 60.486(a) § 60.486(e) § 60.486(e)(1) § 60.486(j) § 60.562-2(e) | § 60.487(a) [G]§ 60.487(b) [G]§ 60.487(c) § 60.487(e) § 60.562-2(e) § 60.565(l) |
| U_FUG | EU | 60DDD-ALL | VOC/TOC | 40 CFR Part 60, Subpart DDD | § 60.562-2(a) § 60.482-1(a) § 60.482-1(b) § 60.482-1(g) § 60.482-7(b) § 60.482-7(d)(1) § 60.482-7(d)(2) [G]§ 60.482-7(e) [G]§ 60.482-7(f) [G]§ 60.482-7(g) [G]§ 60.482-7(h) § 60.482-9(a) § 60.482-9(b) [G]§ 60.482-9(c) § 60.482-9(e) § 60.482-9(f) § 60.486(k) § 60.562-2(d) § 60.562-2(e) | Comply with the requirements in as stated in §60.482-7 for valves in gas/vapor or light-liquid service. | § 60.482-1(f)(1) § 60.482-1(f)(2) [G]§ 60.482-1(f)(3) § 60.482-7(a)(1) [G]§ 60.482-7(a)(2) § 60.482-7(c)(1)(i) § 60.482-7(c)(1)(ii) § 60.482-7(c)(2) § 60.485(a) [G]§ 60.485(b) [G]§ 60.485(c) [G]§ 60.485(d) [G]§ 60.485(e) § 60.485(f) § 60.562-2(d) | § 60.482-1(g) [G]§ 60.486(a) [G]§ 60.486(b) [G]§ 60.486(c) § 60.486(e) § 60.486(e)(1) [G]§ 60.486(e)(2) [G]§ 60.486(e)(4) [G]§ 60.486(f) [G]§ 60.486(g) § 60.486(j) § 60.562-2(e) | § 60.487(a) [G]§ 60.487(b) [G]§ 60.487(c) § 60.487(e) § 60.562-2(e) § 60.565(l) |
| U_FUG | EU | 60DDD-ALL | VOC/TOC | 40 CFR Part 60, Subpart DDD | § 60.562-2(a) § 60.482-1(a) § 60.482-1(b) § 60.482-1(g) | Comply with the requirements in as stated in §60.482-8 for flanges or other connectors. | § 60.482-8(a)(1) § 60.485(a) [G]§ 60.485(b) [G]§ 60.485(d) | § 60.482-1(g) [G]§ 60.486(a) [G]§ 60.486(b) [G]§ 60.486(c) | § 60.487(a) [G]§ 60.487(b) [G]§ 60.487(c) § 60.487(e) |

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) |
|---------------------------|-------------------------|---------------|-----------|---------------------------------------|--|--|---|--|--|
| | | | | | § 60.482-8(a) § 60.482-8(a)(2) § 60.482-8(b) § 60.482-8(c)(1) § 60.482-8(c)(2) § 60.482-8(d) § 60.482-9(a) § 60.482-9(b) § 60.482-9(f) § 60.486(k) § 60.562-2(d) § 60.562-2(e) | | § 60.485(f) § 60.562-2(d) | § 60.486(e) § 60.486(e)(1) § 60.486(j) § 60.562-2(e) | § 60.562-2(e) § 60.565(l) |
| U_FUG | EU | 60DDD-ALL | VOC/TOC | 40 CFR Part 60, Subpart DDD | § 60.562-2(a) § 60.482-1(a) § 60.482-1(b) § 60.482-1(g) § 60.482-8(a) § 60.482-8(a)(2) § 60.482-8(b) § 60.482-8(c)(1) § 60.482-8(c)(2) § 60.482-8(d) § 60.482-9(a) § 60.482-9(b) [G]§ 60.482-9(c) § 60.482-9(e) § 60.482-9(f) § 60.486(k) § 60.562-2(d) § 60.562-2(e) | Comply with the requirements in as stated in §60.482-8 for valves in heavy-liquid service. | § 60.482-8(a)(1) § 60.485(a) [G]§ 60.485(b) [G]§ 60.485(d) § 60.485(f) § 60.562-2(d) | § 60.482-1(g) [G]§ 60.486(a) [G]§ 60.486(b) [G]§ 60.486(c) § 60.486(e) § 60.486(e)(1) § 60.486(j) § 60.562-2(e) | § 60.487(a) [G]§ 60.487(b) [G]§ 60.487(c) § 60.487(e) § 60.562-2(e) § 60.565(l) |
| U_FUG | EU | 60DDD-ALL | VOC/TOC | 40 CFR Part 60, Subpart DDD | § 60.562-2(a) § 60.482-1(a) § 60.482-1(b) § 60.482-1(g) § 60.482-8(a) § 60.482-8(a)(2) § 60.482-8(b) § 60.482-8(c)(1) § 60.482-8(c)(1) | Comply with the requirements in as stated in §60.482-8 for pumps in heavy-liquid service. | § 60.482-8(a)(1) § 60.485(a) [G]§ 60.485(b) [G]§ 60.485(d) § 60.485(f) § 60.562-2(d) | § 60.482-1(g) [G]§ 60.486(a) [G]§ 60.486(b) [G]§ 60.486(c) § 60.486(e) § 60.486(e)(1) § 60.486(j) § 60.562-2(e) | § 60.487(a) [G]§ 60.487(b) [G]§ 60.487(c) § 60.487(e) § 60.562-2(e) § 60.565(l) |

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) |
|---------------------------|-------------------------|---------------|-----------|---------------------------------------|---|---|---|--|--|
| | | | | | § 60.482-8(c)(2) § 60.482-8(d) § 60.482-9(a) § 60.482-9(b) [G]§ 60.482-9(d) § 60.482-9(f) § 60.486(k) § 60.562-2(d) § 60.562-2(e) | | | | |
| U_FUG | EU | 60DDD-ALL | VOC/TOC | 40 CFR Part 60, Subpart DDD | § 60.562-2(a) § 60.482-1(d) § 60.486(k) § 60.562-2(e) | Comply with the requirements as stated in §60.482-1(d) for equipment in vacuum service. | None | [G]§ 60.486(a) § 60.486(e) § 60.486(e)(1) § 60.486(e)(5) § 60.486(j) § 60.562-2(e) | § 60.487(a) [G]§ 60.487(b) [G]§ 60.487(c) § 60.487(e) § 60.562-2(e) § 60.565(l) |
| U_FUG | EU | 60DDD-ALL | VOC/TOC | 40 CFR Part 60, Subpart DDD | § 60.562-2(a) § 60.482-1(a) § 60.482-1(b) § 60.482-1(g) § 60.482-8(a) § 60.482-8(a)(2) § 60.482-8(b) § 60.482-8(c)(1) § 60.482-8(c)(2) § 60.482-8(d) § 60.482-9(a) § 60.482-9(b) § 60.482-9(f) § 60.486(k) § 60.562-2(d) § 60.562-2(e) | Comply with the requirements in as stated in §60.482-8 for pressure relief devices in light-liquid or heavy-liquid service. | § 60.482-8(a)(1) § 60.485(a) [G]§ 60.485(b) [G]§ 60.485(d) [G]§ 60.485(e) § 60.485(f) § 60.562-2(d) | § 60.482-1(g) [G]§ 60.486(a) [G]§ 60.486(b) [G]§ 60.486(c) § 60.486(e) § 60.486(e)(1) § 60.486(j) § 60.562-2(e) | § 60.487(a) [G]§ 60.487(b) [G]§ 60.487(c) § 60.487(e) § 60.562-2(e) § 60.565(l) |
| U_FUG | EU | 60DDD-ALL | VOC/TOC | 40 CFR Part 60, Subpart DDD | § 60.562-2(a) [G]§ 60.482-1(e) § 60.486(k) | Comply with the requirements in as stated in §60.482-1(e) for equipment in VOC service < 300 hours/year. | None | [G]§ 60.486(a) § 60.486(e) § 60.486(e)(1) § 60.486(e)(6) § 60.486(j) | § 60.487(a) [G]§ 60.487(b) [G]§ 60.487(c) § 60.487(e) |
| U_FUG | EU | 60VVA- | VOC | 40 CFR Part 60, | § 60.482-1a(d) | Equipment that is in vacuum | [G]§ 60.485a(b)(1) | § 60.485a(b)(2) | 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) |
|---------------------------|-------------------------|---------------|-----------|---------------------------------------|---|---|--|---|--|
| | | ALL | | Subpart VVa | § 60.482-1a(a) § 60.482-1a(b) § 60.485a(b) § 60.486a(a)(1) § 60.486a(a)(2) § 60.486a(k) | service is excluded from the requirements of §60.482-2a to §60.482-10a, if it is identified as required in §60.486a(e)(5). | § 60.485a(b)(2) | § 60.486a(e) § 60.486a(e)(1) § 60.486a(e)(5) | |
| U_FUG | EU | 60VVA-ALL | VOC | 40 CFR Part 60, Subpart VVa | [G]§ 60.482-1a(e) § 60.482-1a(a) § 60.482-1a(b) § 60.485a(b) § 60.486a(a)(1) § 60.486a(a)(2) § 60.486a(k) | Equipment that an owner or operator designates as being in VOC service less than 300 hours (hr)/yr is excluded from the requirements of §§ 60.482-2a through 60.482-11a if it is identified as required in §60.486a(e)(6) and it meets any of the conditions specified in paragraphs (e)(1) through (3) of this section. §60.482-1a(e)(1)-(3) | [G]§ 60.485a(b)(1) § 60.485a(b)(2) | § 60.485a(b)(2) § 60.486a(e) § 60.486a(e)(1) § 60.486a(e)(6) | None |
| U_FUG | EU | 60VVA-ALL | VOC | 40 CFR Part 60, Subpart VVa | [G]§ 60.482-2a(b)(1) § 60.482-1a(a) § 60.482-1a(b) § 60.482-1a(g) § 60.482-2a(b)(2) § 60.482-2a(b)(2)(ii) § 60.482-2a(c)(1) [G]§ 60.482-2a(c)(2) § 60.482-2a(d) [G]§ 60.482-2a(d)(1) § 60.482-2a(d)(2) § 60.482-2a(d)(3) [G]§ 60.482-2a(d)(6) | The instrument reading that defines a leak in a pump in light liquid service is 5,000 parts per million (ppm) or greater for pumps handling polymerizing monomers or 2,000 ppm or greater for all other pumps, as specified in paragraphs (b)(1)(i) and (ii) of this section. §60.482-2a(b)(1)(i)-(ii) | § 60.482-1a(f)(1) § 60.482-1a(f)(2) [G]§ 60.482-1a(f)(3) § 60.482-1a(g) § 60.482-2a(a)(1) § 60.482-2a(a)(2) § 60.482-2a(b)(2)(i) [G]§ 60.482-2a(d)(4) [G]§ 60.482-2a(d)(5) § 60.482-9a(a) § 60.485a(a) [G]§ 60.485a(b)(1) § 60.485a(b)(2) § 60.485a(c)(2) [G]§ 60.485a(d) [G]§ 60.485a(e) | § 60.482-1a(g) § 60.485a(b)(2) [G]§ 60.486a(a)(3) [G]§ 60.486a(b) [G]§ 60.486a(c) § 60.486a(e) § 60.486a(e)(1) [G]§ 60.486a(e)(2) [G]§ 60.486a(e)(4) § 60.486a(e)(7) [G]§ 60.486a(e)(8) § 60.486a(f) § 60.486a(f)(1) [G]§ 60.486a(h) | § 60.487a(a) § 60.487a(b) § 60.487a(b)(1) § 60.487a(b)(3) § 60.487a(c) § 60.487a(c)(1) § 60.487a(c)(2) § 60.487a(c)(2)(iii) § 60.487a(c)(2)(iv) § 60.487a(c)(2)(ix) § 60.487a(c)(3) § 60.487a(c)(4) § 60.487a(e) |

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) |
|---------------------------|-------------------------|---------------|-----------|---------------------------------------|---|---|--|---|--|
| | | | | | [G]§ 60.482-2a(e) § 60.482-2a(f) [G]§ 60.482-2a(g) § 60.482-2a(h) § 60.482-9a(a) § 60.482-9a(b) [G]§ 60.482-9a(d) § 60.482-9a(f) § 60.485a(b) § 60.485a(c) § 60.485a(c)(1) § 60.485a(f) § 60.486a(a)(1) § 60.486a(a)(2) § 60.486a(k) | | | | |
| U_FUG | EU | 60VVA-ALL | VOC | 40 CFR Part 60, Subpart VVa | § 60.482-3a(a) § 60.482-1a(a) § 60.482-1a(b) § 60.482-1a(g) [G]§ 60.482-3a(b) § 60.482-3a(c) § 60.482-3a(d) § 60.482-3a(e)(2) § 60.482-3a(f) [G]§ 60.482-3a(g) § 60.482-3a(h) [G]§ 60.482-3a(i) § 60.482-3a(j) § 60.482-9a(a) § 60.482-9a(b) § 60.485a(b) § 60.485a(c) § 60.485a(c)(1) § 60.485a(f) § 60.486a(a)(1) § 60.486a(a)(2) § 60.486a(k) | Each compressor shall be equipped with a seal system that includes a barrier fluid system and that prevents leakage of VOC to the atmosphere, except as provided in §60.482-3a(c) and paragraphs (h), (i), and (j) of this section. | § 60.482-1a(g) § 60.482-3a(e)(1) § 60.482-9a(a) § 60.485a(a) [G]§ 60.485a(b)(1) § 60.485a(b)(2) § 60.485a(c)(2) [G]§ 60.485a(d) | § 60.482-1a(g) § 60.485a(b)(2) [G]§ 60.486a(a)(3) [G]§ 60.486a(b) [G]§ 60.486a(c) § 60.486a(e) § 60.486a(e)(1) [G]§ 60.486a(e)(2) [G]§ 60.486a(e)(4) [G]§ 60.486a(e)(8) [G]§ 60.486a(h) | § 60.487a(a) § 60.487a(b) § 60.487a(b)(1) § 60.487a(b)(4) § 60.487a(c) § 60.487a(c)(1) § 60.487a(c)(2) § 60.487a(c)(2)(ix) § 60.487a(c)(2)(v) § 60.487a(c)(2)(vi) § 60.487a(c)(3) § 60.487a(c)(4) § 60.487a(e) |
| U_FUG | EU | 60VVA- | VOC | 40 CFR Part 60, | § 60.482-4a(a) | Except during pressure | § 60.482-1a(g) | § 60.482-1a(g) | § 60.487a(a) |

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) |
|---------------------------|-------------------------|---------------|-----------|---------------------------------------|---|--|--|---|--|
| | | ALL | | Subpart VVa | § 60.482-1a(a) § 60.482-1a(b) § 60.482-1a(g) § 60.482-4a(b)(1) § 60.482-4a(b)(2) § 60.482-4a(c) § 60.482-4a(d)(1) § 60.482-4a(d)(2) § 60.482-9a(a) § 60.482-9a(b) § 60.485a(b) § 60.485a(c) § 60.485a(c)(1) § 60.485a(f) § 60.486a(a)(1) § 60.486a(a)(2) § 60.486a(k) | releases, each pressure relief device in gas/vapor service shall be operated with no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, as determined by the methods specified in §60.485a(c). | § 60.482-4a(b)(2) § 60.482-9a(a) § 60.485a(a) [G]§ 60.485a(b)(1) § 60.485a(b)(2) § 60.485a(c)(2) [G]§ 60.485a(d) | § 60.485a(b)(2) § 60.486a(e) § 60.486a(e)(1) § 60.486a(e)(10) § 60.486a(e)(3) [G]§ 60.486a(e)(4) [G]§ 60.486a(e)(8) | § 60.487a(b) § 60.487a(b)(1) § 60.487a(c) § 60.487a(c)(1) § 60.487a(c)(2) § 60.487a(c)(2)(ix) § 60.487a(c)(3) § 60.487a(c)(4) § 60.487a(e) |
| U_FUG | EU | 60VVA-ALL | VOC | 40 CFR Part 60, Subpart VVa | § 60.482-5a(a) § 60.482-1a(a) § 60.482-1a(b) § 60.482-1a(g) [G]§ 60.482-5a(b) § 60.482-5a(c) § 60.485a(b) § 60.485a(f) § 60.486a(a)(1) § 60.486a(a)(2) § 60.486a(k) | Each sampling connection system shall be equipped with a closed-purge, closed-loop, or closed-vent system, except as provided in §60.482-1a(c) and paragraph (c) of this section. | § 60.482-1a(g) § 60.485a(a) [G]§ 60.485a(b)(1) § 60.485a(b)(2) [G]§ 60.485a(d) | § 60.482-1a(g) § 60.485a(b)(2) § 60.486a(e) § 60.486a(e)(1) [G]§ 60.486a(e)(8) | § 60.487a(a) § 60.487a(b) § 60.487a(b)(1) § 60.487a(c) § 60.487a(c)(1) § 60.487a(c)(2) § 60.487a(c)(2)(ix) § 60.487a(c)(3) § 60.487a(c)(4) § 60.487a(e) |
| U_FUG | EU | 60VVA-ALL | VOC | 40 CFR Part 60, Subpart VVa | § 60.482-6a(a)(1) § 60.482-1a(a) § 60.482-1a(b) § 60.482-1a(g) § 60.482-6a(a)(2) § 60.482-6a(b) § 60.482-6a(c) § 60.482-6a(d) § 60.482-6a(e) § 60.485a(b) | Each open-ended valve or line shall be equipped with a cap, blind flange, plug, or a second valve, except as provided in §60.482-1a(c) and paragraphs (d) and (e) of this section. | § 60.482-1a(g) § 60.485a(a) [G]§ 60.485a(b)(1) § 60.485a(b)(2) [G]§ 60.485a(d) | § 60.482-1a(g) § 60.485a(b)(2) § 60.486a(e) § 60.486a(e)(1) [G]§ 60.486a(e)(8) | § 60.487a(a) § 60.487a(b) § 60.487a(b)(1) § 60.487a(c) § 60.487a(c)(1) § 60.487a(c)(2) § 60.487a(c)(2)(ix) § 60.487a(c)(3) § 60.487a(c)(4) § 60.487a(e) |

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) |
|---------------------------|-------------------------|---------------|-----------|---------------------------------------|---|---|--|--|--|
| | | | | | § 60.485a(f) § 60.486a(a)(1) § 60.486a(a)(2) § 60.486a(k) | | | | |
| U_FUG | EU | 60VVA-ALL | VOC | 40 CFR Part 60, Subpart VVa | § 60.482-7a(b) § 60.482-1a(a) § 60.482-1a(b) § 60.482-1a(g) § 60.482-7a(a)(1) [G]§ 60.482-7a(d) [G]§ 60.482-7a(e) [G]§ 60.482-7a(f) [G]§ 60.482-7a(g) [G]§ 60.482-7a(h) § 60.485a(b) § 60.485a(c) § 60.485a(c)(1) § 60.485a(f) § 60.486a(a)(1) § 60.486a(a)(2) § 60.486a(k) | At a valve in gas vapor service if an instrument reading of 500 ppm or greater is measured, a leak is detected. | § 60.482-1a(f)(1) § 60.482-1a(f)(2) [G]§ 60.482-1a(f)(3) § 60.482-1a(g) § 60.482-7a(a)(1) [G]§ 60.482-7a(a)(2) [G]§ 60.482-7a(c) § 60.485a(a) [G]§ 60.485a(b)(1) § 60.485a(b)(2) § 60.485a(c)(2) [G]§ 60.485a(d) [G]§ 60.485a(e) | § 60.482-1a(g) § 60.485a(b)(2) [G]§ 60.486a(a)(3) [G]§ 60.486a(b) [G]§ 60.486a(c) § 60.486a(e) § 60.486a(e)(1) [G]§ 60.486a(e)(2) [G]§ 60.486a(e)(4) [G]§ 60.486a(e)(8) § 60.486a(f) § 60.486a(f)(1) § 60.486a(f)(2) | § 60.487a(a) § 60.487a(b) § 60.487a(b)(1) § 60.487a(b)(2) § 60.487a(c) § 60.487a(c)(1) § 60.487a(c)(2) § 60.487a(c)(2)(i) § 60.487a(c)(2)(ii) § 60.487a(c)(2)(ix) § 60.487a(c)(3) § 60.487a(c)(4) § 60.487a(e) |
| U_FUG | EU | 60VVA-ALL | VOC | 40 CFR Part 60, Subpart VVa | § 60.482-8a(b) § 60.482-1a(a) § 60.482-1a(b) § 60.482-1a(g) [G]§ 60.482-2a(c)(2) [G]§ 60.482-7a(e) § 60.482-8a(a) § 60.482-8a(a)(2) [G]§ 60.482-8a(c) § 60.482-8a(d) § 60.482-9a(a) § 60.482-9a(b) [G]§ 60.482-9a(d) § 60.482-9a(f) § 60.485a(b) § 60.485a(f) | At a pump in heavy liquid service, if an instrument reading of 10,000 ppm or greater is measured, a leak is detected. | § 60.482-1a(g) § 60.482-8a(a)(1) § 60.482-9a(a) § 60.485a(a) [G]§ 60.485a(b)(1) § 60.485a(b)(2) [G]§ 60.485a(d) | § 60.482-1a(g) § 60.485a(b)(2) [G]§ 60.486a(a)(3) [G]§ 60.486a(b) [G]§ 60.486a(c) § 60.486a(e) § 60.486a(e)(1) [G]§ 60.486a(e)(8) | § 60.487a(a) § 60.487a(b) § 60.487a(b)(1) § 60.487a(c) § 60.487a(c)(1) § 60.487a(c)(2) § 60.487a(c)(2)(ix) § 60.487a(c)(3) § 60.487a(c)(4) § 60.487a(e) |

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) |
|---------------------------|-------------------------|---------------|-----------|---------------------------------------|--|---|--|--|--|
| | | | | | § 60.486a(a)(1) § 60.486a(a)(2) § 60.486a(k) | | | | |
| U_FUG | EU | 60VVA-ALL | VOC | 40 CFR Part 60, Subpart VVa | § 60.482-8a(b) § 60.482-1a(a) § 60.482-1a(b) § 60.482-1a(g) [G]§ 60.482-2a(c)(2) [G]§ 60.482-7a(e) § 60.482-8a(a) § 60.482-8a(a)(2) [G]§ 60.482-8a(c) § 60.482-8a(d) § 60.482-9a(a) § 60.482-9a(b) § 60.482-9a(c) § 60.482-9a(c)(1) § 60.482-9a(e) § 60.482-9a(f) § 60.485a(b) § 60.485a(f) § 60.486a(a)(1) § 60.486a(a)(2) § 60.486a(k) | At a valve in heavy liquid service, if an instrument reading of 10,000 ppm or greater is measured, a leak is detected. | § 60.482-1a(g) § 60.482-8a(a)(1) § 60.482-9a(a) § 60.485a(a) [G]§ 60.485a(b)(1) § 60.485a(b)(2) [G]§ 60.485a(d) | § 60.482-1a(g) § 60.485a(b)(2) [G]§ 60.486a(a)(3) [G]§ 60.486a(b) [G]§ 60.486a(c) § 60.486a(e) § 60.486a(e)(1) [G]§ 60.486a(e)(8) | § 60.487a(a) § 60.487a(b) § 60.487a(b)(1) § 60.487a(c) § 60.487a(c)(1) § 60.487a(c)(2) § 60.487a(c)(2)(ix) § 60.487a(c)(3) § 60.487a(c)(4) § 60.487a(e) |
| U_FUG | EU | 60VVA-ALL | VOC | 40 CFR Part 60, Subpart VVa | § 60.482-8a(b) § 60.482-1a(a) § 60.482-1a(b) § 60.482-1a(g) [G]§ 60.482-2a(c)(2) [G]§ 60.482-7a(e) § 60.482-8a(a) § 60.482-8a(a)(2) [G]§ 60.482-8a(c) § 60.482-8a(d) § 60.482-9a(a) § 60.482-9a(b) § 60.482-9a(c) § 60.482-9a(c)(1) § 60.482-9a(e) § 60.482-9a(f) § 60.485a(b) § 60.485a(f) § 60.486a(a)(1) § 60.486a(a)(2) § 60.486a(k) | At a pressure relief device in light liquid or heavy liquid service, if an instrument reading of 10,000 ppm or greater is measured, a leak is detected. | § 60.482-1a(g) § 60.482-8a(a)(1) § 60.482-9a(a) § 60.485a(a) [G]§ 60.485a(b)(1) § 60.485a(b)(2) [G]§ 60.485a(d) [G]§ 60.485a(e) | § 60.482-1a(g) § 60.485a(b)(2) [G]§ 60.486a(a)(3) [G]§ 60.486a(b) [G]§ 60.486a(c) § 60.486a(e) § 60.486a(e)(1) [G]§ 60.486a(e)(8) | § 60.487a(a) § 60.487a(b) § 60.487a(b)(1) § 60.487a(c) § 60.487a(c)(1) § 60.487a(c)(2) § 60.487a(c)(2)(ix) § 60.487a(c)(3) § 60.487a(c)(4) § 60.487a(e) |

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) |
|---------------------------|-------------------------|---------------|-----------|---------------------------------------|---|--|---|---|---|
| | | | | | § 60.485a(b) § 60.485a(f) § 60.486a(a)(1) § 60.486a(a)(2) § 60.486a(k) | | | | |
| U_FUG | EU | 60VVA-ALL | VOC | 40 CFR Part 60, Subpart VVa | § 60.482-8a(b) § 60.482-1a(a) § 60.482-1a(b) § 60.482-1a(g) [G]§ 60.482-2a(c)(2) [G]§ 60.482-7a(e) § 60.482-8a(a) § 60.482-8a(a)(2) [G]§ 60.482-8a(c) § 60.482-8a(d) § 60.482-9a(a) § 60.482-9a(b) § 60.482-9a(c) § 60.482-9a(c)(1) § 60.482-9a(c)(2) § 60.482-9a(f) § 60.485a(b) § 60.485a(f) § 60.486a(a)(1) § 60.486a(a)(2) § 60.486a(k) | At a connector in heavy liquid service, if an instrument reading of 10,000 ppm or greater is measured, a leak is detected. | § 60.482-1a(g) § 60.482-8a(a)(1) § 60.482-9a(a) § 60.485a(a) [G]§ 60.485a(b)(1) § 60.485a(b)(2) [G]§ 60.485a(d) | § 60.482-1a(g) § 60.485a(b)(2) [G]§ 60.486a(a)(3) [G]§ 60.486a(b) [G]§ 60.486a(c) § 60.486a(e) § 60.486a(e)(1) [G]§ 60.486a(e)(8) | § 60.487a(a) § 60.487a(b) § 60.487a(b)(1) § 60.487a(c) § 60.487a(c)(1) § 60.487a(c)(2) § 60.487a(c)(2)(ix) § 60.487a(c)(3) § 60.487a(c)(4) § 60.487a(e) |
| U_FUG | EU | 60VVA-ALL | VOC | 40 CFR Part 60, Subpart VVa | § 60.482-11a(b)(2) § 60.482-11a(b)(3) § 60.482-11a(b)(3)(i) § 60.482-11a(d) [G]§ 60.482-11a(e) [G]§ 60.482-11a(f)(1) § 60.482-11a(f)(2) § 60.482-11a(g) § 60.485a(b) | If an instrument reading greater than or equal to 500 ppm is measured in connectors in gas and vapor and light liquid service, a leak is detected. | § 60.482-11a(a) § 60.482-11a(b) § 60.482-11a(b)(1) § 60.482-11a(b)(3) § 60.482-11a(b)(3)(ii) [G]§ 60.482-11a(b)(3)(iii) § 60.482-11a(b)(3)(iv) § 60.482-11a(c) | § 60.482-11a(b)(3)(v) § 60.485a(b)(2) [G]§ 60.486a(a)(3) [G]§ 60.486a(b) [G]§ 60.486a(c) § 60.486a(e) § 60.486a(e)(1) [G]§ 60.486a(e)(8) § 60.486a(e)(9) § 60.486a(f) § 60.486a(f)(1) | § 60.487a(b) § 60.487a(b)(1) § 60.487a(b)(5) § 60.487a(c) § 60.487a(c)(1) § 60.487a(c)(2) § 60.487a(c)(2)(i) § 60.487a(c)(2)(ix) § 60.487a(c)(2)(vii) § 60.487a(c)(2)(viii) § 60.487a(c)(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) |
|---------------------------|-------------------------|---------------|-------------|---------------------------------------|---|---|--|---|---|
| | | | | | § 60.486a(a)(1) § 60.486a(a)(2) § 60.486a(k) | | § 60.485a(a) [G]§ 60.485a(b)(1) § 60.485a(b)(2) [G]§ 60.485a(e) | | § 60.487a(c)(4) § 60.487a(e) |
| U_FUG | EU | 63FFFF-ALL | 112(B) HAPS | 40 CFR Part 63, Subpart FFFF | § 63.2480(a) The permit holder shall comply with the applicable limitation, standard and/or equipment specification requirements of 40 CFR Part 63, Subpart FFFF | The permit holder shall comply with the applicable requirements of 40 CFR Part 63, Subpart FFFF | The permit holder shall comply with the applicable monitoring and testing requirements of 40 CFR Part 63, Subpart FFFF | The permit holder shall comply with the applicable recordkeeping requirements of 40 CFR Part 63, Subpart FFFF | The permit holder shall comply with the applicable reporting requirements of 40 CFR Part 63, Subpart FFFF |
| U_FUG | EU | 63H-ALL | 112(B) HAPS | 40 CFR Part 63, Subpart H | § 63.162(e) § 63.162(a) § 63.162(c) [G]§ 63.162(g) § 63.162(h) | Equipment that is in organic HAP service less than 300 hours per year is excluded from the requirements of §§63.163 - 63.174 and §63.178 if it is identified as required in §63.181(j). | [G]§ 63.180(d) | § 63.181(a) [G]§ 63.181(b) § 63.181(c) [G]§ 63.181(i) § 63.181(j) | [G]§ 63.182(a) [G]§ 63.182(b) |
| U_FUG | EU | 63H-ALL | 112(B) HAPS | 40 CFR Part 63, Subpart H | [G]§ 63.164 § 63.162(a) § 63.162(c) [G]§ 63.162(f) [G]§ 63.162(g) § 63.162(h) [G]§ 63.171 | Standards: Compressors. §63.164(a)-(i) | [G]§ 63.164 [G]§ 63.180(b) [G]§ 63.180(c) [G]§ 63.180(d) | § 63.181(a) [G]§ 63.181(b) § 63.181(c) [G]§ 63.181(d) [G]§ 63.181(f) | [G]§ 63.182(a) [G]§ 63.182(b) § 63.182(c) [G]§ 63.182(c)(1) § 63.182(c)(4) [G]§ 63.182(d) |
| U_FUG | EU | 63H-ALL | 112(B) HAPS | 40 CFR Part 63, Subpart H | [G]§ 63.165 § 63.162(a) § 63.162(c) [G]§ 63.162(g) § 63.162(h) [G]§ 63.171 | Standards: Pressure relief device in gas/vapor service. §63.165(a)-(d) | [G]§ 63.165 [G]§ 63.180(b) [G]§ 63.180(c) [G]§ 63.180(d) | § 63.181(a) [G]§ 63.181(b) § 63.181(c) [G]§ 63.181(f) | [G]§ 63.182(a) [G]§ 63.182(b) § 63.182(c) [G]§ 63.182(c)(1) § 63.182(c)(4) [G]§ 63.182(d) |
| U_FUG | EU | 63H-ALL | 112(B) HAPS | 40 CFR Part 63, Subpart H | [G]§ 63.166 § 63.162(a) | Standards: Sampling connection systems. | [G]§ 63.180(b) [G]§ 63.180(d) | § 63.181(a) [G]§ 63.181(b) | [G]§ 63.182(a) [G]§ 63.182(b) |

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) |
|---------------------------|-------------------------|---------------|----------------|---------------------------------------|---|---|---|--|--|
| | | | | | § 63.162(c) [G]§ 63.162(g) § 63.162(h) [G]§ 63.171 | §63.166(a)-(c) | | § 63.181(c) [G]§ 63.181(i) | § 63.182(c) [G]§ 63.182(c)(1) § 63.182(c)(4) [G]§ 63.182(d) |
| U_FUG | EU | 63H-ALL | 112(B) HAPS | 40 CFR Part 63, Subpart H | [G]§ 63.169 § 63.162(a) § 63.162(c) [G]§ 63.162(f) [G]§ 63.162(g) § 63.162(h) [G]§ 63.171 | Standards: Pumps in heavy liquid service. §63.169(a)-(d) | [G]§ 63.169 [G]§ 63.180(b) [G]§ 63.180(d) | § 63.181(a) [G]§ 63.181(b) § 63.181(c) [G]§ 63.181(d) [G]§ 63.181(i) | [G]§ 63.182(a) [G]§ 63.182(b) § 63.182(c) [G]§ 63.182(c)(1) § 63.182(c)(4) [G]§ 63.182(d) |
| U_FUG | EU | 63H-ALL | 112(B) HAPS | 40 CFR Part 63, Subpart H | [G]§ 63.169 § 63.162(a) § 63.162(c) [G]§ 63.162(f) [G]§ 63.162(g) § 63.162(h) [G]§ 63.171 | Standards: Valves in heavy liquid service. §63.169(a)-(d) | [G]§ 63.169 [G]§ 63.180(b) [G]§ 63.180(d) | § 63.181(a) [G]§ 63.181(b) § 63.181(c) [G]§ 63.181(d) [G]§ 63.181(i) | [G]§ 63.182(a) [G]§ 63.182(b) § 63.182(c) [G]§ 63.182(c)(1) § 63.182(c)(4) [G]§ 63.182(d) |
| U_FUG | EU | 63H-ALL | 112(B) HAPS | 40 CFR Part 63, Subpart H | [G]§ 63.169 § 63.162(a) § 63.162(c) [G]§ 63.162(f) [G]§ 63.162(g) § 63.162(h) [G]§ 63.171 | Standards: Connectors in heavy liquid service. §63.169(a)-(d) | [G]§ 63.169 [G]§ 63.180(b) [G]§ 63.180(d) | § 63.181(a) [G]§ 63.181(b) § 63.181(c) [G]§ 63.181(d) [G]§ 63.181(i) | [G]§ 63.182(a) [G]§ 63.182(b) § 63.182(c) [G]§ 63.182(c)(1) § 63.182(c)(4) [G]§ 63.182(d) |
| U_FUG | EU | 63H-ALL | 112(B) HAPS | 40 CFR Part 63, Subpart H | [G]§ 63.169 § 63.162(a) § 63.162(c) [G]§ 63.162(f) [G]§ 63.162(g) § 63.162(h) [G]§ 63.171 | Standards: Agitators in heavy liquid service. §63.169(a)-(d) | [G]§ 63.169 [G]§ 63.180(b) [G]§ 63.180(d) | § 63.181(a) [G]§ 63.181(b) § 63.181(c) [G]§ 63.181(d) [G]§ 63.181(i) | [G]§ 63.182(a) [G]§ 63.182(b) § 63.182(c) [G]§ 63.182(c)(1) § 63.182(c)(4) [G]§ 63.182(d) |
| U_FUG | EU | 63H-ALL | 112(B) HAPS | 40 CFR Part 63, Subpart H | [G]§ 63.169 § 63.162(a) § 63.162(c) [G]§ 63.162(f) [G]§ 63.162(g) § 63.162(h) [G]§ 63.171 | Standards: Instrumentation systems. §63.169(a)-(d) | [G]§ 63.169 [G]§ 63.180(b) [G]§ 63.180(d) | § 63.181(a) [G]§ 63.181(b) § 63.181(c) [G]§ 63.181(d) [G]§ 63.181(i) | [G]§ 63.182(a) [G]§ 63.182(b) § 63.182(c) [G]§ 63.182(c)(1) [G]§ 63.182(c) |

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) |
|---------------------------|-------------------------|---------------|----------------|---------------------------------------|---|--|--|--|--|
| | | | | | [G]§ 63.162(g) § 63.162(h) [G]§ 63.171 | | | | § 63.182(c)(4) [G]§ 63.182(d) |
| U_FUG | EU | 63H-ALL | 112(B) HAPS | 40 CFR Part 63, Subpart H | [G]§ 63.169 § 63.162(a) § 63.162(c) [G]§ 63.162(f) [G]§ 63.162(g) § 63.162(h) [G]§ 63.171 | Standards: Pressure relief devices in liquid service. §63.169(a)-(d) | [G]§ 63.169 [G]§ 63.180(b) [G]§ 63.180(d) | § 63.181(a) [G]§ 63.181(b) § 63.181(c) [G]§ 63.181(d) | [G]§ 63.182(a) [G]§ 63.182(b) § 63.182(c) [G]§ 63.182(c)(1) § 63.182(c)(4) [G]§ 63.182(d) |
| U_FUG | EU | 63H-ALL | 112(B) HAPS | 40 CFR Part 63, Subpart H | § 63.170 § 63.162(a) § 63.162(c) [G]§ 63.162(g) § 63.162(h) [G]§ 63.171 | Standards: Surge control vessels and bottom receivers. | [G]§ 63.180(b) [G]§ 63.180(d) | § 63.181(a) [G]§ 63.181(b) § 63.181(c) | [G]§ 63.182(a) [G]§ 63.182(b) § 63.182(c) [G]§ 63.182(c)(1) § 63.182(c)(4) [G]§ 63.182(d) |
| U_FUG | EU | 63H-ALL | 112(B) HAPS | 40 CFR Part 63, Subpart H | [G]§ 63.173 § 63.162(a) § 63.162(c) [G]§ 63.162(f) [G]§ 63.162(g) § 63.162(h) [G]§ 63.171 | Standards: Agitators gas/vapor service and in light liquid service. §63.173(a)-(j). | [G]§ 63.173 [G]§ 63.180(b) [G]§ 63.180(d) | § 63.181(a) [G]§ 63.181(b) § 63.181(c) [G]§ 63.181(d) | [G]§ 63.182(a) [G]§ 63.182(b) § 63.182(c) [G]§ 63.182(c)(1) § 63.182(c)(4) [G]§ 63.182(d) |
| U_FUG | EU | 63H-ALL | 112(B) HAPS | 40 CFR Part 63, Subpart H | [G]§ 63.174 § 63.162(a) § 63.162(c) [G]§ 63.162(f) [G]§ 63.162(g) § 63.162(h) [G]§ 63.171 | Standards: Connectors in gas/vapor service and in light liquid service. §63.174(a)-(j) | [G]§ 63.174 [G]§ 63.180(b) [G]§ 63.180(d) | § 63.181(a) [G]§ 63.181(b) § 63.181(c) [G]§ 63.181(d) | [G]§ 63.182(a) [G]§ 63.182(b) § 63.182(c) [G]§ 63.182(c)(1) § 63.182(c)(4) [G]§ 63.182(d) |
| U_FUG | EU | 63H-ALL | 112(B) HAPS | 40 CFR Part 63, Subpart H | [G]§ 63.163 § 63.162(a) § 63.162(c) [G]§ 63.162(f) [G]§ 63.162(g) § 63.162(h) | Standards: Pumps in light liquid service. §63.163(a)-(j) | [G]§ 63.163 [G]§ 63.176 [G]§ 63.180(b) [G]§ 63.180(d) | § 63.181(a) [G]§ 63.181(b) § 63.181(c) [G]§ 63.181(d) § 63.181(h) [G]§ 63.181(h)(3) | [G]§ 63.182(a) [G]§ 63.182(b) § 63.182(c) [G]§ 63.182(c)(1) § 63.182(c)(4) [G]§ 63.182(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) |
|---------------------------|-------------------------|---------------|----------------|---------------------------------------|--|---|--|--|--|
| | | | | | [G]§ 63.171 [G]§ 63.176 | | | § 63.181(h)(4) [G]§ 63.181(h)(5) § 63.181(h)(6) § 63.181(h)(7) § 63.181(h)(8) | |
| U_FUG | EU | 63H-ALL | 112(B) HAPS | 40 CFR Part 63, Subpart H | [G]§ 63.167 § 63.162(a) § 63.162(c) [G]§ 63.162(g) § 63.162(h) [G]§ 63.171 [G]§ 63.175 | Standards: Open-ended valves or lines. §63.167(a)-(e). | [G]§ 63.175 [G]§ 63.180(b) [G]§ 63.180(d) | § 63.181(a) [G]§ 63.181(b) § 63.181(c) § 63.181(h) [G]§ 63.181(h)(1) [G]§ 63.181(h)(2) § 63.181(h)(4) [G]§ 63.181(h)(5) § 63.181(h)(6) § 63.181(h)(7) [G]§ 63.181(i) | [G]§ 63.182(a) [G]§ 63.182(b) § 63.182(c) [G]§ 63.182(c)(1) § 63.182(c)(4) [G]§ 63.182(d) |
| U_FUG | EU | 63H-ALL | 112(B) HAPS | 40 CFR Part 63, Subpart H | [G]§ 63.168 § 63.162(a) § 63.162(c) [G]§ 63.162(f) [G]§ 63.162(g) § 63.162(h) [G]§ 63.171 [G]§ 63.175 | Standards: Valves in gas/vapor service and in light liquid service. §63.168(a)-(j) | [G]§ 63.168 [G]§ 63.175 [G]§ 63.180(b) [G]§ 63.180(d) | § 63.181(a) [G]§ 63.181(b) § 63.181(c) [G]§ 63.181(d) § 63.181(h) [G]§ 63.181(h)(1) [G]§ 63.181(h)(2) § 63.181(h)(4) [G]§ 63.181(h)(5) § 63.181(h)(6) § 63.181(h)(7) | [G]§ 63.182(a) [G]§ 63.182(b) § 63.182(c) [G]§ 63.182(c)(1) § 63.182(c)(4) [G]§ 63.182(d) |
| U_FUG | EU | 63YY-ALL | 112(B) HAPS | 40 CFR Part 63, Subpart YY | § 63.1103 The permit holder shall comply with the applicable limitation, standard and/or equipment specification requirements of 40 CFR Part 63, Subpart YY | The permit holder shall comply with the applicable requirements of 40 CFR Part 63, Subpart YY | The permit holder shall comply with the applicable monitoring and testing requirements of 40 CFR Part 63, Subpart YY | The permit holder shall comply with the applicable recordkeeping requirements of 40 CFR Part 63, Subpart YY | The permit holder shall comply with the applicable reporting requirements of 40 CFR Part 63, Subpart YY |

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) |
|---------------------------|-------------------------|---------------|-------------|---------------------------------------|--|--|--|---|---|
| U_LAB | EP | R5121-3 | VOC | 30 TAC Chapter 115, Vent Gas Controls | § 115.127(c)(1)(B) § 115.127(c)(1) | A vent gas stream having a combined weight of the VOC or classes of compounds specified in §115.121(c)(1)(B)-(C) of this title equal to or less than 100 lbs in a continuous 24-hour period is exempt from the requirements of §115.121(c)(1) of this title. | [G]§ 115.125 § 115.126(2) | § 115.126 § 115.126(2) § 115.126(4) | None |
| UCCT01 | EU | 63FFFF-CT | 112(B) HAPS | 40 CFR Part 63, Subpart FFFF | § 63.2490(a)-Table10 § 63.104(a) [G]§ 63.104(d) § 63.104(e) § 63.104(e)(1) [G]§ 63.104(e)(2) § 63.2490(a) § 63.2490(b) § 63.2490(c) | For each heat exchange system, as defined in §63.101, comply with the requirements of §63.104 and the requirements referenced therein except as specified in §63.2490. | [G]§ 63.104(b) | [G]§ 63.104(e)(2) [G]§ 63.104(f)(1) | [G]§ 63.104(f)(2) |
| UCCT01 | EU | 63YY-CT | 112(B) HAPS | 40 CFR Part 63, Subpart YY | § 63.1103 The permit holder shall comply with the applicable limitation, standard and/or equipment specification requirements of 40 CFR Part 63, Subpart YY | The permit holder shall comply with the applicable requirements of 40 CFR Part 63, Subpart YY | The permit holder shall comply with the applicable monitoring and testing requirements of 40 CFR Part 63, Subpart YY | The permit holder shall comply with the applicable recordkeeping requirements of 40 CFR Part 63, Subpart YY | The permit holder shall comply with the applicable reporting requirements of 40 CFR Part 63, Subpart YY |
| UFF01A | EP | R1111-1 | Opacity | 30 TAC Chapter 111, Visible Emissions | § 111.111(a)(1)(C) § 111.111(a)(1)(E) | Visible emissions from any stationary vent shall not exceed an opacity of 15% averaged over a six minute period for any source with a total flow rate of at least 100,000 acfm unless a CEMS is installed. | [G]§ 111.111(a)(1)(F) ** See Periodic Monitoring Summary | 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) |
|---------------------------|-------------------------|---------------|-----------|---------------------------------------|--|--|---|---|---|
| UFF01B | EP | R1111-1 | Opacity | 30 TAC Chapter 111, Visible Emissions | § 111.111(a)(1)(C) § 111.111(a)(1)(E) | Visible emissions from any stationary vent shall not exceed an opacity of 15% averaged over a six minute period for any source with a total flow rate of at least 100,000 acfm unless a CEMS is installed. | [G]§ 111.111(a)(1)(F) ** See Periodic Monitoring Summary | None | None |
| UFFLARE01 | CD | R1111-2 | 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 upset 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 |
| UFFLARE02 | CD | R1111-2 | 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 upset 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 |
| UFFLARE02 | CD | 60A-1 | Opacity | 40 CFR Part 60, Subpart A | § 60.18(b) § 60.18(c)(1) § 60.18(c)(2) § 60.18(c)(3)(ii) § 60.18(c)(4)(i) § 60.18(c)(6) § 60.18(e) | Flares shall comply with paragraphs (c)-(f) of § 60.18. | § 60.18(d) § 60.18(f)(1) § 60.18(f)(2) § 60.18(f)(3) § 60.18(f)(4) | None | None |
| UFFLARE02 | CD | 60A-2 | Opacity | 40 CFR Part 60, Subpart A | § 60.18(b) § 60.18(c)(1) § 60.18(c)(2) § 60.18(c)(3)(ii) § 60.18(c)(4)(iii) § 60.18(c)(6) § 60.18(e) | Flares shall comply with paragraphs (c)-(f) of § 60.18. | § 60.18(d) § 60.18(f)(1) § 60.18(f)(2) § 60.18(f)(3) § 60.18(f)(4) § 60.18(f)(5) | 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) |
|---------------------------|-------------------------|---------------|-----------|--|--|--|--|---|---|
| UFFLARE02 | CD | 60A-3 | Opacity | 40 CFR Part 60, Subpart A | § 60.18(b) § 60.18(c)(1) § 60.18(c)(2) § 60.18(c)(3)(ii) § 60.18(c)(4)(ii) § 60.18(c)(6) § 60.18(e) | Flares shall comply with paragraphs (c)-(f) of § 60.18. | § 60.18(d) § 60.18(f)(1) § 60.18(f)(2) § 60.18(f)(3) § 60.18(f)(4) | None | None |
| UFFLARE02 | CD | 63A-1 | Opacity | 40 CFR Part 63, Subpart A | § 63.11(b)(4) § 63.11(b)(1) § 63.11(b)(2) § 63.11(b)(3) § 63.11(b)(5) § 63.11(b)(6)(ii) § 63.11(b)(7)(i) | Flares shall be designed and operated with no visible emissions, except for periods of a total of 5 minutes or less during any 2 consecutive hrs. Test Method 22 in App. A of part 60 of this chapter shall be used. | § 63.11(b)(4) § 63.11(b)(5) § 63.11(b)(7)(i) | None | None |
| UFFLARE02 | CD | 63A-2 | Opacity | 40 CFR Part 63, Subpart A | § 63.11(b)(4) § 63.11(b)(1) § 63.11(b)(2) § 63.11(b)(3) § 63.11(b)(5) § 63.11(b)(6)(ii) § 63.11(b)(7)(iii) | Flares shall be designed and operated with no visible emissions, except for periods of a total of 5 minutes or less during any 2 consecutive hrs. Test Method 22 in App. A of part 60 of this chapter shall be used. | § 63.11(b)(4) § 63.11(b)(5) § 63.11(b)(7)(i) | None | None |
| UFFLARE02 | CD | 63A-3 | Opacity | 40 CFR Part 63, Subpart A | § 63.11(b)(4) § 63.11(b)(1) § 63.11(b)(2) § 63.11(b)(3) § 63.11(b)(5) § 63.11(b)(6)(ii) § 63.11(b)(7)(ii) | Flares shall be designed and operated with no visible emissions, except for periods of a total of 5 minutes or less during any 2 consecutive hrs. Test Method 22 in App. A of part 60 of this chapter shall be used. | § 63.11(b)(4) § 63.11(b)(5) § 63.11(b)(7)(i) | None | None |
| WASHUNLO AD | EU | R5212-2 | VOC | 30 TAC Chapter 115, Loading and Unloading of VOC | § 115.217(b)(2) § 115.212(b)(2) § 115.214(b)(1)(B) | Vapor pressure (at land-based operations). All land-based loading and | § 115.214(b)(1)(A) § 115.214(b)(1)(A)(i) | § 115.216 § 115.216(2) § 115.216(3)(B) | 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) |
|---------------------------|-------------------------|---------------|-------------|---------------------------------------|---|--|--|---|---|
| | | | | | § 115.214(b)(1)(D) § 115.214(b)(1)(D)(i) | unloading of VOC with a true vapor pressure less than 1.5 psia is exempt from the requirements of this division except as specified. | § 115.215 § 115.215(4) | | |
| WASHUNLO AD | EU | 63EEEE-1 | 112(B) HAPS | 40 CFR Part 63, Subpart EEEE | § 63.2338(b) The permit holder shall comply with the applicable limitation, standard and/or equipment specification requirements of 40 CFR Part 63, Subpart EEEE | The permit holder shall comply with the applicable requirements of 40 CFR Part 63, Subpart EEEE | The permit holder shall comply with the applicable monitoring and testing requirements of 40 CFR Part 63, Subpart EEEE | The permit holder shall comply with the applicable recordkeeping requirements of 40 CFR Part 63, Subpart EEEE | The permit holder shall comply with the applicable reporting requirements of 40 CFR Part 63, Subpart EEEE |
| ZMTK01 | EU | R5112-4 | VOC | 30 TAC Chapter 115, Storage of VOCs | § 115.112(c)(1) | Tanks shall not store VOC, other than crude oil or condensate, unless the required pressure is maintained, or they are equipped with the appropriate control device specified in Table I(b). | ** See Periodic Monitoring Summary | None | None |
| ZTD08 | EU | R5112-26 | VOC | 30 TAC Chapter 115, Storage of VOCs | § 115.112(c)(1) | Tanks shall not store VOC, other than crude oil or condensate, unless the required pressure is maintained, or they are equipped with the appropriate control device specified in Table I(b). | ** See Periodic Monitoring Summary | None | None |
| ZTD08 | EU | R5112-27 | VOC | 30 TAC Chapter 115, Storage of VOCs | § 115.112(c)(1) | Tanks shall not store VOC, other than crude oil or condensate, unless the required pressure is maintained, or they are equipped with the | ** See Periodic Monitoring Summary | 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) |
|---------------------------|-------------------------|---------------|-----------|---------------------------------------|---|--|--|--|---|
| | | | | | | appropriate control device specified in Table I(b). | | | |
| ZTD08 | EU | R5112-30 | VOC | 30 TAC Chapter 115, Storage of VOCs | § 115.112(c)(1) | Tanks shall not store VOC, other than crude oil or condensate, unless the required pressure is maintained, or they are equipped with the appropriate control device specified in Table I(b). | ** See Periodic Monitoring Summary | None | None |
| ZTD08 | EU | 60Kb-22 | VOC | 40 CFR Part 60, Subpart Kb | § 60.112b(b)(1) [G]§ 60.112b(a)(3) § 60.18 | Storage vessels specified in §60.112b(b) and equipped with a closed vent system and control device are to meet the specifications in §60.112b(a)(3). | § 60.113b(d) § 60.116b(a) § 60.116b(b) § 60.116b(e) § 60.116b(e)(1) [G]§ 60.116b(e)(3) [G]§ 60.485(b) ** See Periodic Monitoring Summary | § 60.115b § 60.115b(d)(2) § 60.116b(a) § 60.116b(b) | § 60.115b § 60.115b(d)(1) § 60.115b(d)(3) |
| ZTD08 | EU | 60Kb-23A | VOC | 40 CFR Part 60, Subpart Kb | § 60.112b(b)(1) [G]§ 60.112b(a)(3) | Storage vessels specified in §60.112b(b) and equipped with a closed vent system and control device are to meet the specifications in §60.112b(a)(3). | [G]§ 60.113b(c)(1) § 60.113b(c)(2) § 60.116b(a) § 60.116b(b) § 60.116b(e) § 60.116b(e)(1) [G]§ 60.116b(e)(3) [G]§ 60.485(b) ** See Periodic Monitoring Summary | § 60.115b [G]§ 60.115b(c) § 60.116b(a) § 60.116b(b) | [G]§ 60.113b(c)(1) § 60.115b |
| ZTD08 | EU | 60Kb-23B | VOC | 40 CFR Part 60, Subpart Kb | § 60.112b(b)(1) [G]§ 60.112b(a)(3) | Storage vessels specified in §60.112b(b) and equipped with a closed vent system and control device are to meet the specifications in §60.112b(a)(3). | [G]§ 60.113b(c)(1) § 60.113b(c)(2) § 60.116b(a) § 60.116b(b) § 60.116b(e) § 60.116b(e)(1) | § 60.115b [G]§ 60.115b(c) § 60.116b(a) § 60.116b(b) | [G]§ 60.113b(c)(1) § 60.115b |

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) |
|---------------------------|-------------------------|---------------|-----------|---------------------------------------|---|---|--|---|--|
| | | | | | | | [G]§ 60.116b(e)(3) [G]§ 60.485(b) ** See Periodic Monitoring Summary | | |
| ZTD12 | EU | R5131-1 | VOC | 30 TAC Chapter 115, Water Separation | § 115.132(c)(1) | VOC water separators must have each compartment totally enclosed with all openings sealed. Gauging and sampling devices shall be vapor-tight except during use. | ** See Periodic Monitoring Summary | None | None |
| ZTD12 | EU | 61FF-10 | Benzene | 40 CFR Part 61, Subpart FF | § 61.347(a)(1) § 61.347(a)(1)(i)(A) § 61.347(a)(1)(i)(C) § 61.347(a)(1)(i)(C)(1)) § 61.347(a)(1)(i)(C)(2)) § 61.347(a)(1)(i)(C)(3)) § 61.347(b) § 61.347(c) § 61.349(a) § 61.349(a)(1)(i) § 61.349(a)(1)(iii) § 61.349(a)(1)(iv) § 61.349(a)(2)(i)(A) § 61.349(b) § 61.349(e) § 61.349(f) § 61.349(g) | Install, operate, and maintain a fixed-roof and closed-vent system that routes all organic vapors vented from the oil-water separator to a control device. | § 61.347(a)(1)(i)(A) § 61.347(a)(1)(i)(C)(2) § 61.347(a)(1)(i)(C)(3) § 61.347(b) § 61.349(a)(1)(i) § 61.349(e) § 61.349(f) § 61.354(c) § 61.354(c)(1) § 61.354(g) [G]§ 61.355(h) | § 61.354(c) § 61.354(c)(1) § 61.354(g) § 61.356(d) § 61.356(f) § 61.356(f)(1) § 61.356(f)(2) § 61.356(f)(2)(i) § 61.356(f)(2)(i)(A) § 61.356(g) § 61.356(h) § 61.356(j) § 61.356(j)(1) § 61.356(j)(2) § 61.356(j)(3) § 61.356(j)(4) § 61.356(m) | § 61.357(d)(7) § 61.357(d)(7)(iv) § 61.357(d)(7)(iv)(A) § 61.357(d)(7)(v) |
| ZTD12 | EU | 61FF-11 | Benzene | 40 CFR Part 61, Subpart FF | § 61.347(a)(1) § 60.18 § 61.347(a)(1)(i)(A) | Install, operate, and maintain a fixed-roof and closed-vent system that | § 60.18(f)(2) § 61.347(a)(1)(i)(A) § | § 61.354(c) § 61.354(c)(3) § 61.354(g) | § 61.357(d)(7) § 61.357(d)(7)(iv) § 61.357(d)(7)(iv)(F) |

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) |
|---------------------------|-------------------------|---------------|-------------|---------------------------------------|---|--|--|--|---|
| | | | | | § 61.347(a)(1)(i)(C) § 61.347(a)(1)(i)(C)(1)) § 61.347(a)(1)(i)(C)(2)) § 61.347(a)(1)(i)(C)(3)) § 61.347(b) § 61.347(c) § 61.349(a) § 61.349(a)(1)(i) § 61.349(a)(1)(iii) § 61.349(a)(1)(iv) § 61.349(b) § 61.349(e) § 61.349(f) § 61.349(g) | routes all organic vapors vented from the oil-water separator to a control device. | 61.347(a)(1)(i)(C)(2) § 61.347(a)(1)(i)(C)(3) § 61.347(b) § 61.349(a)(1)(i) § 61.349(e) § 61.349(f) § 61.354(c) § 61.354(c)(3) § 61.354(g) [G]§ 61.355(h) | § 61.356(d) § 61.356(f) § 61.356(f)(1) § 61.356(g) § 61.356(h) § 61.356(i) § 61.356(j)(1) § 61.356(j)(2) § 61.356(j)(3) § 61.356(j)(7) § 61.356(m) | § 61.357(d)(7)(v) |
| ZTD12 | EU | 61FF-12 | Benzene | 40 CFR Part 61, Subpart FF | § 61.347(a)(1) § 61.340(d) § 61.347(a)(1)(i)(A) § 61.347(a)(1)(i)(B) § 61.347(b) § 61.347(c) | Install, operate, and maintain a fixed-roof and closed-vent system that routes all organic vapors vented from the oil-water separator to a control device. | § 61.347(a)(1)(i)(A) § 61.347(b) | § 61.356(d) § 61.356(g) | None |
| ZTTK02 | EU | 63G-1 | 112(B) HAPS | 40 CFR Part 63, Subpart G | § 63.119(a)(3) | Group 2 tanks not using emissions averaging as prescribed by §63.150 shall use record keeping methods in §63.123(a). Not required to comply with §63.119 to §63.123. | None | § 63.123(a) | § 63.152(c)(4)(iii) |
| ZTTK03 | EU | 63G-1 | 112(B) HAPS | 40 CFR Part 63, Subpart G | § 63.119(a)(3) | Group 2 tanks not using emissions averaging as prescribed by §63.150 shall use record keeping | None | § 63.123(a) | § 63.152(c)(4)(iii) |

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) |
|---------------------------|-------------------------|---------------|-----------|---------------------------------------|---|--|--|--|--|
| | | | | | | methods in §63.123(a). Not required to comply with §63.119 to §63.123. | | | |
| ZTTK04 | EU | R5112-20 | VOC | 30 TAC Chapter 115, Storage of VOCs | § 115.112(c)(1) § 115.111(c)(2) § 115.112(c)(2) § 115.112(c)(2)(A) § 115.114(c)(1)(A) | Tanks shall not store VOC, other than crude oil or condensate, unless the required pressure is maintained, or they are equipped with the appropriate control device specified in Table I(b). | § 115.114(c)(1)(A) ** See Periodic Monitoring Summary | None | § 115.114(c)(1)(B) |
| ZTTK04 | EU | 60Kb-34 | VOC | 40 CFR Part 60, Subpart Kb | § 60.112b(a)(1) § 60.112b(a)(1)(i) § 60.112b(a)(1)(ii)(B) § 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) [G]§ 60.113b(a)(3) § 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)(5) § 60.115b § 60.115b(a)(1) § 60.115b(a)(4) |
| ZTTK04 | EU | 61FF-1 | Benzene | 40 CFR Part 61, Subpart FF | § 61.351(a) § 60.112b(a)(1) § 60.112b(a)(1)(i) § 60.112b(a)(1)(ii)(B) § 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) § 61.351(a)(1) § 61.351(b) | As an alternative to the standards for tanks specified in § 61.343, an owner or operator may elect to comply with one of the following §61.351(a)(1)-(3): | § 60.113b(a)(1) [G]§ 60.113b(a)(3) § 60.113b(a)(4) § 60.113b(a)(5) | § 60.115b § 60.115b(a)(2) § 61.356(k) | § 60.113b(a)(5) § 60.115b § 60.115b(a)(1) § 60.115b(a)(4) § 61.357(e) § 61.357(f) |
| ZTTK04 | EU | 63YY-1 | 112(B) | 40 CFR Part 63, | § 63.1103(e) Table | The permit holder shall | The permit holder | The permit holder shall | The permit holder shall |

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) |
|---------------------------|-------------------------|---------------|-----------|---------------------------------------|---|--|---|---|---|
| | | | HAPS | Subpart YY | 7(g)(1)(i) The permit holder shall comply with the applicable limitation, standard and/or equipment specification requirements of 40 CFR Part 63, Subpart YY | comply with the applicable requirements of 40 CFR Part 63, Subpart YY | shall comply with the applicable monitoring and testing requirements of 40 CFR Part 63, Subpart YY | comply with the applicable recordkeeping requirements of 40 CFR Part 63, Subpart YY | comply with the applicable reporting requirements of 40 CFR Part 63, Subpart YY |
| ZTTK05 | EU | R5112-20 | VOC | 30 TAC Chapter 115, Storage of VOCs | § 115.112(c)(1) § 115.111(c)(2) § 115.112(c)(2) § 115.112(c)(2)(A) § 115.114(c)(1)(A) | Tanks shall not store VOC, other than crude oil or condensate, unless the required pressure is maintained, or they are equipped with the appropriate control device specified in Table I(b). | § 115.114(c)(1)(A) ** See Periodic Monitoring Summary | None | § 115.114(c)(1)(B) |
| ZTTK05 | EU | 60Kb-35 | 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) |

Additional Monitoring Requirements

| | |
|--|------------|
| Compliance Assurance Monitoring Summary | 145 |
| Periodic Monitoring Summary | 172 |

CAM Summary

| Unit/Group/Process Information | |
|--|--|
| ID No.: C-VENTGAS | |
| Control Device ID No.: UFF01A | Control Device Type: Thermal Incinerator (Direct Flame Incinerator/Regenerative Thermal Oxidizer) |
| Control Device ID No.: UFF01B | Control Device Type: Thermal Incinerator (Direct Flame Incinerator/Regenerative Thermal Oxidizer) |
| Applicable Regulatory Requirement | |
| Name: 30 TAC Chapter 115, Vent Gas Controls | SOP Index No.: R5121-10 |
| Pollutant: VOC | Main Standard: § 115.122(c)(1) |
| Monitoring Information | |
| Indicator: Combustion Temperature / Exhaust Gas Temperature | |
| Minimum Frequency: once per day | |
| Averaging Period: n/a | |
| Deviation Limit: A minimum combustion temperature of 1400 °F shall be maintained before establishing a minimum combustion temperature using the most recent performance test or stack testing data. | |
| <p>CAM Text: The monitoring device should be installed in the combustion chamber or immediately downstream of the combustion chamber. Each monitoring device shall be calibrated at a frequency in accordance with the manufacturer's specifications, other written procedures that provide an adequate assurance that the device is calibrated accurately, or at least annually, whichever is more frequent, and shall be accurate to within one of the following:</p> <ul style="list-style-type: none"> ± 0.75% of the temperature being measured expressed in degrees Celsius; or ± 2.5 degrees Celsius. | |

CAM Summary

| Unit/Group/Process Information | |
|--|--------------------------------|
| ID No.: C-VENTGAS | |
| Control Device ID No.: UFFLARE01 | Control Device Type: Flare |
| Control Device ID No.: UFFLARE02 | Control Device Type: Flare |
| Applicable Regulatory Requirement | |
| Name: 30 TAC Chapter 115, Vent Gas Controls | SOP Index No.: R5121-16 |
| Pollutant: VOC | Main Standard: § 115.122(c)(1) |
| Monitoring Information | |
| Indicator: Pilot Flame | |
| Minimum Frequency: Continuous | |
| Averaging Period: n/a | |
| Deviation Limit: A deviation shall be reported if a pilot flame is not present. | |
| <p>CAM Text: Monitor the presence of a flare pilot flame using a thermocouple or other equivalent device to detect the presence of a flame or using an alarm that uses a thermocouple or other equivalent device to detect the absence of a flame. Maintain records of alarm events and duration of alarm events. Each monitoring device shall be accurate to within manufacturer's recommendations. Each monitoring device shall be calibrated at a frequency in accordance with the manufacturer's specifications or other written procedures that provide an adequate assurance that the device is calibrated accurately.</p> | |

CAM Summary

| Unit/Group/Process Information | |
|--|---|
| ID No.: C-VENTGAS | |
| Control Device ID No.: USSG01A | Control Device Type: Steam Generating Unit (Boiler)/Process Heater (Design heat input is greater than or equal to 44MW) |
| Control Device ID No.: USSG01B | Control Device Type: Steam Generating Unit (Boiler)/Process Heater (Design heat input is greater than or equal to 44MW) |
| Control Device ID No.: USSG01C | Control Device Type: Steam Generating Unit (Boiler)/Process Heater (Design heat input is greater than or equal to 44MW) |
| Applicable Regulatory Requirement | |
| Name: 30 TAC Chapter 115, Vent Gas Controls | SOP Index No.: R5121-20 |
| Pollutant: VOC | Main Standard: § 115.122(c)(1) |
| Monitoring Information | |
| Indicator: Period of Operation | |
| Minimum Frequency: n/a | |
| Averaging Period: n/a | |
| Deviation Limit: If vent gas is being sent to the boiler and the boiler is not in operation, it shall be reported as a deviation. | |
| CAM Text: Monitor and record the periods of operation of the steam generating units or process heater. The records must be readily available for inspection. | |

CAM Summary

| Unit/Group/Process Information | |
|--|--|
| ID No.: E-VENTGAS | |
| Control Device ID No.: UFF01A | Control Device Type: Thermal Incinerator (Direct Flame Incinerator/Regenerative Thermal Oxidizer) |
| Control Device ID No.: UFF01B | Control Device Type: Thermal Incinerator (Direct Flame Incinerator/Regenerative Thermal Oxidizer) |
| Applicable Regulatory Requirement | |
| Name: 30 TAC Chapter 115, Vent Gas Controls | SOP Index No.: R5121-10 |
| Pollutant: VOC | Main Standard: § 115.122(c)(1) |
| Monitoring Information | |
| Indicator: Combustion Temperature / Exhaust Gas Temperature | |
| Minimum Frequency: once per day | |
| Averaging Period: n/a | |
| Deviation Limit: A minimum combustion temperature of 1400 °F shall be maintained before establishing a minimum combustion temperature using the most recent performance test or stack testing data. | |
| <p>CAM Text: The monitoring device should be installed in the combustion chamber or immediately downstream of the combustion chamber. Each monitoring device shall be calibrated at a frequency in accordance with the manufacturer's specifications, other written procedures that provide an adequate assurance that the device is calibrated accurately, or at least annually, whichever is more frequent, and shall be accurate to within one of the following:</p> <ul style="list-style-type: none"> ± 0.75% of the temperature being measured expressed in degrees Celsius; or ± 2.5 degrees Celsius. | |

CAM Summary

| Unit/Group/Process Information | |
|--|--------------------------------|
| ID No.: E-VENTGAS | |
| Control Device ID No.: UFFLARE01 | Control Device Type: Flare |
| Control Device ID No.: UFFLARE02 | Control Device Type: Flare |
| Applicable Regulatory Requirement | |
| Name: 30 TAC Chapter 115, Vent Gas Controls | SOP Index No.: R5121-16 |
| Pollutant: VOC | Main Standard: § 115.122(c)(1) |
| Monitoring Information | |
| Indicator: Pilot Flame | |
| Minimum Frequency: Continuous | |
| Averaging Period: n/a | |
| Deviation Limit: A deviation shall be reported if a pilot flame is not present. | |
| <p>CAM Text: Monitor the presence of a flare pilot flame using a thermocouple or other equivalent device to detect the presence of a flame or using an alarm that uses a thermocouple or other equivalent device to detect the absence of a flame. Maintain records of alarm events and duration of alarm events. Each monitoring device shall be accurate to within manufacturer's recommendations. Each monitoring device shall be calibrated at a frequency in accordance with the manufacturer's specifications or other written procedures that provide an adequate assurance that the device is calibrated accurately.</p> | |

CAM Summary

| Unit/Group/Process Information | |
|--|---|
| ID No.: E-VENTGAS | |
| Control Device ID No.: USSG01A | Control Device Type: Steam Generating Unit (Boiler)/Process Heater (Design heat input is greater than or equal to 44MW) |
| Control Device ID No.: USSG01B | Control Device Type: Steam Generating Unit (Boiler)/Process Heater (Design heat input is greater than or equal to 44MW) |
| Control Device ID No.: USSG01C | Control Device Type: Steam Generating Unit (Boiler)/Process Heater (Design heat input is greater than or equal to 44MW) |
| Applicable Regulatory Requirement | |
| Name: 30 TAC Chapter 115, Vent Gas Controls | SOP Index No.: R5121-20 |
| Pollutant: VOC | Main Standard: § 115.122(c)(1) |
| Monitoring Information | |
| Indicator: Period of Operation | |
| Minimum Frequency: n/a | |
| Averaging Period: n/a | |
| Deviation Limit: If vent gas is being sent to the boiler and the boiler is not in operation, it shall be reported as a deviation. | |
| CAM Text: Monitor and record the periods of operation of the steam generating units or process heater. The records must be readily available for inspection. | |

CAM Summary

| Unit/Group/Process Information | |
|--|--|
| ID No.: GBD05 | |
| Control Device ID No.: GBX02 | Control Device Type: Thermal Incinerator (Direct Flame Incinerator/Regenerative Thermal Oxidizer) |
| Applicable Regulatory Requirement | |
| Name: 30 TAC Chapter 115, Vent Gas Controls | SOP Index No.: R5121-10 |
| Pollutant: VOC | Main Standard: § 115.122(c)(1) |
| Monitoring Information | |
| Indicator: Combustion Temperature / Exhaust Gas Temperature | |
| Minimum Frequency: once per day | |
| Averaging Period: n/a | |
| Deviation Limit: A minimum combustion temperature of 1400 °F shall be maintained before establishing a minimum combustion temperature using the most recent performance test or stack testing data. | |
| <p>CAM Text: The monitoring device should be installed in the combustion chamber or immediately downstream of the combustion chamber. Each monitoring device shall be calibrated at a frequency in accordance with the manufacturer's specifications, other written procedures that provide an adequate assurance that the device is calibrated accurately, or at least annually, whichever is more frequent, and shall be accurate to within one of the following:</p> <ul style="list-style-type: none"> ± 0.75% of the temperature being measured expressed in degrees Celsius; or ± 2.5 degrees Celsius. | |

CAM Summary

| Unit/Group/Process Information | |
|--|--------------------------------|
| ID No.: GBD05 | |
| Control Device ID No.: GFFLARE01 | Control Device Type: Flare |
| Applicable Regulatory Requirement | |
| Name: 30 TAC Chapter 115, Vent Gas Controls | SOP Index No.: R5121-16 |
| Pollutant: VOC | Main Standard: § 115.122(c)(1) |
| Monitoring Information | |
| Indicator: Pilot Flame | |
| Minimum Frequency: Continuous | |
| Averaging Period: n/a | |
| Deviation Limit: A deviation shall be reported if a pilot flame is not present. | |
| <p>CAM Text: Monitor the presence of a flare pilot flame using a thermocouple or other equivalent device to detect the presence of a flame or using an alarm that uses a thermocouple or other equivalent device to detect the absence of a flame. Maintain records of alarm events and duration of alarm events. Each monitoring device shall be accurate to within manufacturer's recommendations. Each monitoring device shall be calibrated at a frequency in accordance with the manufacturer's specifications or other written procedures that provide an adequate assurance that the device is calibrated accurately.</p> | |

CAM Summary

| Unit/Group/Process Information | |
|--|--|
| ID No.: GRPCPEBPV | |
| Control Device ID No.: UFF01A | Control Device Type: Thermal Incinerator (Direct Flame Incinerator/Regenerative Thermal Oxidizer) |
| Control Device ID No.: UFF01B | Control Device Type: Thermal Incinerator (Direct Flame Incinerator/Regenerative Thermal Oxidizer) |
| Applicable Regulatory Requirement | |
| Name: 30 TAC Chapter 115, Vent Gas Controls | SOP Index No.: R5121-10 |
| Pollutant: VOC | Main Standard: § 115.122(c)(1) |
| Monitoring Information | |
| Indicator: Combustion Temperature / Exhaust Gas Temperature | |
| Minimum Frequency: once per day | |
| Averaging Period: n/a | |
| Deviation Limit: A minimum combustion temperature of 1400 °F shall be maintained before establishing a minimum combustion temperature using the most recent performance test or stack testing data. | |
| <p>CAM Text: The monitoring device should be installed in the combustion chamber or immediately downstream of the combustion chamber. Each monitoring device shall be calibrated at a frequency in accordance with the manufacturer's specifications, other written procedures that provide an adequate assurance that the device is calibrated accurately, or at least annually, whichever is more frequent, and shall be accurate to within one of the following:</p> <ul style="list-style-type: none"> ± 0.75% of the temperature being measured expressed in degrees Celsius; or ± 2.5 degrees Celsius. | |

CAM Summary

| Unit/Group/Process Information | |
|--|--------------------------------|
| ID No.: GRPCPEBPV | |
| Control Device ID No.: UFFLARE01 | Control Device Type: Flare |
| Control Device ID No.: UFFLARE02 | Control Device Type: Flare |
| Applicable Regulatory Requirement | |
| Name: 30 TAC Chapter 115, Vent Gas Controls | SOP Index No.: R5121-16 |
| Pollutant: VOC | Main Standard: § 115.122(c)(1) |
| Monitoring Information | |
| Indicator: Pilot Flame | |
| Minimum Frequency: Continuous | |
| Averaging Period: n/a | |
| Deviation Limit: A deviation shall be reported if a pilot flame is not present. | |
| <p>CAM Text: Monitor the presence of a flare pilot flame using a thermocouple or other equivalent device to detect the presence of a flame or using an alarm that uses a thermocouple or other equivalent device to detect the absence of a flame. Maintain records of alarm events and duration of alarm events. Each monitoring device shall be accurate to within manufacturer's recommendations. Each monitoring device shall be calibrated at a frequency in accordance with the manufacturer's specifications or other written procedures that provide an adequate assurance that the device is calibrated accurately.</p> | |

CAM Summary

| Unit/Group/Process Information | |
|--|---|
| ID No.: GRPCPEBPV | |
| Control Device ID No.: USSG01A | Control Device Type: Steam Generating Unit (Boiler)/Process Heater (Design heat input is greater than or equal to 44MW) |
| Control Device ID No.: USSG01B | Control Device Type: Steam Generating Unit (Boiler)/Process Heater (Design heat input is greater than or equal to 44MW) |
| Control Device ID No.: USSG01C | Control Device Type: Steam Generating Unit (Boiler)/Process Heater (Design heat input is greater than or equal to 44MW) |
| Applicable Regulatory Requirement | |
| Name: 30 TAC Chapter 115, Vent Gas Controls | SOP Index No.: R5121-20 |
| Pollutant: VOC | Main Standard: § 115.122(c)(1) |
| Monitoring Information | |
| Indicator: Period of Operation | |
| Minimum Frequency: n/a | |
| Averaging Period: n/a | |
| Deviation Limit: If vent gas is being sent to the boiler and the boiler is not in operation, it shall be reported as a deviation. | |
| CAM Text: Monitor and record the periods of operation of the steam generating units or process heater. The records must be readily available for inspection. | |

CAM Summary

| Unit/Group/Process Information | |
|--|--|
| ID No.: GRPCPECPV | |
| Control Device ID No.: UFF01A | Control Device Type: Thermal Incinerator (Direct Flame Incinerator/Regenerative Thermal Oxidizer) |
| Control Device ID No.: UFF01B | Control Device Type: Thermal Incinerator (Direct Flame Incinerator/Regenerative Thermal Oxidizer) |
| Applicable Regulatory Requirement | |
| Name: 30 TAC Chapter 115, Vent Gas Controls | SOP Index No.: R5121-10 |
| Pollutant: VOC | Main Standard: § 115.122(c)(1) |
| Monitoring Information | |
| Indicator: Combustion Temperature / Exhaust Gas Temperature | |
| Minimum Frequency: once per day | |
| Averaging Period: n/a | |
| Deviation Limit: A minimum combustion temperature of 1400 °F shall be maintained before establishing a minimum combustion temperature using the most recent performance test or stack testing data. | |
| <p>CAM Text: The monitoring device should be installed in the combustion chamber or immediately downstream of the combustion chamber. Each monitoring device shall be calibrated at a frequency in accordance with the manufacturer's specifications, other written procedures that provide an adequate assurance that the device is calibrated accurately, or at least annually, whichever is more frequent, and shall be accurate to within one of the following:</p> <ul style="list-style-type: none"> ± 0.75% of the temperature being measured expressed in degrees Celsius; or ± 2.5 degrees Celsius. | |

CAM Summary

| Unit/Group/Process Information | |
|--|--------------------------------|
| ID No.: GRPCPECPV | |
| Control Device ID No.: UFFLARE01 | Control Device Type: Flare |
| Control Device ID No.: UFFLARE02 | Control Device Type: Flare |
| Applicable Regulatory Requirement | |
| Name: 30 TAC Chapter 115, Vent Gas Controls | SOP Index No.: R5121-16 |
| Pollutant: VOC | Main Standard: § 115.122(c)(1) |
| Monitoring Information | |
| Indicator: Pilot Flame | |
| Minimum Frequency: Continuous | |
| Averaging Period: n/a | |
| Deviation Limit: A deviation shall be reported if a pilot flame is not present. | |
| <p>CAM Text: Monitor the presence of a flare pilot flame using a thermocouple or other equivalent device to detect the presence of a flame or using an alarm that uses a thermocouple or other equivalent device to detect the absence of a flame. Maintain records of alarm events and duration of alarm events. Each monitoring device shall be accurate to within manufacturer's recommendations. Each monitoring device shall be calibrated at a frequency in accordance with the manufacturer's specifications or other written procedures that provide an adequate assurance that the device is calibrated accurately.</p> | |

CAM Summary

| Unit/Group/Process Information | |
|--|---|
| ID No.: GRPCPECPV | |
| Control Device ID No.: USSG01A | Control Device Type: Steam Generating Unit (Boiler)/Process Heater (Design heat input is greater than or equal to 44MW) |
| Control Device ID No.: USSG01B | Control Device Type: Steam Generating Unit (Boiler)/Process Heater (Design heat input is greater than or equal to 44MW) |
| Control Device ID No.: USSG01C | Control Device Type: Steam Generating Unit (Boiler)/Process Heater (Design heat input is greater than or equal to 44MW) |
| Applicable Regulatory Requirement | |
| Name: 30 TAC Chapter 115, Vent Gas Controls | SOP Index No.: R5121-20 |
| Pollutant: VOC | Main Standard: § 115.122(c)(1) |
| Monitoring Information | |
| Indicator: Period of Operation | |
| Minimum Frequency: n/a | |
| Averaging Period: n/a | |
| Deviation Limit: If vent gas is being sent to the boiler and the boiler is not in operation, it shall be reported as a deviation. | |
| CAM Text: Monitor and record the periods of operation of the steam generating units or process heater. The records must be readily available for inspection. | |

CAM Summary

| Unit/Group/Process Information | |
|--|--|
| ID No.: GRPEMPEBPV | |
| Control Device ID No.: UFF01A | Control Device Type: Thermal Incinerator (Direct Flame Incinerator/Regenerative Thermal Oxidizer) |
| Control Device ID No.: UFF01B | Control Device Type: Thermal Incinerator (Direct Flame Incinerator/Regenerative Thermal Oxidizer) |
| Applicable Regulatory Requirement | |
| Name: 30 TAC Chapter 115, Vent Gas Controls | SOP Index No.: R5121-10 |
| Pollutant: VOC | Main Standard: § 115.122(c)(1) |
| Monitoring Information | |
| Indicator: Combustion Temperature / Exhaust Gas Temperature | |
| Minimum Frequency: once per day | |
| Averaging Period: n/a | |
| Deviation Limit: A minimum combustion temperature of 1400 °F shall be maintained before establishing a minimum combustion temperature using the most recent performance test or stack testing data. | |
| <p>CAM Text: The monitoring device should be installed in the combustion chamber or immediately downstream of the combustion chamber. Each monitoring device shall be calibrated at a frequency in accordance with the manufacturer's specifications, other written procedures that provide an adequate assurance that the device is calibrated accurately, or at least annually, whichever is more frequent, and shall be accurate to within one of the following:</p> <ul style="list-style-type: none"> ± 0.75% of the temperature being measured expressed in degrees Celsius; or ± 2.5 degrees Celsius. | |

CAM Summary

| Unit/Group/Process Information | |
|--|--------------------------------|
| ID No.: GRPEMPEBPV | |
| Control Device ID No.: UFFLARE01 | Control Device Type: Flare |
| Control Device ID No.: UFFLARE02 | Control Device Type: Flare |
| Applicable Regulatory Requirement | |
| Name: 30 TAC Chapter 115, Vent Gas Controls | SOP Index No.: R5121-16 |
| Pollutant: VOC | Main Standard: § 115.122(c)(1) |
| Monitoring Information | |
| Indicator: Pilot Flame | |
| Minimum Frequency: Continuous | |
| Averaging Period: n/a | |
| Deviation Limit: A deviation shall be reported if a pilot flame is not present. | |
| <p>CAM Text: Monitor the presence of a flare pilot flame using a thermocouple or other equivalent device to detect the presence of a flame or using an alarm that uses a thermocouple or other equivalent device to detect the absence of a flame. Maintain records of alarm events and duration of alarm events. Each monitoring device shall be accurate to within manufacturer's recommendations. Each monitoring device shall be calibrated at a frequency in accordance with the manufacturer's specifications or other written procedures that provide an adequate assurance that the device is calibrated accurately.</p> | |

CAM Summary

| Unit/Group/Process Information | |
|--|---|
| ID No.: GRPEMPEBPV | |
| Control Device ID No.: USSG01A | Control Device Type: Steam Generating Unit (Boiler)/Process Heater (Design heat input is greater than or equal to 44MW) |
| Control Device ID No.: USSG01B | Control Device Type: Steam Generating Unit (Boiler)/Process Heater (Design heat input is greater than or equal to 44MW) |
| Control Device ID No.: USSG01C | Control Device Type: Steam Generating Unit (Boiler)/Process Heater (Design heat input is greater than or equal to 44MW) |
| Applicable Regulatory Requirement | |
| Name: 30 TAC Chapter 115, Vent Gas Controls | SOP Index No.: R5121-20 |
| Pollutant: VOC | Main Standard: § 115.122(c)(1) |
| Monitoring Information | |
| Indicator: Period of Operation | |
| Minimum Frequency: n/a | |
| Averaging Period: n/a | |
| Deviation Limit: If vent gas is being sent to the boiler and the boiler is not in operation, it shall be reported as a deviation. | |
| CAM Text: Monitor and record the periods of operation of the steam generating units or process heater. The records must be readily available for inspection. | |

CAM Summary

| Unit/Group/Process Information | |
|--|--|
| ID No.: GRPEMPECPV | |
| Control Device ID No.: UFF01A | Control Device Type: Thermal Incinerator (Direct Flame Incinerator/Regenerative Thermal Oxidizer) |
| Control Device ID No.: UFF01B | Control Device Type: Thermal Incinerator (Direct Flame Incinerator/Regenerative Thermal Oxidizer) |
| Applicable Regulatory Requirement | |
| Name: 30 TAC Chapter 115, Vent Gas Controls | SOP Index No.: R5121-10 |
| Pollutant: VOC | Main Standard: § 115.122(c)(1) |
| Monitoring Information | |
| Indicator: Combustion Temperature / Exhaust Gas Temperature | |
| Minimum Frequency: once per day | |
| Averaging Period: n/a | |
| Deviation Limit: A minimum combustion temperature of 1400 °F shall be maintained before establishing a minimum combustion temperature using the most recent performance test or stack testing data. | |
| <p>CAM Text: The monitoring device should be installed in the combustion chamber or immediately downstream of the combustion chamber. Each monitoring device shall be calibrated at a frequency in accordance with the manufacturer's specifications, other written procedures that provide an adequate assurance that the device is calibrated accurately, or at least annually, whichever is more frequent, and shall be accurate to within one of the following:</p> <ul style="list-style-type: none"> ± 0.75% of the temperature being measured expressed in degrees Celsius; or ± 2.5 degrees Celsius. | |

CAM Summary

| Unit/Group/Process Information | |
|--|--------------------------------|
| ID No.: GRPEMPECPV | |
| Control Device ID No.: UFFLARE01 | Control Device Type: Flare |
| Control Device ID No.: UFFLARE02 | Control Device Type: Flare |
| Applicable Regulatory Requirement | |
| Name: 30 TAC Chapter 115, Vent Gas Controls | SOP Index No.: R5121-16 |
| Pollutant: VOC | Main Standard: § 115.122(c)(1) |
| Monitoring Information | |
| Indicator: Pilot Flame | |
| Minimum Frequency: Continuous | |
| Averaging Period: n/a | |
| Deviation Limit: A deviation shall be reported if a pilot flame is not present. | |
| <p>CAM Text: Monitor the presence of a flare pilot flame using a thermocouple or other equivalent device to detect the presence of a flame or using an alarm that uses a thermocouple or other equivalent device to detect the absence of a flame. Maintain records of alarm events and duration of alarm events. Each monitoring device shall be accurate to within manufacturer's recommendations. Each monitoring device shall be calibrated at a frequency in accordance with the manufacturer's specifications or other written procedures that provide an adequate assurance that the device is calibrated accurately.</p> | |

CAM Summary

| Unit/Group/Process Information | |
|--|---|
| ID No.: GRPEMPECPV | |
| Control Device ID No.: USSG01A | Control Device Type: Steam Generating Unit (Boiler)/Process Heater (Design heat input is greater than or equal to 44MW) |
| Control Device ID No.: USSG01B | Control Device Type: Steam Generating Unit (Boiler)/Process Heater (Design heat input is greater than or equal to 44MW) |
| Control Device ID No.: USSG01C | Control Device Type: Steam Generating Unit (Boiler)/Process Heater (Design heat input is greater than or equal to 44MW) |
| Applicable Regulatory Requirement | |
| Name: 30 TAC Chapter 115, Vent Gas Controls | SOP Index No.: R5121-20 |
| Pollutant: VOC | Main Standard: § 115.122(c)(1) |
| Monitoring Information | |
| Indicator: Period of Operation | |
| Minimum Frequency: n/a | |
| Averaging Period: n/a | |
| Deviation Limit: If vent gas is being sent to the boiler and the boiler is not in operation, it shall be reported as a deviation. | |
| CAM Text: Monitor and record the periods of operation of the steam generating units or process heater. The records must be readily available for inspection. | |

CAM Summary

| Unit/Group/Process Information | |
|--|--|
| ID No.: GRPHON-PV | |
| Control Device ID No.: GBX02 | Control Device Type: Thermal Incinerator (Direct Flame Incinerator/Regenerative Thermal Oxidizer) |
| Applicable Regulatory Requirement | |
| Name: 30 TAC Chapter 115, Vent Gas Controls | SOP Index No.: R5121-10 |
| Pollutant: VOC | Main Standard: § 115.122(c)(1) |
| Monitoring Information | |
| Indicator: Combustion Temperature / Exhaust Gas Temperature | |
| Minimum Frequency: once per day | |
| Averaging Period: n/a | |
| Deviation Limit: A minimum combustion temperature of 1400 °F shall be maintained before establishing a minimum combustion temperature using the most recent performance test or stack testing data. | |
| <p>CAM Text: The monitoring device should be installed in the combustion chamber or immediately downstream of the combustion chamber. Each monitoring device shall be calibrated at a frequency in accordance with the manufacturer's specifications, other written procedures that provide an adequate assurance that the device is calibrated accurately, or at least annually, whichever is more frequent, and shall be accurate to within one of the following:</p> <ul style="list-style-type: none"> ± 0.75% of the temperature being measured expressed in degrees Celsius; or ± 2.5 degrees Celsius. | |

CAM Summary

| Unit/Group/Process Information | |
|--|--------------------------------|
| ID No.: GRPHON-PV | |
| Control Device ID No.: GFFLARE01 | Control Device Type: Flare |
| Applicable Regulatory Requirement | |
| Name: 30 TAC Chapter 115, Vent Gas Controls | SOP Index No.: R5121-16 |
| Pollutant: VOC | Main Standard: § 115.122(c)(1) |
| Monitoring Information | |
| Indicator: Pilot Flame | |
| Minimum Frequency: Continuous | |
| Averaging Period: n/a | |
| Deviation Limit: A deviation shall be reported if a pilot flame is not present. | |
| <p>CAM Text: Monitor the presence of a flare pilot flame using a thermocouple or other equivalent device to detect the presence of a flame or using an alarm that uses a thermocouple or other equivalent device to detect the absence of a flame. Maintain records of alarm events and duration of alarm events. Each monitoring device shall be accurate to within manufacturer's recommendations. Each monitoring device shall be calibrated at a frequency in accordance with the manufacturer's specifications or other written procedures that provide an adequate assurance that the device is calibrated accurately.</p> | |

CAM Summary

| Unit/Group/Process Information | |
|--|--|
| ID No.: G-VENTGAS | |
| Control Device ID No.: GBX02 | Control Device Type: Thermal Incinerator (Direct Flame Incinerator/Regenerative Thermal Oxidizer) |
| Applicable Regulatory Requirement | |
| Name: 30 TAC Chapter 115, Vent Gas Controls | SOP Index No.: R5121-10 |
| Pollutant: VOC | Main Standard: § 115.122(c)(1) |
| Monitoring Information | |
| Indicator: Combustion Temperature / Exhaust Gas Temperature | |
| Minimum Frequency: once per day | |
| Averaging Period: n/a | |
| Deviation Limit: A minimum combustion temperature of 1400 °F shall be maintained before establishing a minimum combustion temperature using the most recent performance test or stack testing data. | |
| <p>CAM Text: The monitoring device should be installed in the combustion chamber or immediately downstream of the combustion chamber. Each monitoring device shall be calibrated at a frequency in accordance with the manufacturer's specifications, other written procedures that provide an adequate assurance that the device is calibrated accurately, or at least annually, whichever is more frequent, and shall be accurate to within one of the following:</p> <ul style="list-style-type: none"> ± 0.75% of the temperature being measured expressed in degrees Celsius; or ± 2.5 degrees Celsius. | |

CAM Summary

| Unit/Group/Process Information | |
|--|--------------------------------|
| ID No.: G-VENTGAS | |
| Control Device ID No.: GFFLARE01 | Control Device Type: Flare |
| Applicable Regulatory Requirement | |
| Name: 30 TAC Chapter 115, Vent Gas Controls | SOP Index No.: R5121-16 |
| Pollutant: VOC | Main Standard: § 115.122(c)(1) |
| Monitoring Information | |
| Indicator: Pilot Flame | |
| Minimum Frequency: Continuous | |
| Averaging Period: n/a | |
| Deviation Limit: A deviation shall be reported if a pilot flame is not present. | |
| <p>CAM Text: Monitor the presence of a flare pilot flame using a thermocouple or other equivalent device to detect the presence of a flame or using an alarm that uses a thermocouple or other equivalent device to detect the absence of a flame. Maintain records of alarm events and duration of alarm events. Each monitoring device shall be accurate to within manufacturer's recommendations. Each monitoring device shall be calibrated at a frequency in accordance with the manufacturer's specifications or other written procedures that provide an adequate assurance that the device is calibrated accurately.</p> | |

CAM Summary

| Unit/Group/Process Information | |
|--|--|
| ID No.: O-VENTGAS | |
| Control Device ID No.: UFF01A | Control Device Type: Thermal Incinerator (Direct Flame Incinerator/Regenerative Thermal Oxidizer) |
| Control Device ID No.: UFF01B | Control Device Type: Thermal Incinerator (Direct Flame Incinerator/Regenerative Thermal Oxidizer) |
| Applicable Regulatory Requirement | |
| Name: 30 TAC Chapter 115, Vent Gas Controls | SOP Index No.: R5121-10 |
| Pollutant: VOC | Main Standard: § 115.122(c)(1) |
| Monitoring Information | |
| Indicator: Combustion Temperature / Exhaust Gas Temperature | |
| Minimum Frequency: once per day | |
| Averaging Period: n/a | |
| Deviation Limit: A minimum combustion temperature of 1400 °F shall be maintained before establishing a minimum combustion temperature using the most recent performance test or stack testing data. | |
| <p>CAM Text: The monitoring device should be installed in the combustion chamber or immediately downstream of the combustion chamber. Each monitoring device shall be calibrated at a frequency in accordance with the manufacturer's specifications, other written procedures that provide an adequate assurance that the device is calibrated accurately, or at least annually, whichever is more frequent, and shall be accurate to within one of the following:</p> <ul style="list-style-type: none"> ± 0.75% of the temperature being measured expressed in degrees Celsius; or ± 2.5 degrees Celsius. | |

CAM Summary

| Unit/Group/Process Information | |
|--|--------------------------------|
| ID No.: O-VENTGAS | |
| Control Device ID No.: UFFLARE01 | Control Device Type: Flare |
| Control Device ID No.: UFFLARE02 | Control Device Type: Flare |
| Applicable Regulatory Requirement | |
| Name: 30 TAC Chapter 115, Vent Gas Controls | SOP Index No.: R5121-16 |
| Pollutant: VOC | Main Standard: § 115.122(c)(1) |
| Monitoring Information | |
| Indicator: Pilot Flame | |
| Minimum Frequency: Continuous | |
| Averaging Period: n/a | |
| Deviation Limit: A deviation shall be reported if a pilot flame is not present. | |
| <p>CAM Text: Monitor the presence of a flare pilot flame using a thermocouple or other equivalent device to detect the presence of a flame or using an alarm that uses a thermocouple or other equivalent device to detect the absence of a flame. Maintain records of alarm events and duration of alarm events. Each monitoring device shall be accurate to within manufacturer's recommendations. Each monitoring device shall be calibrated at a frequency in accordance with the manufacturer's specifications or other written procedures that provide an adequate assurance that the device is calibrated accurately.</p> | |

CAM Summary

| Unit/Group/Process Information | |
|--|---|
| ID No.: O-VENTGAS | |
| Control Device ID No.: USSG01A | Control Device Type: Steam Generating Unit (Boiler)/Process Heater (Design heat input is greater than or equal to 44MW) |
| Control Device ID No.: USSG01B | Control Device Type: Steam Generating Unit (Boiler)/Process Heater (Design heat input is greater than or equal to 44MW) |
| Control Device ID No.: USSG01C | Control Device Type: Steam Generating Unit (Boiler)/Process Heater (Design heat input is greater than or equal to 44MW) |
| Applicable Regulatory Requirement | |
| Name: 30 TAC Chapter 115, Vent Gas Controls | SOP Index No.: R5121-20 |
| Pollutant: VOC | Main Standard: § 115.122(c)(1) |
| Monitoring Information | |
| Indicator: Period of Operation | |
| Minimum Frequency: n/a | |
| Averaging Period: n/a | |
| Deviation Limit: If vent gas is being sent to the boiler and the boiler is not in operation, it shall be reported as a deviation. | |
| CAM Text: Monitor and record the periods of operation of the steam generating units or process heater. The records must be readily available for inspection. | |

Periodic Monitoring Summary

| Unit/Group/Process Information | |
|--|--|
| ID No.: GAD03 | |
| Control Device ID No.: GAD09A-D | Control Device Type: Carbon Adsorption System (Non-Regenerative) |
| Applicable Regulatory Requirement | |
| Name: 30 TAC Chapter 115, Storage of VOCs | SOP Index No.: R5112-14 |
| Pollutant: VOC | Main Standard: § 115.112(c)(1) |
| Monitoring Information | |
| Indicator: Carbon Replacement Interval | |
| Minimum Frequency: At each replacement of carbon canister | |
| Averaging Period: n/a | |
| Deviation Limit: A deviation shall be reported if the carbon is not replaced within the maximum replacement interval. | |
| <p>Periodic Monitoring Text: Monitor and record the replacement time interval of the carbon canister(s), as determined by the maximum design flow rate and organic concentration in the gas stream vented to the carbon adsorption system. Establish a maximum carbon replacement interval using the most recent performance test, manufacturer's recommendations, engineering calculations, and/or historical data. Any data, collected for a period which exceeds the maximum carbon replacement interval shall be considered and reported as a deviation.</p> | |

Periodic Monitoring Summary

| Unit/Group/Process Information | |
|--|-----------------------------------|
| ID No.: GBX02 | |
| Control Device ID No.: N/A | Control Device Type: N/A |
| Applicable Regulatory Requirement | |
| Name: 30 TAC Chapter 111, Visible Emissions | SOP Index No.: R1111-1 |
| Pollutant: Opacity | Main Standard: § 111.111(a)(1)(C) |
| Monitoring Information | |
| Indicator: Visible Emissions | |
| Minimum Frequency: Once per week | |
| Averaging Period: n/a | |
| Deviation Limit: A deviation shall be reported if visible emissions are observed or if opacity exceeds 15% averaged over a six-minute period. | |
| <p>Periodic Monitoring Text: Visible emissions observations shall be made and recorded. Note that to properly determine the presence of visible emissions, all sources must be in clear view of the observer. The observer shall be at least 15 feet, but not more than 0.25 miles, away from the emission source during the observation. The observer shall select a position where the sun is not directly in the observer's eyes. If the observations cannot be conducted due to weather conditions, the date, time, and specific weather conditions shall be recorded. 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.</p> <p>If visible emissions are observed, the permit holder shall report a deviation. As an alternative, the permit holder may determine the opacity consistent with Test Method 9, as soon as practicable, but no later than 24 hours after observing visible emissions. If a Test Method 9 is performed, the opacity limit is the corresponding opacity limit associated with the particulate matter standard in the underlying applicable requirement. If there is no corresponding opacity limit in the underlying applicable requirement, the maximum opacity will be established using the most recent performance test. If the result of the Test Method 9 is opacity above the corresponding opacity limit (associated with the particulate matter standard in the underlying applicable requirement or as identified as a result of a previous performance test to establish the maximum opacity limit), the permit holder shall report a deviation.</p> | |

Periodic Monitoring Summary

| Unit/Group/Process Information | |
|--|-----------------------------------|
| ID No.: GRPBLRSTK | |
| Control Device ID No.: N/A | Control Device Type: N/A |
| Applicable Regulatory Requirement | |
| Name: 30 TAC Chapter 111, Visible Emissions | SOP Index No.: R1111-1 |
| Pollutant: Opacity | Main Standard: § 111.111(a)(1)(C) |
| Monitoring Information | |
| Indicator: Visible Emissions | |
| Minimum Frequency: Once per week | |
| Averaging Period: n/a | |
| Deviation Limit: A deviation shall be reported if visible emissions are observed or if opacity exceeds 15% averaged over a six-minute period. | |
| <p>Periodic Monitoring Text: Visible emissions observations shall be made and recorded. Note that to properly determine the presence of visible emissions, all sources must be in clear view of the observer. The observer shall be at least 15 feet, but not more than 0.25 miles, away from the emission source during the observation. The observer shall select a position where the sun is not directly in the observer's eyes. If the observations cannot be conducted due to weather conditions, the date, time, and specific weather conditions shall be recorded. 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.</p> <p>If visible emissions are observed, the permit holder shall report a deviation. As an alternative, the permit holder may determine the opacity consistent with Test Method 9, as soon as practicable, but no later than 24 hours after observing visible emissions. If a Test Method 9 is performed, the opacity limit is the corresponding opacity limit associated with the particulate matter standard in the underlying applicable requirement. If there is no corresponding opacity limit in the underlying applicable requirement, the maximum opacity will be established using the most recent performance test. If the result of the Test Method 9 is opacity above the corresponding opacity limit (associated with the particulate matter standard in the underlying applicable requirement or as identified as a result of a previous performance test to establish the maximum opacity limit), the permit holder shall report a deviation.</p> | |

Periodic Monitoring Summary

| Unit/Group/Process Information | |
|--|-----------------------------------|
| ID No.: GRPFURNSTK | |
| Control Device ID No.: N/A | Control Device Type: N/A |
| Applicable Regulatory Requirement | |
| Name: 30 TAC Chapter 111, Visible Emissions | SOP Index No.: R1111-1 |
| Pollutant: Opacity | Main Standard: § 111.111(a)(1)(C) |
| Monitoring Information | |
| Indicator: Visible Emissions | |
| Minimum Frequency: Once per week | |
| Averaging Period: n/a | |
| Deviation Limit: A deviation shall be reported if visible emissions are observed or if opacity exceeds 15% averaged over a six-minute period. | |
| <p>Periodic Monitoring Text: Visible emissions observations shall be made and recorded. Note that to properly determine the presence of visible emissions, all sources must be in clear view of the observer. The observer shall be at least 15 feet, but not more than 0.25 miles, away from the emission source during the observation. The observer shall select a position where the sun is not directly in the observer's eyes. If the observations cannot be conducted due to weather conditions, the date, time, and specific weather conditions shall be recorded. 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.</p> <p>If visible emissions are observed, the permit holder shall report a deviation. As an alternative, the permit holder may determine the opacity consistent with Test Method 9, as soon as practicable, but no later than 24 hours after observing visible emissions. If a Test Method 9 is performed, the opacity limit is the corresponding opacity limit associated with the particulate matter standard in the underlying applicable requirement. If there is no corresponding opacity limit in the underlying applicable requirement, the maximum opacity will be established using the most recent performance test. If the result of the Test Method 9 is opacity above the corresponding opacity limit (associated with the particulate matter standard in the underlying applicable requirement or as identified as a result of a previous performance test to establish the maximum opacity limit), the permit holder shall report a deviation.</p> | |

Periodic Monitoring Summary

| Unit/Group/Process Information | |
|---|--------------------------------|
| ID No.: GRPHFOTANK | |
| Control Device ID No.: UFFLARE01 | Control Device Type: Flare |
| Control Device ID No.: UFFLARE02 | Control Device Type: Flare |
| Applicable Regulatory Requirement | |
| Name: 30 TAC Chapter 115, Storage of VOCs | SOP Index No.: R5112-21 |
| Pollutant: VOC | Main Standard: § 115.112(c)(1) |
| Monitoring Information | |
| Indicator: Pilot Flame | |
| Minimum Frequency: Once per hour | |
| Averaging Period: n/a | |
| Deviation Limit: A deviation shall be reported if a pilot flame is not present. | |
| <p>Periodic Monitoring Text: Measure and record the presence of the pilot flame or maintain records of alarm events and duration of alarm events. The presence of a flare pilot flame shall be monitored using a thermocouple or any other equivalent device to detect the presence of a flame or using an alarm that uses a thermocouple or other equivalent device to detect the absence of a flame. The monitoring instrumentation shall be maintained, calibrated and operated in accordance with manufacturer's specifications or other written procedures. Any monitoring data which indicates the lack of a pilot flame shall be considered and reported as a deviation.</p> | |

Periodic Monitoring Summary

| Unit/Group/Process Information | |
|---|--|
| ID No.: GRPHFOTANK | |
| Control Device ID No.: UFF01A | Control Device Type: Thermal Incinerator (Direct Flame Incinerator/Regenerative Thermal Oxidizer) |
| Control Device ID No.: UFF01B | Control Device Type: Thermal Incinerator (Direct Flame Incinerator/Regenerative Thermal Oxidizer) |
| Applicable Regulatory Requirement | |
| Name: 30 TAC Chapter 115, Storage of VOCs | SOP Index No.: R5112-22 |
| Pollutant: VOC | Main Standard: § 115.112(c)(1) |
| Monitoring Information | |
| Indicator: Combustion Temperature / Exhaust Gas Temperature | |
| Minimum Frequency: Once per week | |
| Averaging Period: n/a | |
| Deviation Limit: A minimum combustion temperature of 1400 °F shall be maintained before establishing a minimum combustion temperature using the most recent performance test or stack testing data. | |
| Periodic Monitoring Text: Measure and record the combustion temperature in the combustion chamber or immediately downstream of the combustion chamber. The monitoring instrumentation shall be maintained, calibrated and operated in accordance with manufacturer's specifications or other written procedures. Any monitoring data below the minimum limit shall be considered and reported as a deviation. | |

Periodic Monitoring Summary

| Unit/Group/Process Information | |
|---|---|
| ID No.: GRPHFOTANK | |
| Control Device ID No.: USSG01A | Control Device Type: Steam Generating Unit (Boiler)/Process Heater (Design heat input is greater than or equal to 44MW) |
| Control Device ID No.: USSG01B | Control Device Type: Steam Generating Unit (Boiler)/Process Heater (Design heat input is greater than or equal to 44MW) |
| Control Device ID No.: USSG01C | Control Device Type: Steam Generating Unit (Boiler)/Process Heater (Design heat input is greater than or equal to 44MW) |
| Applicable Regulatory Requirement | |
| Name: 30 TAC Chapter 115, Storage of VOCs | SOP Index No.: R5112-25 |
| Pollutant: VOC | Main Standard: § 115.112(c)(1) |
| Monitoring Information | |
| Indicator: Period of Operation | |
| Minimum Frequency: n/a | |
| Averaging Period: n/a | |
| Deviation Limit: If vent gas is being sent to the boiler and the boiler is not in operation, it shall be reported as a deviation. | |
| Periodic Monitoring Text: Monitor and record the periods of operation of the steam generating units or process heater. All periods that are not recorded shall be considered and reported as a deviation. The records must be readily available for inspection. | |

Periodic Monitoring Summary

| Unit/Group/Process Information | |
|---|--|
| ID No.: GRPSKIMMER | |
| Control Device ID No.: ZWSRCO1A | Control Device Type: Catalytic Incinerator |
| Control Device ID No.: ZWSRCO1B | Control Device Type: Catalytic Incinerator |
| Applicable Regulatory Requirement | |
| Name: 30 TAC Chapter 115, Water Separation | SOP Index No.: R5131-2 |
| Pollutant: VOC | Main Standard: § 115.132(c)(3) |
| Monitoring Information | |
| Indicator: Combustion Temperature / Exhaust Gas Temperature | |
| Minimum Frequency: Once per week | |
| Averaging Period: n/a | |
| Deviation Limit: A minimum combustion temperature of 700 °F shall be maintained before establishing a minimum combustion temperature using the most recent performance test or stack testing data. | |
| Periodic Monitoring Text: Measure and record the combustion temperature in the combustion chamber or immediately downstream of the combustion chamber. The monitoring instrumentation shall be maintained, calibrated and operated in accordance with manufacturer's specifications or other written procedures. Any monitoring data below the minimum limit shall be considered and reported as a deviation. | |

Periodic Monitoring Summary

| Unit/Group/Process Information | |
|---|--------------------------------|
| ID No.: RAD02 | |
| Control Device ID No.: UFFLARE02 | Control Device Type: Flare |
| Applicable Regulatory Requirement | |
| Name: 30 TAC Chapter 115, Storage of VOCs | SOP Index No.: R5112-11 |
| Pollutant: VOC | Main Standard: § 115.112(c)(1) |
| Monitoring Information | |
| Indicator: Pilot Flame | |
| Minimum Frequency: Once per hour | |
| Averaging Period: n/a | |
| Deviation Limit: A deviation shall be reported if a pilot flame is not present. | |
| <p>Periodic Monitoring Text: Measure and record the presence of the pilot flame or maintain records of alarm events and duration of alarm events. The presence of a flare pilot flame shall be monitored using a thermocouple or any other equivalent device to detect the presence of a flame or using an alarm that uses a thermocouple or other equivalent device to detect the absence of a flame. The monitoring instrumentation shall be maintained, calibrated and operated in accordance with manufacturer's specifications or other written procedures. Any monitoring data which indicates the lack of a pilot flame shall be considered and reported as a deviation.</p> | |

Periodic Monitoring Summary

| Unit/Group/Process Information | |
|--|-----------------------------------|
| ID No.: UFF01A | |
| Control Device ID No.: N/A | Control Device Type: N/A |
| Applicable Regulatory Requirement | |
| Name: 30 TAC Chapter 111, Visible Emissions | SOP Index No.: R1111-1 |
| Pollutant: Opacity | Main Standard: § 111.111(a)(1)(C) |
| Monitoring Information | |
| Indicator: Visible Emissions | |
| Minimum Frequency: Once per week | |
| Averaging Period: n/a | |
| Deviation Limit: A deviation shall be reported if visible emissions are observed or if opacity exceeds 15% averaged over a six-minute period. | |
| <p>Periodic Monitoring Text: Visible emissions observations shall be made and recorded. Note that to properly determine the presence of visible emissions, all sources must be in clear view of the observer. The observer shall be at least 15 feet, but not more than 0.25 miles, away from the emission source during the observation. The observer shall select a position where the sun is not directly in the observer's eyes. If the observations cannot be conducted due to weather conditions, the date, time, and specific weather conditions shall be recorded. 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.</p> <p>If visible emissions are observed, the permit holder shall report a deviation. As an alternative, the permit holder may determine the opacity consistent with Test Method 9, as soon as practicable, but no later than 24 hours after observing visible emissions. If a Test Method 9 is performed, the opacity limit is the corresponding opacity limit associated with the particulate matter standard in the underlying applicable requirement. If there is no corresponding opacity limit in the underlying applicable requirement, the maximum opacity will be established using the most recent performance test. If the result of the Test Method 9 is opacity above the corresponding opacity limit (associated with the particulate matter standard in the underlying applicable requirement or as identified as a result of a previous performance test to establish the maximum opacity limit), the permit holder shall report a deviation.</p> | |

Periodic Monitoring Summary

| Unit/Group/Process Information | |
|--|-----------------------------------|
| ID No.: UFF01B | |
| Control Device ID No.: N/A | Control Device Type: N/A |
| Applicable Regulatory Requirement | |
| Name: 30 TAC Chapter 111, Visible Emissions | SOP Index No.: R1111-1 |
| Pollutant: Opacity | Main Standard: § 111.111(a)(1)(C) |
| Monitoring Information | |
| Indicator: Visible Emissions | |
| Minimum Frequency: Once per week | |
| Averaging Period: n/a | |
| Deviation Limit: A deviation shall be reported if visible emissions are observed or if opacity exceeds 15% averaged over a six-minute period. | |
| <p>Periodic Monitoring Text: Visible emissions observations shall be made and recorded. Note that to properly determine the presence of visible emissions, all sources must be in clear view of the observer. The observer shall be at least 15 feet, but not more than 0.25 miles, away from the emission source during the observation. The observer shall select a position where the sun is not directly in the observer's eyes. If the observations cannot be conducted due to weather conditions, the date, time, and specific weather conditions shall be recorded. 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.</p> <p>If visible emissions are observed, the permit holder shall report a deviation. As an alternative, the permit holder may determine the opacity consistent with Test Method 9, as soon as practicable, but no later than 24 hours after observing visible emissions. If a Test Method 9 is performed, the opacity limit is the corresponding opacity limit associated with the particulate matter standard in the underlying applicable requirement. If there is no corresponding opacity limit in the underlying applicable requirement, the maximum opacity will be established using the most recent performance test. If the result of the Test Method 9 is opacity above the corresponding opacity limit (associated with the particulate matter standard in the underlying applicable requirement or as identified as a result of a previous performance test to establish the maximum opacity limit), the permit holder shall report a deviation.</p> | |

Periodic Monitoring Summary

| Unit/Group/Process Information | |
|---|--------------------------------|
| ID No.: ZMTK01 | |
| Control Device ID No.: N/A | Control Device Type: N/A |
| Applicable Regulatory Requirement | |
| Name: 30 TAC Chapter 115, Storage of VOCs | SOP Index No.: R5112-4 |
| Pollutant: VOC | Main Standard: § 115.112(c)(1) |
| Monitoring Information | |
| Indicator: Structural Integrity of the Pipe | |
| Minimum Frequency: Emptied and degassed | |
| Averaging Period: n/a | |
| Deviation Limit: A deviation shall be reported if the repairs are not completed prior to refilling the storage vessel. | |
| <p>Periodic Monitoring Text: Inspect to determine the structural integrity of the fill pipe and record each time the storage vessel is emptied and degassed to ensure that it continues to meet the specifications in the above requirement. If the structural integrity of the fill pipe is in question, repairs shall be made before the storage vessel is refilled. It shall be considered and reported as a deviation if the repairs are not completed prior to refilling the storage vessel.</p> | |

Periodic Monitoring Summary

| Unit/Group/Process Information | |
|---|--------------------------------|
| ID No.: ZMTK01 | |
| Control Device ID No.: N/A | Control Device Type: N/A |
| Applicable Regulatory Requirement | |
| Name: 30 TAC Chapter 115, Storage of VOCs | SOP Index No.: R5112-4 |
| Pollutant: VOC | Main Standard: § 115.112(c)(1) |
| Monitoring Information | |
| Indicator: Record of Tank Construction Specifications | |
| Minimum Frequency: n/a | |
| Averaging Period: n/a | |
| Deviation Limit: A deviation shall be reported if the applicant fails to keep a record of the tank construction specifications. | |
| Periodic Monitoring Text: Keep a record of tank construction specifications (e.g. engineering drawings) that show a fill pipe that extends from the top of a tank to have a maximum clearance of six inches (15.2 centimeters) from the bottom or, when the tank is loaded from the side, a discharge opening entirely submerged when the pipe used to withdraw liquid from the tank can no longer withdraw liquid in normal operation. | |

Periodic Monitoring Summary

| Unit/Group/Process Information | |
|---|--------------------------------|
| ID No.: ZTD08 | |
| Control Device ID No.: UFFLARE01 | Control Device Type: Flare |
| Control Device ID No.: UFFLARE02 | Control Device Type: Flare |
| Applicable Regulatory Requirement | |
| Name: 30 TAC Chapter 115, Storage of VOCs | SOP Index No.: R5112-26 |
| Pollutant: VOC | Main Standard: § 115.112(c)(1) |
| Monitoring Information | |
| Indicator: Pilot Flame | |
| Minimum Frequency: Once per hour | |
| Averaging Period: n/a | |
| Deviation Limit: A deviation shall be reported if a pilot flame is not present. | |
| <p>Periodic Monitoring Text: Measure and record the presence of the pilot flame or maintain records of alarm events and duration of alarm events. The presence of a flare pilot flame shall be monitored using a thermocouple or any other equivalent device to detect the presence of a flame or using an alarm that uses a thermocouple or other equivalent device to detect the absence of a flame. The monitoring instrumentation shall be maintained, calibrated and operated in accordance with manufacturer's specifications or other written procedures. Any monitoring data which indicates the lack of a pilot flame shall be considered and reported as a deviation.</p> | |

Periodic Monitoring Summary

| Unit/Group/Process Information | |
|---|--|
| ID No.: ZTD08 | |
| Control Device ID No.: UFF01A | Control Device Type: Thermal Incinerator (Direct Flame Incinerator/Regenerative Thermal Oxidizer) |
| Control Device ID No.: UFF01B | Control Device Type: Thermal Incinerator (Direct Flame Incinerator/Regenerative Thermal Oxidizer) |
| Applicable Regulatory Requirement | |
| Name: 30 TAC Chapter 115, Storage of VOCs | SOP Index No.: R5112-27 |
| Pollutant: VOC | Main Standard: § 115.112(c)(1) |
| Monitoring Information | |
| Indicator: Combustion Temperature / Exhaust Gas Temperature | |
| Minimum Frequency: Once per week | |
| Averaging Period: n/a | |
| Deviation Limit: A minimum combustion temperature of 1400 °F shall be maintained before establishing a minimum combustion temperature using the most recent performance test or stack testing data. | |
| Periodic Monitoring Text: Measure and record the combustion temperature in the combustion chamber or immediately downstream of the combustion chamber. The monitoring instrumentation shall be maintained, calibrated and operated in accordance with manufacturer's specifications or other written procedures. Any monitoring data below the minimum limit shall be considered and reported as a deviation. | |

Periodic Monitoring Summary

| Unit/Group/Process Information | |
|---|---|
| ID No.: ZTD08 | |
| Control Device ID No.: USSG01A | Control Device Type: Steam Generating Unit (Boiler)/Process Heater (Design heat input is greater than or equal to 44MW) |
| Control Device ID No.: USSG01B | Control Device Type: Steam Generating Unit (Boiler)/Process Heater (Design heat input is greater than or equal to 44MW) |
| Control Device ID No.: USSG01C | Control Device Type: Steam Generating Unit (Boiler)/Process Heater (Design heat input is greater than or equal to 44MW) |
| Applicable Regulatory Requirement | |
| Name: 30 TAC Chapter 115, Storage of VOCs | SOP Index No.: R5112-30 |
| Pollutant: VOC | Main Standard: § 115.112(c)(1) |
| Monitoring Information | |
| Indicator: Period of Operation | |
| Minimum Frequency: n/a | |
| Averaging Period: n/a | |
| Deviation Limit: If vent gas is being sent to the boiler and the boiler is not in operation, it shall be reported as a deviation. | |
| Periodic Monitoring Text: Monitor and record the periods of operation of the steam generating units or process heater. All periods that are not recorded shall be considered and reported as a deviation. The records must be readily available for inspection. | |

Periodic Monitoring Summary

| Unit/Group/Process Information | |
|---|--------------------------------|
| ID No.: ZTD08 | |
| Control Device ID No.: N/A | Control Device Type: N/A |
| Applicable Regulatory Requirement | |
| Name: 40 CFR Part 60, Subpart Kb | SOP Index No.: 60Kb-22 |
| Pollutant: VOC | Main Standard: § 60.112b(b)(1) |
| Monitoring Information | |
| Indicator: VOC Concentration | |
| Minimum Frequency: Once per year | |
| Averaging Period: n/a | |
| Deviation Limit: A deviation shall be reported if the applicant fails to measure and record the fugitive emissions from the vapor collection system annually. | |
| Periodic Monitoring Text: Measure and record fugitive emissions from the vapor collection system in accordance with part 60, appendix A, method 21. | |

Periodic Monitoring Summary

| Unit/Group/Process Information | |
|---|--------------------------------|
| ID No.: ZTD08 | |
| Control Device ID No.: N/A | Control Device Type: N/A |
| Applicable Regulatory Requirement | |
| Name: 40 CFR Part 60, Subpart Kb | SOP Index No.: 60Kb-22 |
| Pollutant: VOC | Main Standard: § 60.112b(b)(1) |
| Monitoring Information | |
| Indicator: Visual Inspection | |
| Minimum Frequency: Once per year | |
| Averaging Period: n/a | |
| Deviation Limit: A deviation shall be reported if the applicant fails to perform a visual inspection annually. | |
| Periodic Monitoring Text: Visually inspect all components of the vapor collection system for defects, such as cracks, holes, gaps, loose connections, or broken or missing covers or other closure devices, that could result in air emissions. | |

Periodic Monitoring Summary

| Unit/Group/Process Information | |
|---|---|
| ID No.: ZTD08 | |
| Control Device ID No.: USSG01A | Control Device Type: Steam Generating Unit (Boiler)/Process Heater (Design heat input is greater than or equal to 44MW) |
| Control Device ID No.: USSG01B | Control Device Type: Steam Generating Unit (Boiler)/Process Heater (Design heat input is greater than or equal to 44MW) |
| Control Device ID No.: USSG01C | Control Device Type: Steam Generating Unit (Boiler)/Process Heater (Design heat input is greater than or equal to 44MW) |
| Applicable Regulatory Requirement | |
| Name: 40 CFR Part 60, Subpart Kb | SOP Index No.: 60Kb-23A |
| Pollutant: VOC | Main Standard: § 60.112b(b)(1) |
| Monitoring Information | |
| Indicator: Period of Operation | |
| Minimum Frequency: n/a | |
| Averaging Period: n/a | |
| Deviation Limit: If vent gas is being sent to the boiler and the boiler is not in operation, it shall be reported as a deviation. | |
| Periodic Monitoring Text: Monitor and record the periods of operation of the steam generating units or process heater. All periods that are not recorded shall be considered and reported as a deviation. The records must be readily available for inspection. | |

Periodic Monitoring Summary

| Unit/Group/Process Information | |
|---|--|
| ID No.: ZTD08 | |
| Control Device ID No.: UFF01A | Control Device Type: Thermal Incinerator (Direct Flame Incinerator/Regenerative Thermal Oxidizer) |
| Control Device ID No.: UFF01B | Control Device Type: Thermal Incinerator (Direct Flame Incinerator/Regenerative Thermal Oxidizer) |
| Applicable Regulatory Requirement | |
| Name: 40 CFR Part 60, Subpart Kb | SOP Index No.: 60Kb-23B |
| Pollutant: VOC | Main Standard: § 60.112b(b)(1) |
| Monitoring Information | |
| Indicator: Combustion Temperature / Exhaust Gas Temperature | |
| Minimum Frequency: Once per week | |
| Averaging Period: n/a | |
| Deviation Limit: A minimum combustion temperature of 1400 °F shall be maintained before establishing a minimum combustion temperature using the most recent performance test or stack testing data. | |
| Periodic Monitoring Text: Measure and record the combustion temperature in the combustion chamber or immediately downstream of the combustion chamber. The monitoring instrumentation shall be maintained, calibrated and operated in accordance with manufacturer's specifications or other written procedures. Any monitoring data below the minimum limit shall be considered and reported as a deviation. | |

Periodic Monitoring Summary

| Unit/Group/Process Information | |
|--|--------------------------------|
| ID No.: ZTD12 | |
| Control Device ID No.: N/A | Control Device Type: N/A |
| Applicable Regulatory Requirement | |
| Name: 30 TAC Chapter 115, Water Separation | SOP Index No.: R5131-1 |
| Pollutant: VOC | Main Standard: § 115.132(c)(1) |
| Monitoring Information | |
| Indicator: VOC Concentration | |
| Minimum Frequency: Annually | |
| Averaging Period: n/a | |
| Deviation Limit: A deviation shall be reported if any monitoring data greater than the maximum VOC limit of 10,000 ppmv. | |
| <p>Periodic Monitoring Text: Measure and record the VOC concentration using a portable analyzer to monitor VOC concentration around the immediate area of the compartment in accordance with 40 CFR Part 60, Appendix A, Method 21. Each potential leak interface (i.e., a location where organic vapor leakage could occur) on the cover and associated closer devices shall be checked. Potential leak interfaces that are associated with covers and closure devices include, but are not limited to: the interface of the cover and its foundation mounting; the periphery of any opening on the cover and its associated closure device; and the sealing seat interface on a spring-loaded pressure relief valve. The owner or operator may choose to adjust the detection instrument readings for the background organic concentration level.</p> <p>The monitoring instrumentation shall be maintained and operated in accordance with manufacturer's specifications or other written procedures.</p> <p>Any monitoring data greater than the maximum VOC limit indicated in the Deviation Limit above shall be considered and reported as a deviation as required by § 122.145(2).</p> | |

Periodic Monitoring Summary

| Unit/Group/Process Information | |
|--|--------------------------------|
| ID No.: ZTTK04 | |
| Control Device ID No.: N/A | Control Device Type: N/A |
| Applicable Regulatory Requirement | |
| Name: 30 TAC Chapter 115, Storage of VOCs | SOP Index No.: R5112-20 |
| Pollutant: VOC | Main Standard: § 115.112(c)(1) |
| Monitoring Information | |
| Indicator: Internal Floating Roof | |
| Minimum Frequency: annually | |
| Averaging Period: n/a | |
| Deviation Limit: A deviation shall be reported if the roof is not floating on the surface of the VOC, if liquid has accumulated on the internal floating roof, the seals are detached, or if there are holes or tears in the seal fabric. | |
| Periodic Monitoring Text: Visually inspect and record the inspection of the internal floating roof to ensure: the roof is floating on the surface of the VOC and, liquid has not accumulated on the internal floating roof, the seals are not detached, and there are no holes or tears in the seal fabric. Any monitoring data in which the roof is not floating on the surface of the VOC, if liquid has accumulated on the internal floating roof, the seals are detached, or if there are holes or tears in the seal fabric shall be considered and reported as a deviation. | |

Periodic Monitoring Summary

| Unit/Group/Process Information | |
|--|--------------------------------|
| ID No.: ZTTK05 | |
| Control Device ID No.: N/A | Control Device Type: N/A |
| Applicable Regulatory Requirement | |
| Name: 30 TAC Chapter 115, Storage of VOCs | SOP Index No.: R5112-20 |
| Pollutant: VOC | Main Standard: § 115.112(c)(1) |
| Monitoring Information | |
| Indicator: Internal Floating Roof | |
| Minimum Frequency: annually | |
| Averaging Period: n/a | |
| Deviation Limit: A deviation shall be reported if the roof is not floating on the surface of the VOC, if liquid has accumulated on the internal floating roof, the seals are detached, or if there are holes or tears in the seal fabric. | |
| Periodic Monitoring Text: Visually inspect and record the inspection of the internal floating roof to ensure: the roof is floating on the surface of the VOC and, liquid has not accumulated on the internal floating roof, the seals are not detached, and there are no holes or tears in the seal fabric. Any monitoring data in which the roof is not floating on the surface of the VOC, if liquid has accumulated on the internal floating roof, the seals are detached, or if there are holes or tears in the seal fabric shall be considered and reported as a deviation. | |

Permit Shield

| | |
|----------------------------|------------|
| Permit Shield | 196 |
|----------------------------|------------|

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 | | |
| ADMINGEN | N/A | 30 TAC Chapter 117, Subchapter B | Emission unit is not located in the ozone nonattainment area. |
| ADMINGENTK | N/A | 30 TAC Chapter 115, Storage of VOCs | Vessel storing VOC with a true vapor pressure less than 1.5 psia. |
| ADMINGENTK | N/A | 40 CFR Part 60, Subpart Kb | Tank capacity is less than 75 cubic meters (19,813 gallons). |
| ADMINGENTK | N/A | 40 CFR Part 63, Subpart EEEE | Diesel does not meet definition of organic liquid under MACT EEEE. |
| CPE-DIST | N/A | 40 CFR Part 60, Subpart NNN | Any distillation unit that is subject to the provisions of NSPS DDD is not an affected facility under NSPS NNN. |
| CPE-REACT | N/A | 40 CFR Part 60, Subpart RRR | Any reactor process that is subject to the provisions of NSPS DDD is not an affected facility under NSPS RRR. |
| C-VENTGAS | N/A | 30 TAC Chapter 115, Batch Processes | Vent gas stream is not located in Beaumont/Port Arthur or Houston/Galveston area. |
| C-VENTGAS | N/A | 30 TAC Chapter 115, HRVOC Vent Gas | Vent gas stream is not located in the Houston/Galveston/Brazoria area. |
| EPE-DIST | N/A | 40 CFR Part 60, Subpart NNN | Any distillation unit that is subject to the provisions of NSPS DDD is not an affected facility under NSPS NNN. |
| EPE-REACT | N/A | 40 CFR Part 60, Subpart RRR | Any reactor process that is subject to the provisions of NSPS DDD is not an affected facility under NSPS RRR. |

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 | | |
| E-VENTGAS | N/A | 30 TAC Chapter 115, Batch Processes | Vent gas stream is not located in Beaumont/Port Arthur or Houston/Galveston area. |
| E-VENTGAS | N/A | 30 TAC Chapter 115, HRVOC Vent Gas | Vent gas stream is not located in the Houston/Galveston/Brazoria area. |
| GAD03 | N/A | 40 CFR Part 60, Subpart Kb | Vessel capacity is less than 75 cubic meters (19,813 gallons) and operates as a process tank. |
| GAD03 | N/A | 40 CFR Part 63, Subpart G | The unit does not meet the definition of a storage vessel since its capacity is less than 38 cubic meters and operates as a surge control vessel. |
| GBD06 | N/A | 40 CFR Part 60, Subpart Kb | Surge drum is a process tank and does not meet the definition of a storage vessel. |
| GBD06 | N/A | 40 CFR Part 63, Subpart H | Surge control vessel is routed back to the process. |
| GDD08 | N/A | 30 TAC Chapter 115, Storage of VOCs | Vessel storing VOC with a true vapor pressure less than 1.5 psia. |
| GDD08 | N/A | 40 CFR Part 60, Subpart Kb | Vessel operating as a process tank with capacity less than 151 cubic meters (39,900 gallons) and storing a VOL with a maximum TVP < 2.2 psia (15 kPa). |
| GDD08 | N/A | 40 CFR Part 63, Subpart H | Surge control vessel stores VOC with a vapor pressure less than 0.7 kPa (0.10 psia), hence it does not meet the conditions in Table 3 of MACT H. |

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 | | |
| GDD09 | N/A | 30 TAC Chapter 115, Storage of VOCs | Vessel storing VOC with a true vapor pressure less than 1.5 psia. |
| GDD09 | N/A | 40 CFR Part 60, Subpart Kb | Vessel capacity is less than 75 cubic meters (19,813 gallons) and operates as a process tank. |
| GDD09 | N/A | 40 CFR Part 63, Subpart G | The unit does not meet the definition of a storage vessel since its capacity is less than 38 cubic meters and operates as a surge control vessel. |
| GDT01 | N/A | 40 CFR Part 63, Subpart HH | Does not meet the definition of Glycol Dehydration Unit and is not located at an oil and natural gas production facility. |
| GED04 | N/A | 30 TAC Chapter 115, Storage of VOCs | Vessel storing VOC with a true vapor pressure less than 1.5 psia. |
| GED04 | N/A | 40 CFR Part 60, Subpart Kb | Vessel capacity is less than 75 cubic meters (19,813 gallons) and operates as a process tank. |
| GED04 | N/A | 40 CFR Part 63, Subpart G | The unit does not meet the definition of a storage vessel since its capacity is less than 38 cubic meters and operates as a surge control vessel. |
| GFFLARE01 | N/A | 30 TAC Chapter 115, HRVOC Vent Gas | Flare is not located in the Houston/ Galveston/Brazoria area. |
| GREFUSTN | N/A | 30 TAC Chapter 115, Loading and Unloading of VOC | Facility is a motor vehicle fuel dispensing facility. |
| GREFUSTN | N/A | 40 CFR Part 63, Subpart CCCCCC | Gasoline dispensing facility is not located at |

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 | | |
| | | | an area source. |
| GRPADDITIVE | CLB03, CLDC06, CLFAN04, ELB01, ELB02, ELB03, ELB04, ELB05, ELDC06, ELFAN01, ELFAN04 | 30 TAC Chapter 115, Vent Gas Controls | The vent gas stream does not contain volatile organic compounds (VOC). |
| GRPADDITIVE | CLB03, CLDC06, CLFAN04, ELB01, ELB02, ELB03, ELB04, ELB05, ELDC06, ELFAN01, ELFAN04 | 40 CFR Part 63, Subpart FFFF | The batch process vent gas stream does not contain Hazardous Air Pollutant (HAP). |
| GRPBOILER | USSG01A, USSG01B, USSG01C | 30 TAC Chapter 112, Sulfur Compounds | Boilers do not burn liquid fuels. |
| GRPBOILER | USSG01A, USSG01B, USSG01C | 30 TAC Chapter 117, Subchapter B | Boilers are not located in ozone nonattainment area. |
| GRPCATLYST | CBFIL01, CCFIL04, CCFIL05, CCFIL06, EBFIL01, ECFIL04, ECFIL05, ECFIL06 | 30 TAC Chapter 115, Vent Gas Controls | The vent gas stream does not contain volatile organic compounds (VOC). |
| GRPCATLYST | CBFIL01, CCFIL04, CCFIL05, CCFIL06, EBFIL01, ECFIL04, ECFIL05, ECFIL06 | 40 CFR Part 63, Subpart FFFF | The batch process vent gas stream does not contain Hazardous Air Pollutant (HAP). |
| GRPCPEBPV | CADR04A, CADR04B, CCD21, CCD22, CCD23, CCD24, CCGT01, CCR01, CDFIL01, CEC01A, CED01, CED02, CED03, CEE01, CEFIL01, CEMEM01A | 40 CFR Part 60, Subpart DDD | MACT FFFF MCPU contains equipment that is also subject to the provisions of NSPS DDD and the site is electing to comply with the requirements for Group 1 process vents to all such equipment in the MCPU. |
| GRPCPECPV | CCT01, CDD03, CEMEM01B | 40 CFR Part 60, Subpart DDD | MACT FFFF MCPU contains equipment that is |

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 | | |
| | | | also subject to the provisions of NSPS DDD and the site is electing to comply with the requirements for Group 1 process vents to all such equipment in the MCPU. |
| GRPEMPEBPV | EADR04A, EADR04B, EADR05A, EADR05B, EADR06, EADR07A, EADR07B, EADR09, EADR10, ECD21, ECD22, ECD23, ECD24, ECGTO1, ECR01, EDFIL01, EEC01A, EED01, EED02, EED03, EEE01, EEFIL01, EEMEM01A | 40 CFR Part 60, Subpart DDD | MACT FFFF MCPU contains equipment that is also subject to the provisions of NSPS DDD and the site is electing to comply with the requirements for Group 1 process vents to all such equipment in the MCPU. |
| GRPEMPECPV | ECT01, EEMEM01B | 40 CFR Part 60, Subpart DDD | MACT FFFF MCPU contains equipment that is also subject to the provisions of NSPS DDD and the site is electing to comply with the requirements for Group 1 process vents to all such equipment in the MCPU. |
| GRPEMRGGEN | GUDGEN01, UKDGEN01, UKDGEN02 | 30 TAC Chapter 117, Subchapter B | Emission unit is not located in the ozone nonattainment area. |
| GRPEQTANK | ZWTK01, ZWTK02 | 40 CFR Part 60, Subpart Kb | Vessel is a process tank and does not meet the definition of a storage vessel. |
| GRPEXTRUD | CLDC03, ELDC03 | 40 CFR Part 63, Subpart FFFF | The continuous process gas stream contains less than 0.005 wt% HAP at the point of discharge to the atmosphere, as defined in 63.107(d). |
| GRPFURNACE | FA-F01, FB-F01, FC-F01, FD-F01, FE-F01, FF-F01, FG-F01, | 30 TAC Chapter 112, Sulfur Compounds | Furnaces do not burn liquid fuels. |

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 | | |
| | FH-F01 | | |
| GRPFURNACE | FA-F01, FB-F01, FC-F01, FD-F01, FE-F01, FF-F01, FG-F01, FH-F01 | 30 TAC Chapter 117, Subchapter B | Furnaces are not located in ozone nonattainment area. |
| GRPFURNACE | FA-F01, FB-F01, FC-F01, FD-F01, FE-F01, FF-F01, FG-F01, FH-F01 | 40 CFR Part 63, Subpart DDDDD | Ethylene cracking furnace covered by 40 CFR 63 Subpart YY is not subject to 40 CFR 63 Subpart DDDDD. |
| GRPFURNSTK | OFAF01, OFBF01, OFCF01, OFDF01, OFEF01, OFFF01, OFGF01, OFHF01 | 30 TAC Chapter 115, Vent Gas Controls | The combustion unit exhaust stream is not being used as a control device for any vent gas stream which originates from a non-combustion source. |
| GRPFWP | ZFP02B, ZFP02C | 30 TAC Chapter 117, Subchapter B | Emission unit is not located in the ozone nonattainment area. |
| GRPFWPTK | ZFTK02B, ZFTK02C | 30 TAC Chapter 115, Storage of VOCs | Storage tank capacity less than 1,000 gallons. |
| GRPFWPTK | ZFTK02B, ZFTK02C | 40 CFR Part 60, Subpart Kb | Tank capacity is less than 75 cubic meters (19,813 gallons). |
| GRPFWPTK | ZFTK02B, ZFTK02C | 40 CFR Part 63, Subpart EEEE | Diesel does not meet definition of organic liquid under MACT EEEE. |
| GRPGENTK | GUDGEN01TK, UKDGEN01TK, UKDGEN02TK | 30 TAC Chapter 115, Storage of VOCs | Storage tank capacity less than 1,000 gallons and storing VOC with TVP less than 1.5 psia. |
| GRPGENTK | GUDGEN01TK, UKDGEN01TK, UKDGEN02TK | 40 CFR Part 60, Subpart Kb | Tank capacity is less than 75 cubic meters (19,813 gallons). |
| GRPGENTK | GUDGEN01TK, UKDGEN01TK, UKDGEN02TK | 40 CFR Part 63, Subpart EEEE | Diesel does not meet definition of organic liquid under MACT EEEE. |
| GRPGLYTANK | GDTK01, GETK01, GETK02A, | 30 TAC Chapter 115, Storage of VOCs | Storage tank storing VOC with a true vapor |

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 | | |
| | GETK02B | | pressure less than 1.5 psia. |
| GRPGLYTANK | GDTK01, GETK01, GETK02A, GETK02B | 40 CFR Part 60, Subpart Kb | Tank capacity is greater than 151 cubic meters (39,900 gallons) and storing a VOL with a maximum TVP < 0.5 psia (3.5 kPa). |
| GRPGRANULE | CDDCO4, CDFAN01, CLDC01, EDDCO4, EDFAN01, ELDC01 | 40 CFR Part 63, Subpart FFFF | The continuous process gas stream contains less than 0.005 wt% HAP at the point of discharge to the atmosphere, as defined in 63.107(d). |
| GRPHONNNN | GET01, GET02 | 40 CFR Part 60, Subpart NNN | Process vent controlled to the levels required in §63.113(a)(1) or (a)(2) is exempt from the testing, monitoring, reporting, and recordkeeping provisions of 40 CFR part 60, subpart NNN. |
| GRPHONRRR | GAR01A, GAR01B, GDR02, GDR05 | 40 CFR Part 60, Subpart RRR | Process vent controlled to the levels required in §63.113(a)(1) or (a)(2) is exempt from the testing, monitoring, reporting, and recordkeeping provisions of 40 CFR part 60, subpart RRR. |
| GRPLOADOUT | CMDC01, CPFAN01, EMDC01, EPFAN01 | 40 CFR Part 63, Subpart FFFF | The unit does not meet the definition of miscellaneous organic chemical manufacturing process equipment since it is at the end of a process that produces a solid material, and is downstream of the dryers. |
| GRPNOVOC | GBD09, GBTK01, UCTK01, UTD02, UTTK04, ZTTK01 | 30 TAC Chapter 115, Storage of VOCs | Storage tank does not store volatile organic compounds. |
| GRPNOVOC | GBD09, GBTK01, UCTK01, UTD02, UTTK04, ZTTK01 | 40 CFR Part 60, Subpart Kb | Tank does not store volatile organic liquids. |

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 | | |
| GRPPELLET | CMFAN01, CMFAN02, EMFAN01, EMFAN02 | 40 CFR Part 63, Subpart FFFF | The continuous process gas stream contains less than 0.005 wt% HAP at the point of discharge to the atmosphere, as defined in 63.107(d). |
| GRPPETANK | CCD81, ELDO1, ELDO2 | 30 TAC Chapter 115, Storage of VOCs | Tank capacity is less than 1,000 gallons. |
| GRPPETANK | CCD81, ELDO1, ELDO2 | 40 CFR Part 60, Subpart Kb | Tank capacity is less than 75 cubic meters (19,813 gallons). |
| GRPPETANK | CCD81, ELDO1, ELDO2 | 40 CFR Part 63, Subpart FFFF | Storage tank does not meet the definition since it does not store liquids that contain organic HAP and/or hydrogen halide. |
| GRPPRSTANK | ZTD09, ZTD10A, ZTD10B, ZTD10C, ZTD11A, ZTD11B | 40 CFR Part 60, Subpart Kb | Pressure vessels designed to operate in excess of 204.9 kPa and without emissions to the atmosphere. |
| GRPUNLOAD | DMSUNLOAD, RLUNLOAD-A, RLUNLOAD-B, TKUNLOAD-A, TKUNLOAD-B | 40 CFR Part 63, Subpart EEEE | Organic liquids are not unloaded out of transport vehicles at the transfer racks. |
| G-VENTGAS | N/A | 30 TAC Chapter 115, HRVOC Vent Gas | Vent gas stream is not located in the Houston/Galveston/Brazoria area. |
| MEOHLOAD | N/A | 40 CFR Part 63, Subpart EEEE | Transfer racks, transport vehicles, and containers when used to conduct maintenance activities, such as liquid removal for inspections and maintenance or changeovers. |
| O_FUG | N/A | 30 TAC Chapter 115, Pet. Refinery & Petrochemicals | Synthetic organic chemical manufacturing process is not located in ozone nonattainment area. |
| O_FUG | N/A | 40 CFR Part 61, Subpart J | Equipment subject to NESHAP J and MACT |

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 | | |
| | | | YY is required to comply only with MACT YY. |
| O_FUG | N/A | 40 CFR Part 61, Subpart V | Equipment subject to NESHAP V and MACT YY is required to comply only with MACT YY. |
| O-VENTGAS | N/A | 30 TAC Chapter 115, HRVOC Vent Gas | Vent gas stream is not located in the Houston/Galveston/Brazoria area. |
| PE-REGEN | N/A | 40 CFR Part 63, Subpart FFFF | Vent from the unit operation does not meet the definition of a batch process vent since the emission streams from emission episodes that are undiluted and uncontrolled contains <50 ppmv HAP. |
| PROADDTIVE | N/A | 40 CFR Part 60, Subpart DDD | The vent gas stream does not contain total organic compounds (TOC). |
| PROCATLYST | N/A | 40 CFR Part 60, Subpart DDD | The vent gas stream does not contain total organic compounds (TOC). |
| RAD02 | N/A | 40 CFR Part 60, Subpart Kb | Tank capacity is less than 75 cubic meters (19,813 gallons). |
| RESIDLOAD | N/A | 40 CFR Part 63, Subpart EEEE | Transfer racks, transport vehicles, and containers when used to conduct maintenance activities, such as liquid removal for inspections and maintenance or changeovers. |
| RLOAD-C3 | N/A | 40 CFR Part 63, Subpart YY | Transfer rack use vapor balance at all times and does not load HAP containing material. |
| SCTOTE-GLY | N/A | 30 TAC Chapter 115, Storage of VOCs | Storage tank storing VOC with a true vapor pressure less than 1.5 psia. |
| SCTOTE-GLY | N/A | 40 CFR Part 60, Subpart Kb | Tank capacity is less than 75 cubic meters |

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 | | |
| | | | (19,813 gallons). |
| SCTOTE-GLY | N/A | 40 CFR Part 63, Subpart G | The unit does not meet the definition of a storage vessel since its capacity is less than 38 cubic meters. |
| TOTES | N/A | 30 TAC Chapter 115, Storage of VOCs | Storage tank capacity less than 1,000 gallons. |
| TOTES | N/A | 40 CFR Part 60, Subpart Kb | Tank capacity is less than 75 cubic meters (19,813 gallons). |
| UCCT01 | N/A | 30 TAC Chapter 115, HRVOC Cooling Towers | Cooling tower is not located in the Houston/Galveston/Brazoria area. |
| UCCT01 | N/A | 40 CFR Part 63, Subpart Q | Cooling tower is not operated with chromium-based water treatment chemicals. |
| UFFLARE01 | N/A | 30 TAC Chapter 115, HRVOC Vent Gas | Flare is not located in the Houston/Galveston/Brazoria area. |
| UFFLARE02 | N/A | 30 TAC Chapter 115, HRVOC Vent Gas | Flare is not located in the Houston/Galveston/Brazoria area. |
| UTD04 | N/A | 30 TAC Chapter 115, Storage of VOCs | Storage tank storing VOC with a true vapor pressure less than 1.5 psia. |
| UTD04 | N/A | 40 CFR Part 60, Subpart Kb | Tank capacity is less than 151 cubic meters (39,900 gallons) and storing a VOL with a maximum TVP < 2.2 psia (15 kPa). |
| ZMTK01 | N/A | 40 CFR Part 60, Subpart Kb | Storage vessels located at gasoline service station with capacity less than 75 cubic meters (19,813 gallons). |
| ZMTK01 | N/A | 40 CFR Part 63, Subpart EEEE | Gasoline does not meet definition of organic liquid under MACT EEEE. |

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 | | |
| ZMTK02 | N/A | 30 TAC Chapter 115, Storage of VOCs | Storage tank storing VOC with a true vapor pressure less than 1.5 psia. |
| ZMTK02 | N/A | 40 CFR Part 60, Subpart Kb | Tank capacity is less than 75 cubic meters (19,813 gallons). |
| ZMTK02 | N/A | 40 CFR Part 63, Subpart EEEE | Diesel does not meet definition of organic liquid under MACT EEEE. |
| ZTD08 | N/A | 40 CFR Part 63, Subpart FFFF | Storage vessel does not meet the definition of a storage tank since it does not store liquid that contain organic HAP and/or hydrogen halide. |
| ZTTK02 | N/A | 30 TAC Chapter 115, Storage of VOCs | Storage tank storing VOC with a true vapor pressure less than 1.5 psia. |
| ZTTK02 | N/A | 40 CFR Part 60, Subpart Kb | Tank capacity is greater than 151 cubic meters (39,900 gallons) and storing a VOL with a maximum TVP < 0.5 psia (3.5 kPa). |
| ZTTK03 | N/A | 30 TAC Chapter 115, Storage of VOCs | Storage tank storing VOC with a true vapor pressure less than 1.5 psia. |
| ZTTK03 | N/A | 40 CFR Part 60, Subpart Kb | Tank capacity is greater than 151 cubic meters (39,900 gallons) and storing a VOL with a maximum TVP < 0.5 psia (3.5 kPa). |
| ZTTK05 | N/A | 40 CFR Part 63, Subpart FFFF | The vessel does not meet the definition of a storage tank since it stores organic liquid that contain HAP only as impurity. |

New Source Review Authorization References

| | |
|--|------------|
| New Source Review Authorization References | 208 |
| New Source Review Authorization References by Emission Unit | 209 |

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.

| Prevention of Significant Deterioration (PSD) Permits | |
|--|---------------------------|
| PSD Permit No.: GHGPSDTX170 | Issuance Date: 11/27/2019 |
| PSD Permit No.: PSDTX1518 | Issuance Date: 11/27/2019 |
| 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. | |
| Authorization No.: 146425 | Issuance Date: 11/27/2019 |

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 |
|---------------------------|--|---------------------------------|
| ADMINGEN | ADMIN EMERGENCY GENERATOR NO. 1 | 146425, PSDTX1518 |
| ADMINGENTK | ADMIN EMERGENCY GENERATOR NO. 1 TANK | 146425, PSDTX1518 |
| BOILER A | UTILITIES BOILER A STACK | 146425, PSDTX1518 |
| BOILER B | UTILITIES BOILER B STACK | 146425, PSDTX1518 |
| BOILER C | UTILITIES BOILER C STACK | 146425, PSDTX1518 |
| C_FUG | CPE UNIT FUGITIVES | 146425, PSDTX1518 |
| CADR04A | 1-BUTENE DRYER | 146425, PSDTX1518 |
| CADR04B | 1-BUTENE DRYER | 146425, PSDTX1518 |
| CBFIL01 | CATALYST CYLINDER VENT FILTER | 146425, PSDTX1518 |
| CCD21 | PRODUCT CHAMBER 1 | 146425, PSDTX1518 |
| CCD22 | PRODUCT BLOW TANK 1 | 146425, PSDTX1518 |
| CCD23 | PRODUCT CHAMBER 2 | 146425, PSDTX1518 |
| CCD24 | PRODUCT BLOW TANK 2 | 146425, PSDTX1518 |
| CCD81-LOAD | DILUTED TEAL LOADING | 146425, PSDTX1518 |
| CCD81 | SEAL POT | 146425, PSDTX1518 |
| CCFIL04 | CATALYST FEEDER 1/CATALYST HOLD TANK 1 FILTER VENT | 146425, PSDTX1518 |
| CCFIL05 | CATALYST FEEDER 2/CATALYST HOLD TANK 2 FILTER VENT | 146425, PSDTX1518 |
| CCFIL06 | CATALYST FEEDER 3/CATALYST HOLD TANK 3 FILTER VENT | 146425, PSDTX1518 |
| CCGT01 | BLOWDOWN TURBINE | 146425, PSDTX1518 |
| CCR01 | REACTOR | 146425, PSDTX1518 |
| CCT01 | VENT COLUMN | 146425, PSDTX1518 |

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 |
|---------------------------|--|---------------------------------|
| CDD03 | LOW PURGE BIN DUST COLLECTOR VENT | 146425, PSDTX1518 |
| CDDCO4 | SEED BED BIN DUST COLLECTOR | 146425, PSDTX1518 |
| CDFAN01 | GRANULES HOPPER VENT DUST COLLECTOR | 146425, PSDTX1518 |
| CDFIL01 | PURGE BIN VENT FILTER | 146425, PSDTX1518 |
| CEC01A | RECOVERY COMPRESSOR (2ND STAGE) | 146425, PSDTX1518 |
| CED01 | RECOVERED LIQUIDS DRUM | 146425, PSDTX1518 |
| CED02 | CONVEYING GAS SURGE DRUM | 146425, PSDTX1518 |
| CED03 | RECOVERY COMPRESSOR INTERSTAGE ACCUMULATOR | 146425, PSDTX1518 |
| CEE01 | RECOVERY VAPOR INTERCHANGER | 146425, PSDTX1518 |
| CEFIL01 | RECOVERY COMPRESSOR INTAKE FILTER | 146425, PSDTX1518 |
| CEMEM01A | HYDROCARBON RECOVERY MEMBRANE UNIT | 146425, PSDTX1518 |
| CEMEM01B | NITROGEN RECOVERY MEMBRANE UNIT | 146425, PSDTX1518 |
| CLB03 | ADDITIVE VACUUM BLOWER CLB03 | 146425, PSDTX1518 |
| CLDC01 | GRANULES FEED BIN DUST COLLECTOR | 146425, PSDTX1518 |
| CLDC03 | EXTRUDER FEED CONVEYOR DUST COLLECTOR | 146425, PSDTX1518 |
| CLDC06 | ZINC OXIDE DRYING HOPPER DUST COLLECTOR | 146425, PSDTX1518 |
| CLFAN04 | WEIGH FEEDER HOPPER EXTRACTION VENT | 146425, PSDTX1518 |
| CMDC01 | PELLET SURGE BIN DUST COLLECTOR | 146425, PSDTX1518 |
| CMFAN01 | PELLET DRYER 1 VENT | 146425, PSDTX1518 |
| CMFAN02 | PELLET DRYER 2 VENT | 146425, PSDTX1518 |
| CPE-DIST | CPE DISTILLATION UNITS | 146425, PSDTX1518 |

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 |
|---------------------------|--|---------------------------------|
| CPE-REACT | CPE REACTORS | 146425, PSDTX1518 |
| CPFAN01 | PELLET SILOS DUST COLLECTOR | 146425, PSDTX1518 |
| C-VENTGAS | CPE PROCESS VENT GAS | 146425, PSDTX1518 |
| DMSUNLOAD | DMS UNLOADING | 146425, PSDTX1518 |
| DREFUSTN | DIESEL VEHICLE REFUELING STATION | 146425, PSDTX1518 |
| E_FUG | EPE UNIT FUGITIVES | 146425, PSDTX1518 |
| EADR04A | HEXENE DRYER | 146425, PSDTX1518 |
| EADR04B | HEXENE DRYER | 146425, PSDTX1518 |
| EADR05A | CA1 DRYER | 146425, PSDTX1518 |
| EADR05B | CA1 DRYER | 146425, PSDTX1518 |
| EADR06 | CA2 DRYER | 146425, PSDTX1518 |
| EADR07A | ETHYLENE PURIFICATION VESSEL | 146425, PSDTX1518 |
| EADR07B | ETHYLENE PURIFICATION VESSEL | 146425, PSDTX1518 |
| EADR09 | ETHYLENE CO REMOVAL VESSEL | 146425, PSDTX1518 |
| EADR10 | ETHYLENE DEOXO VESSEL | 146425, PSDTX1518 |
| EBFIL01 | CATALYST CYLINDER VENT FILTER | 146425, PSDTX1518 |
| ECD21 | PRODUCT CHAMBER 1 | 146425, PSDTX1518 |
| ECD22 | PRODUCT BLOW TANK 1 | 146425, PSDTX1518 |
| ECD23 | PRODUCT CHAMBER 2 | 146425, PSDTX1518 |
| ECD24 | PRODUCT BLOW TANK 2 | 146425, PSDTX1518 |
| ECFIL04 | CATALYST FEEDER 1/CATALYST HOLD TANK 1 FILTER VENT | 146425, PSDTX1518 |

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 |
|---------------------------|--|---------------------------------|
| ECFIL05 | CATALYST FEEDER 2/CATALYST HOLD TANK 2 FILTER VENT | 146425, PSDTX1518 |
| ECFIL06 | CATALYST FEEDER 3/CATALYST HOLD TANK 3 FILTER VENT | 146425, PSDTX1518 |
| ECGTO1 | BLOWDOWN TURBINE | 146425, PSDTX1518 |
| ECR01 | REACTOR | 146425, PSDTX1518 |
| ECT01 | VENT COLUMN | 146425, PSDTX1518 |
| EDDCO4 | SEED BED BIN DUST COLLECTOR | 146425, PSDTX1518 |
| EDFAN01 | GRANULES HOPPER VENT DUST COLLECTOR | 146425, PSDTX1518 |
| EDFIL01 | PURGE BIN VENT FILTER | 146425, PSDTX1518 |
| EEC01A | RECOVERY COMPRESSOR (2ND STAGE) | 146425, PSDTX1518 |
| EED01 | RECOVERED LIQUIDS DRUM | 146425, PSDTX1518 |
| EED02 | CONVEYING GAS SURGE DRUM | 146425, PSDTX1518 |
| EED03 | RECOVERY COMPRESSOR INTERSTAGE ACCUMULATOR | 146425, PSDTX1518 |
| EEE01 | RECOVERY VAPOR INTERCHANGER | 146425, PSDTX1518 |
| EEFIL01 | RECOVERY COMPRESSOR INTAKE FILTER | 146425, PSDTX1518 |
| EEMEM01A | HYDROCARBON RECOVERY MEMBRANE UNIT | 146425, PSDTX1518 |
| EEMEM01B | NITROGEN RECOVERY MEMBRANE UNIT | 146425, PSDTX1518 |
| ELB01 | ADDITIVE VACUUM BLOWER ELB01 | 146425, PSDTX1518 |
| ELB02 | ADDITIVE VACUUM BLOWER ELB02 | 146425, PSDTX1518 |
| ELB03 | ADDITIVE VACUUM BLOWER ELB03 | 146425, PSDTX1518 |
| ELB04 | ADDITIVE VACUUM BLOWER ELB04 | 146425, PSDTX1518 |
| ELB05 | ADDITIVE VACUUM BLOWER ELB05 | 146425, PSDTX1518 |

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 |
|---------------------------|---|---------------------------------|
| ELDC01 | GRANULES FEED BIN DUST COLLECTOR | 146425, PSDTX1518 |
| ELDC03 | EXTRUDER FEED CONVEYOR DUST COLLECTOR | 146425, PSDTX1518 |
| ELDC06 | ZINC OXIDE DRYING HOPPER DUST COLLECTOR | 146425, PSDTX1518 |
| ELDO1 | PRIMARY RUN TANK | 146425, PSDTX1518 |
| ELDO2 | SECONDARY RUN TANK | 146425, PSDTX1518 |
| ELFAN01 | SOLID ADDITIVES VENT DUST COLLECTOR | 146425, PSDTX1518 |
| ELFAN04 | WEIGH FEEDER HOPPER EXTRACTION VENT | 146425, PSDTX1518 |
| EMDC01 | PELLET SURGE BIN DUST COLLECTOR | 146425, PSDTX1518 |
| EMFAN01 | PELLET DRYER 1 VENT | 146425, PSDTX1518 |
| EMFAN02 | PELLET DRYER 2 VENT | 146425, PSDTX1518 |
| EPE-DIST | EMPE DISTILLATION UNITS | 146425, PSDTX1518 |
| EPE-REACT | EMPE REACTORS | 146425, PSDTX1518 |
| EPFAN01 | PELLET SILOS DUST COLLECTOR | 146425, PSDTX1518 |
| E-VENTGAS | EMPE PROCESS VENT GAS | 146425, PSDTX1518 |
| FA-F01 | PYROLYSIS FURNACE A | 146425, PSDTX1518 |
| FB-F01 | PYROLYSIS FURNACE B | 146425, PSDTX1518 |
| FC-F01 | PYROLYSIS FURNACE C | 146425, PSDTX1518 |
| FD-F01 | PYROLYSIS FURNACE D | 146425, PSDTX1518 |
| FE-F01 | PYROLYSIS FURNACE E | 146425, PSDTX1518 |
| FF-F01 | PYROLYSIS FURNACE F | 146425, PSDTX1518 |
| FG-F01 | PYROLYSIS FURNACE G | 146425, PSDTX1518 |

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 |
|---------------------------|--|---------------------------------|
| FH-F01 | PYROLYSIS FURNACE H | 146425, PSDTX1518 |
| G_FUG | GLYCOL UNIT FUGITIVES | 146425, PSDTX1518 |
| GAD03 | MODERATOR FEED VESSEL | 146425, PSDTX1518 |
| GAR01A | EO REACTOR 01A | 146425, PSDTX1518 |
| GAR01B | EO REACTOR 01B | 146425, PSDTX1518 |
| GBD02 | RECYCLE GAS COMPRESSOR SUCTION KO DRUM | 146425, PSDTX1518 |
| GBD05 | CO2 STRIPPER OVERHEAD VENT | 146425, PSDTX1518 |
| GBD06 | EO CONCENTRATOR SURGE DRUM | 146425, PSDTX1518 |
| GBD09 | CARBONATE DISSOLVING DRUM | 146425, PSDTX1518 |
| GBTK01 | CARBONATE STORAGE TANK | 146425, PSDTX1518 |
| GBX02 | MEG THERMAL OXIDIZER | 146425, PSDTX1518 |
| GDD07 | CO2 SEPARATION VESSEL | 146425, PSDTX1518 |
| GDD08 | CATALYST CHARGE VESSEL | 146425, PSDTX1518 |
| GDD09 | CATALYST DRIPS VESSEL | 146425, PSDTX1518 |
| GDE11 | EG-2 REACTOR TOP CONDENSER VENT | 146425, PSDTX1518 |
| GDR02 | EC-2 REACTOR | 146425, PSDTX1518 |
| GDR05 | EG-2 REACTOR | 146425, PSDTX1518 |
| GDT01 | GLYCOL DEHYDRATOR | 146425, PSDTX1518 |
| GDTK01 | CATALYST STORAGE TANK | 146425, PSDTX1518 |
| GED03 | VACUUM SYSTEM CONDENSATE VESSEL | 146425, PSDTX1518 |
| GED04 | GLYCOL DRAIN COLLECTION VESSEL | 146425, PSDTX1518 |

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 |
|---------------------------|------------------------------------|---------------------------------|
| GET01 | MEG PURIFICATION COLUMN | 146425, PSDTX1518 |
| GET02 | MEG RECYCLE COLUMN | 146425, PSDTX1518 |
| GETK01 | GLYCOL SLOPS TANK | 146425, PSDTX1518 |
| GETK02A | MEG RUNDOWN TANK 2A | 146425, PSDTX1518 |
| GETK02B | MEG RUNDOWN TANK 2B | 146425, PSDTX1518 |
| GFFLARE01 | MEG ELEVATED FLARE | 146425, PSDTX1518 |
| GLYUNLOAD | GLYCOL UNLOADING | 146425, PSDTX1518 |
| GREFUSTN | GASOLINE VEHICLE REFUELING STATION | 146425, PSDTX1518 |
| GUDGEN01 | GLYCOL EMERGENCY GENERATOR NO. 1 | 146425, PSDTX1518 |
| GUDGEN01TK | GLYCOL EMERGENCY GENERATOR TANK | 146425, PSDTX1518 |
| G-VENTGAS | GLYCOL PROCESS VENT GAS | 146425, PSDTX1518 |
| MEOHLOAD | METHANOL LOADING MSS | 146425, PSDTX1518 |
| MEOHUNLOAD | METHANOL UNLOADING | 146425, PSDTX1518 |
| O_FAF01 | FURNACE A STACK | 146425, PSDTX1518 |
| O_FBF01 | FURNACE B STACK | 146425, PSDTX1518 |
| O_FCF01 | FURNACE C STACK | 146425, PSDTX1518 |
| O_FDF01 | FURNACE D STACK | 146425, PSDTX1518 |
| O_FEF01 | FURNACE E STACK | 146425, PSDTX1518 |
| O_FFF01 | FURNACE F STACK | 146425, PSDTX1518 |
| O_FGF01 | FURNACE G STACK | 146425, PSDTX1518 |
| O_FHF01 | FURNACE H STACK | 146425, PSDTX1518 |

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 |
|---------------------------|--|---------------------------------|
| O_FUG | OLEFIN UNIT FUGITIVES | 146425, PSDTX1518 |
| O-REGEN | OLEFINS REGENERATION VENT (RFD24) | 146425, PSDTX1518 |
| O-VENTGAS | OLEFINS PROCESS VENT GAS | 146425, PSDTX1518 |
| PE-REGEN | PE REGENERATION VENT (EADR09/10) | 146425, PSDTX1518 |
| PROADDITIVE | CPE & EMPE ADDITIVE SOURCES | 146425, PSDTX1518 |
| PROCATLYST | CPE & EMPE CATALYST TRANSFER SOURCES | 146425, PSDTX1518 |
| PROEXTRUD | CPE & EMPE EXTRUDER SOURCES | 146425, PSDTX1518 |
| PROGRANULE | CPE & EMPE GRANULES SOURCES | 146425, PSDTX1518 |
| PROLOADOUT | CPE & EMPE LOADOUT SOURCES | 146425, PSDTX1518 |
| PROMEGCMPU | MEG CHEMICAL MANUFACTURING PROCESS UNIT (CMPU) | 146425, PSDTX1518 |
| PROPELLET | CPE & EMPE PELLET PRODUCT SOURCES | 146425, PSDTX1518 |
| PRO-RJT01 | BENZENE STRIPPER TREATMENT PROCESS | 146425, PSDTX1518 |
| RAD02 | DMS STORAGE DRUM | 146425, PSDTX1518 |
| RESIDLOAD | RESIDUE LOADING MSS | 146425, PSDTX1518 |
| RJT01 | BENZENE STRIPPER | 146425, PSDTX1518 |
| RLOAD-C3 | RAIL LOADING PROPYLENE (ZTLA04A-4D) | 146425, PSDTX1518 |
| RLOAD-GB | RAIL LOADING GLYCOL BLEED (ZTLA07A-7B) | 146425, PSDTX1518 |
| RLOAD-HFO | RAIL LOADING HFO (ZTLA05A-5B) | 146425, PSDTX1518 |
| RLOAD-HG | RAIL LOADING HEAVY GLYCOL (ZTLA06A-6B) | 146425, PSDTX1518 |
| RLOAD-MEG | RAIL LOADING MEG (ZTLA02A-2D) | 146425, PSDTX1518 |
| RLUNLOAD-A | RAIL UNLOADING AREA A | 146425, PSDTX1518 |

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 |
|---------------------------|--|---------------------------------|
| RLUNLOAD-B | RAIL UNLOADING AREA B | 146425, PSDTX1518 |
| SCTOTE-GLY | SPENT CATALYST TOTE | 146425, PSDTX1518 |
| SLOPUNLOAD | SLOP UNLOADING | 146425, PSDTX1518 |
| TKUNLOAD-A | TRUCK UNLOADING AREA A | 146425, PSDTX1518 |
| TKUNLOAD-B | TRUCK UNLOADING AREA B | 146425, PSDTX1518 |
| TLOAD-MEG | TRUCK LOADING MEG (ZTLA01A-1B) | 146425, PSDTX1518 |
| TLOAD-SLOP | TRUCK LOADING SLOP OIL (ZTLA03A-3B) | 146425, PSDTX1518 |
| TOTES | SITE TOTES | 146425, PSDTX1518 |
| U_FUG | UTILITIES FUGITIVES | 146425, PSDTX1518 |
| U_LAB | LABORATORY OPERATION VENTS | 146425, PSDTX1518 |
| UCCT01 | UTILITIES COOLING TOWER | 146425, PSDTX1518 |
| UCTK01 | HYPOCHLORITE STORAGE TANK | 146425, PSDTX1518 |
| UFF01A | OFFSITES & UTILITIES THERMAL OXIDIZER A | 146425, PSDTX1518 |
| UFF01B | OFFSITES & UTILITIES THERMAL OXIDIZER B | 146425, PSDTX1518 |
| UFFLARE01 | MULTI-POINT GROUND FLARE | 146425, PSDTX1518 |
| UFFLARE02 | SHARED ELEVATED LP FLARE | 146425, PSDTX1518 |
| UKDGEN01 | OLEFINS EMERGENCY GENERATOR NO. 1 | 146425, PSDTX1518 |
| UKDGEN01TK | OLEFINS EMERGENCY GENERATOR NO. 1 TANK | 146425, PSDTX1518 |
| UKDGEN02TK | UTILITIES EMERGENCY GENERATOR NO. 2 TANK | 146425, PSDTX1518 |
| UKDGEN02 | UTILITIES EMERGENCY GENERATOR NO. 2 | 146425, PSDTX1518 |
| USSG01A | UTILITIES BOILER A | 146425, PSDTX1518 |

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 |
|---------------------------|-----------------------------------|---------------------------------|
| USSG01B | UTILITIES BOILER B | 146425, PSDTX1518 |
| USSG01C | UTILITIES BOILER C | 146425, PSDTX1518 |
| UTD02 | AQUEOUS AMMONIA STORAGE DRUM | 146425, PSDTX1518 |
| UTD04 | WASH OIL STORAGE DRUM | 146425, PSDTX1518 |
| UTTK04 | SULFURIC ACID STORAGE TANK | 146425, PSDTX1518 |
| WASHUNLOAD | WASH OIL UNLOADING | 146425, PSDTX1518 |
| ZFP02B | FIREWATER PUMP NO. 1 | 146425, PSDTX1518 |
| ZFP02C | FIREWATER PUMP NO. 2 | 146425, PSDTX1518 |
| ZFTK02B | FIREWATER PUMP DIESEL TANK 2B | 146425, PSDTX1518 |
| ZFTK02C | FIREWATER PUMP DIESEL TANK 2C | 146425, PSDTX1518 |
| ZMTK01 | GASOLINE INFRASTRUCTURE TANK | 146425, PSDTX1518 |
| ZMTK02 | DIESEL INFRASTRUCTURE TANK | 146425, PSDTX1518 |
| ZTD08 | CONDENSING AGENT 1 STORAGE BULLET | 146425, PSDTX1518 |
| ZTD09 | CONDENSING AGENT 2 STORAGE BULLET | 146425, PSDTX1518 |
| ZTD10A | DILUTE PROPYLENE STORAGE BULLET | 146425, PSDTX1518 |
| ZTD10B | DILUTE PROPYLENE STORAGE BULLET | 146425, PSDTX1518 |
| ZTD10C | DILUTE PROPYLENE STORAGE BULLET | 146425, PSDTX1518 |
| ZTD11A | BUTENE STORAGE BULLET | 146425, PSDTX1518 |
| ZTD11B | BUTENE STORAGE BULLET | 146425, PSDTX1518 |
| ZTD12 | OILY WATER COALESCER | 146425, PSDTX1518 |
| ZTTK01 | CAUSTIC STORAGE TANK | 146425, PSDTX1518 |

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 |
|---------------------------|---------------------------------|---------------------------------|
| ZTTK02 | HEAVY GLYCOL STORAGE TANK | 146425, PSDTX1518 |
| ZTTK03 | GLYCOL BLEED STORAGE TANK | 146425, PSDTX1518 |
| ZTTK04 | SLOP OIL STORAGE TANK | 146425, PSDTX1518 |
| ZTTK05 | HEXENE STORAGE TANK | 146425, PSDTX1518 |
| ZTTK06A | HEAVY FUEL OIL STORAGE TANK | 146425, PSDTX1518 |
| ZTTK06B | HEAVY FUEL OIL STORAGE TANK | 146425, PSDTX1518 |
| ZWFOS01 | EQUALIZATION TANK 1 OIL SKIMMER | 146425, PSDTX1518 |
| ZWFOS02 | EQUALIZATION TANK 2 OIL SKIMMER | 146425, PSDTX1518 |
| ZWTK01 | EQUALIZATION TANK 1 | 146425, PSDTX1518 |
| ZWTK02 | EQUALIZATION TANK 2 | 146425, PSDTX1518 |

Appendix A

Acronym List 221

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 |
| CEMS | continuous emissions monitoring system |
| CFR | Code of Federal Regulations |
| COMS | continuous opacity monitoring system |
| CVS | closed vent system |
| D/FW | Dallas/Fort Worth (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 |
| gr/100 scf | grains per 100 standard cubic feet |
| HAP | hazardous air pollutant |
| H/G/B | Houston/Galveston/Brazoria (nonattainment area) |
| H ₂ S | hydrogen sulfide |
| ID No. | identification number |
| lb/hr | pound(s) per hour |
| MACT | Maximum Achievable Control Technology (40 CFR Part 63) |
| MMBtu/hr | Million British thermal units per hour |
| NA | nonattainment |
| N/A | not applicable |
| NADB | National Allowance Data Base |
| NESHAP | National Emission Standards for Hazardous Air Pollutants (40 CFR Part 61) |
| NO _x | 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 |
| PEMS | predictive emissions monitoring system |
| PM | particulate matter |
| ppmv | parts per million by volume |
| PRO | process unit |
| PSD | prevention of significant deterioration |
| psia | pounds per square inch absolute |
| SIP | state implementation plan |
| SO ₂ | 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 223

Major NSR Summary Table

| Permit Numbers: 146425 and PSDTX1518 | | | | | Issuance Date: November 27, 2019 | | |
|--------------------------------------|---------------------|--------------------------------|----------------|---------|---|---|---|
| Emission Point No. (1) | Source Name (2) | Air Contaminant Name (3) | Emission Rates | | Monitoring and Testing Requirements | Recordkeeping Requirements | Reporting Requirements |
| | | | lbs/hour | TPY (4) | Special Condition/Application Information | Special Condition/Application Information | Special Condition/Application Information |
| O_FAFO1 | Pyrolysis Furnace A | CO | 165.16 | — | 7, 18, 20, 21, 62, 63, 64, 66 | 7, 18, 20, 21, 62, 63, 64, 66, 67 | 7, 62, 66 |
| | | NO _x | 25.20 | — | | | |
| | | PM | 4.32 | — | | | |
| | | PM ₁₀ | 4.32 | — | | | |
| | | PM _{2.5} | 4.32 | — | | | |
| | | VOC | 3.12 | — | | | |
| | | SO ₂ | 0.34 | — | | | |
| | | H ₂ SO ₄ | 0.03 | — | | | |
| | | NH ₃ | 2.51 | — | | | |
| O_FBFO1 | Pyrolysis Furnace B | CO | 165.16 | — | 7, 18, 20, 21, 62, 63, 64, 66 | 7, 18, 20, 21, 62, 63, 64, 66, 67 | 7, 62, 66 |
| | | NO _x | 25.20 | — | | | |
| | | PM | 4.32 | — | | | |
| | | PM ₁₀ | 4.32 | — | | | |
| | | PM _{2.5} | 4.32 | — | | | |
| | | VOC | 3.12 | — | | | |

Major NSR Summary Table

| Permit Numbers: 146425 and PSDTX1518 | | | | | Issuance Date: November 27, 2019 | | |
|--------------------------------------|---------------------|--------------------------------|----------------|---------|---|---|---|
| Emission Point No. (1) | Source Name (2) | Air Contaminant Name (3) | Emission Rates | | Monitoring and Testing Requirements | Recordkeeping Requirements | Reporting Requirements |
| | | | lbs/hour | TPY (4) | Special Condition/Application Information | Special Condition/Application Information | Special Condition/Application Information |
| | | SO ₂ | 0.34 | — | | | |
| | | H ₂ SO ₄ | 0.03 | — | | | |
| | | NH ₃ | 2.51 | — | | | |
| O_FCF01 | Pyrolysis Furnace C | CO | 165.16 | — | 7,18, 20, 21, 62, 63, 64, 66 | 7,18, 20, 21, 62, 63, 64, 66, 67 | 7, 62, 66 |
| | | NO _x | 25.20 | — | | | |
| | | PM | 4.32 | — | | | |
| | | PM ₁₀ | 4.32 | — | | | |
| | | PM _{2.5} | 4.32 | — | | | |
| | | VOC | 3.12 | — | | | |
| | | SO ₂ | 0.34 | — | | | |
| | | H ₂ SO ₄ | 0.03 | — | | | |
| | | NH ₃ | 2.51 | — | | | |
| O_FDF01 | Pyrolysis Furnace D | CO | 165.16 | — | 7,18, 20, 21, 62, 63, 64, 66 | 7,18, 20, 21, 62, 63, 64, 66, 67 | 7, 62, 66 |
| | | NO _x | 25.20 | — | | | |
| | | PM | 4.32 | — | | | |

Major NSR Summary Table

| Permit Numbers: 146425 and PSDTX1518 | | | | | Issuance Date: November 27, 2019 | | |
|--------------------------------------|---------------------|--------------------------------|----------------|---------|---|---|---|
| Emission Point No. (1) | Source Name (2) | Air Contaminant Name (3) | Emission Rates | | Monitoring and Testing Requirements | Recordkeeping Requirements | Reporting Requirements |
| | | | lbs/hour | TPY (4) | Special Condition/Application Information | Special Condition/Application Information | Special Condition/Application Information |
| | | PM ₁₀ | 4.32 | — | | | |
| | | PM _{2.5} | 4.32 | — | | | |
| | | VOC | 3.12 | — | | | |
| | | SO ₂ | 0.34 | — | | | |
| | | H ₂ SO ₄ | 0.03 | — | | | |
| | | NH ₃ | 2.51 | — | | | |
| O_FEF01 | Pyrolysis Furnace E | CO | 165.16 | — | 7, 18, 20, 21, 62, 63, 64, 66 | 7, 18, 20, 21, 62, 63, 64, 66, 67 | 7, 62, 66 |
| | | NO _x | 25.20 | — | | | |
| | | PM | 4.32 | — | | | |
| | | PM ₁₀ | 4.32 | — | | | |
| | | PM _{2.5} | 4.32 | — | | | |
| | | VOC | 3.12 | — | | | |
| | | SO ₂ | 0.34 | — | | | |
| | | H ₂ SO ₄ | 0.03 | — | | | |
| | | NH ₃ | 2.51 | — | | | |

Major NSR Summary Table

| Permit Numbers: 146425 and PSDTX1518 | | | | | Issuance Date: November 27, 2019 | | |
|--------------------------------------|---------------------|--------------------------------|----------------|---------|---|---|---|
| Emission Point No. (1) | Source Name (2) | Air Contaminant Name (3) | Emission Rates | | Monitoring and Testing Requirements | Recordkeeping Requirements | Reporting Requirements |
| | | | lbs/hour | TPY (4) | Special Condition/Application Information | Special Condition/Application Information | Special Condition/Application Information |
| O_FFF01 | Pyrolysis Furnace F | CO | 165.16 | — | 7,18, 20, 21, 62, 63, 64, 66 | 7,18, 20, 21, 62, 63, 64, 66, 67 | 7, 62, 66 |
| | | NO _x | 25.20 | — | | | |
| | | PM | 4.32 | — | | | |
| | | PM ₁₀ | 4.32 | — | | | |
| | | PM _{2.5} | 4.32 | — | | | |
| | | VOC | 3.12 | — | | | |
| | | SO ₂ | 0.34 | — | | | |
| | | H ₂ SO ₄ | 0.03 | — | | | |
| | | NH ₃ | 2.51 | — | | | |
| O_FGF01 | Pyrolysis Furnace G | CO | 165.16 | — | 7,18, 20, 21, 62, 63, 64, 66 | 7,18, 20, 21, 62, 63, 64, 66, 67 | 7, 62, 66 |
| | | NO _x | 25.20 | — | | | |
| | | PM | 4.32 | — | | | |
| | | PM ₁₀ | 4.32 | — | | | |
| | | PM _{2.5} | 4.32 | — | | | |
| | | VOC | 3.12 | — | | | |

Major NSR Summary Table

| Permit Numbers: 146425 and PSDTX1518 | | | | | Issuance Date: November 27, 2019 | | |
|--------------------------------------|------------------------|--------------------------------|----------------|---------|---|---|---|
| Emission Point No. (1) | Source Name (2) | Air Contaminant Name (3) | Emission Rates | | Monitoring and Testing Requirements | Recordkeeping Requirements | Reporting Requirements |
| | | | lbs/hour | TPY (4) | Special Condition/Application Information | Special Condition/Application Information | Special Condition/Application Information |
| | | SO ₂ | 0.34 | — | | | |
| | | H ₂ SO ₄ | 0.03 | — | | | |
| | | NH ₃ | 2.51 | — | | | |
| O_FHF01 | Pyrolysis Furnace H | CO | 165.16 | — | 7, 18, 20, 21, 62, 63, 64, 66 | 7, 18, 20, 21, 62, 63, 64, 66, 67 | 7, 62, 66 |
| | | NO _x | 25.20 | — | | | |
| | | PM | 4.32 | — | | | |
| | | PM ₁₀ | 4.32 | — | | | |
| | | PM _{2.5} | 4.32 | — | | | |
| | | VOC | 3.12 | — | | | |
| | | SO ₂ | 0.34 | — | | | |
| | | H ₂ SO ₄ | 0.03 | — | | | |
| | | NH ₃ | 2.51 | — | | | |
| O_F_CAP | Pyrolysis Furnaces Cap | CO | 651.06 | 637.87 | 7, 20, 21 | 7, 20, 67 | 7, 66 |
| | | NO _x | 53.70 | 196.22 | | | |
| | | NO _x Shakedown | 53.70 | 184.22 | | | |

Major NSR Summary Table

| Permit Numbers: 146425 and PSDTX1518 | | | | | Issuance Date: November 27, 2019 | | |
|--------------------------------------|---|--------------------------------|----------------|---------|---|---|---|
| Emission Point No. (1) | Source Name (2) | Air Contaminant Name (3) | Emission Rates | | Monitoring and Testing Requirements | Recordkeeping Requirements | Reporting Requirements |
| | | | lbs/hour | TPY (4) | Special Condition/Application Information | Special Condition/Application Information | Special Condition/Application Information |
| | | PM | — | 92.85 | | | |
| | | PM ₁₀ | — | 92.85 | | | |
| | | PM _{2.5} | — | 92.85 | | | |
| | | VOC | — | 67.20 | | | |
| | | SO ₂ | — | 7.33 | | | |
| | | H ₂ SO ₄ | — | 0.67 | | | |
| | | NH ₃ | — | 77.46 | | | |
| UFFLARE01 | Multi-Point Ground Flare (Routine) | CO | 167.48 | — | 41, 42, 44 | 41, 42, 67 | 42 |
| | | NO _x | 109.51 | — | | | |
| | | VOC | 500.00 | — | | | |
| | | SO ₂ | 22.00 | — | | | |
| UFFLARE01 | Multi-Point Ground Flare (Planned MSS, alternate operating mode and Shakedown Period) (8) | CO | 4218.81 | — | 41, 42, 44 | 41, 42, 67 | 42 |
| | | NO _x | 2758.17 | — | | | |
| | | VOC | 5944.74 | — | | | |
| | | SO ₂ | 395.28 | — | | | |

Major NSR Summary Table

| Permit Numbers: 146425 and PSDTX1518 | | | | | Issuance Date: November 27, 2019 | | |
|--------------------------------------|--|--------------------------|----------------|---------|---|---|---|
| Emission Point No. (1) | Source Name (2) | Air Contaminant Name (3) | Emission Rates | | Monitoring and Testing Requirements | Recordkeeping Requirements | Reporting Requirements |
| | | | lbs/hour | TPY (4) | Special Condition/Application Information | Special Condition/Application Information | Special Condition/Application Information |
| UFFLARE02 | Shared Elevated Flare (Routine) | CO | 165.32 | — | 41, 42, 45 | 41, 42, 45, 67 | 42 |
| | | NO _x | 32.44 | — | | | |
| | | VOC | 300.00 | — | | | |
| | | SO ₂ | 98.00 | — | | | |
| UFFLARE02 | Shared Elevated Flare (Planned MSS, alternate operating mode and Shakedown Period) (8) | CO | 349.86 | — | 41, 42, 45 | 41, 42, 45, 67 | 42 |
| | | NO _x | 68.66 | — | | | |
| | | VOC | 916.17 | — | | | |
| | | SO ₂ | 98.00 | — | | | |
| CAPUFFLR | Shared Elevated and Ground Flare Cap | CO | — | 300.72 | | 67 | |
| | | NO _x | — | 149.36 | | | |
| | | VOC | — | 320.06 | | | |
| | | SO ₂ | — | 23.57 | | | |
| CAPUFFLR | Shared Elevated and Ground Flare Cap (Shakedown period) | NO _x | — | 194.38 | | 67 | |
| | | CO | — | 380.41 | | | |
| | | VOC | — | 422.30 | | | |

Major NSR Summary Table

| Permit Numbers: 146425 and PSDTX1518 | | | | | Issuance Date: November 27, 2019 | | |
|--------------------------------------|------------------------------|--------------------------------|----------------|---------|---|---|---|
| Emission Point No. (1) | Source Name (2) | Air Contaminant Name (3) | Emission Rates | | Monitoring and Testing Requirements | Recordkeeping Requirements | Reporting Requirements |
| | | | lbs/hour | TPY (4) | Special Condition/Application Information | Special Condition/Application Information | Special Condition/Application Information |
| | | SO2 | — | 23.57 | | | |
| O_FUG | Olefins Unit Fugitives (5) | VOC | 12.74 | 55.81 | 5, 7, 33, 34, 35, 54 | 5, 7, 33, 34, 35, 54, 67 | 5, 7, 33, 34 |
| | | NH ₃ | 2.00 | 8.76 | | | |
| | | CO | 0.04 | 0.16 | | | |
| | | H ₂ SO ₄ | < 0.01 | 0.02 | | | |
| | | H ₂ S | < 0.01 | 0.01 | | | |
| | | NaOH | < 0.01 | < 0.01 | | | |
| O-REGEN | Olefins Regeneration Vent | VOC | 0.18 | 0.06 | 10 | | |
| | | CO | 10.61 | 1.91 | | | |
| GFFLARE01 | MEG Elevated Flare (Routine) | CO | 41.89 | — | 41, 42 | 41, 42, 67 | 42 |
| | | NO _x | 8.22 | — | | | |
| | | VOC | 17.30 | — | | | |
| | | SO ₂ | 22.74 | — | | | |
| | | Total Halide | 0.92 | — | | | |
| GFFLARE01 | MEG Elevated Flare | CO | 310.95 | — | 41, 42 | 41, 42, 67 | 42 |

Major NSR Summary Table

| Permit Numbers: 146425 and PSDTX1518 | | | | | Issuance Date: November 27, 2019 | | |
|--------------------------------------|---------------------------------------|--------------------------|----------------|---------|---|---|---|
| Emission Point No. (1) | Source Name (2) | Air Contaminant Name (3) | Emission Rates | | Monitoring and Testing Requirements | Recordkeeping Requirements | Reporting Requirements |
| | | | lbs/hour | TPY (4) | Special Condition/Application Information | Special Condition/Application Information | Special Condition/Application Information |
| | (Planned MSS and Shakedown Period) | NO _x | 61.02 | — | | | |
| | | VOC | 214.98 | — | | | |
| | | SO ₂ | 22.74 | — | | | |
| | | Total Halide | 0.92 | — | | | |
| GFFLARE01 | MEG Elevated Flare | CO | — | 90.91 | 41, 42, 45 | 41, 42, 45, 67 | 42 |
| | | NO _x | — | 17.84 | | | |
| | | VOC | — | 17.66 | | | |
| | | SO ₂ | — | 0.43 | | | |
| | | Total Halide | — | 0.40 | | | |
| GFFLARE01 | MEG Elevated Flare (Shakedown Period) | CO | — | 106.65 | 41, 42, 45 | 41, 42, 45, 67 | 42 |
| | | NO _x | — | 20.93 | | | |
| | | VOC | — | 21.69 | | | |
| | | SO ₂ | — | 0.43 | | | |
| | | Total Halide | — | 0.40 | | | |

Major NSR Summary Table

| Permit Numbers: 146425 and PSDTX1518 | | | | | Issuance Date: November 27, 2019 | | |
|--------------------------------------|---------------------------|--------------------------|----------------|---------|---|---|---|
| Emission Point No. (1) | Source Name (2) | Air Contaminant Name (3) | Emission Rates | | Monitoring and Testing Requirements | Recordkeeping Requirements | Reporting Requirements |
| | | | lbs/hour | TPY (4) | Special Condition/Application Information | Special Condition/Application Information | Special Condition/Application Information |
| GBX02 | MEG Thermal Oxidizer | NO _x | 8.00 | 25.79 | 9, 18, 41, 42, 46, 62 | 9, 18, 41, 42, 46, 62, 67 | 42, 46, 62 |
| | | CO | 11.06 | 35.65 | | | |
| | | VOC | 21.10 | 41.43 | | | |
| | | SO ₂ | 1.75 | 0.38 | | | |
| | | PM | 1.00 | 3.23 | | | |
| | | PM ₁₀ | 1.00 | 3.23 | | | |
| | | PM _{2.5} | 1.00 | 3.23 | | | |
| | | Total Halide | 0.92 | 4.04 | | | |
| | | NH ₃ | 0.04 | < 0.01 | | | |
| GDVAC | Glycol Vacuum Vent | VOC | 3.43 | 0.34 | 9 | | |
| GAD09A-D | Glycol Moderator CAS | VOC | < 0.01 | < 0.01 | 11,47 | 47, 67 | |
| G_FUG | Glycol Unit Fugitives (5) | VOC | 2.22 | 9.73 | 5, 7, 33, 34, 54 | 5, 7, 33, 34, 54, 67 | 5, 7, 33,34 |
| | | CO | < 0.01 | 0.03 | | | |

Major NSR Summary Table

| Permit Numbers: 146425 and PSDTX1518 | | | | | Issuance Date: November 27, 2019 | | |
|--------------------------------------|-------------------------|--------------------------------|----------------|---------|---|---|---|
| Emission Point No. (1) | Source Name (2) | Air Contaminant Name (3) | Emission Rates | | Monitoring and Testing Requirements | Recordkeeping Requirements | Reporting Requirements |
| | | | lbs/hour | TPY (4) | Special Condition/Application Information | Special Condition/Application Information | Special Condition/Application Information |
| UCCT01 | Utilities Cooling Tower | VOC | 115.29 | 91.13 | 36 | 36, 67 | |
| | | PM | 8.07 | 31.56 | | | |
| | | PM ₁₀ | 5.65 | 22.09 | | | |
| | | PM _{2.5} | 3.39 | 13.26 | | | |
| | | NaOH | 0.03 | 0.01 | | | |
| USSG01A | Utilities Boiler A | NO _x | 35.25 | — | 5, 7, 18, 20, 23, 62, 63, 64, 66 | 5, 7, 18, 20, 23, 62, 63, 64, 66, 67 | 5, 7, 62, 66 |
| | | CO | 186.00 | — | | | |
| | | PM | 7.82 | — | | | |
| | | PM ₁₀ | 7.82 | — | | | |
| | | PM _{2.5} | 7.82 | — | | | |
| | | VOC | 5.66 | — | | | |
| | | SO ₂ | 5.22 | — | | | |
| | | H ₂ SO ₄ | 0.07 | — | | | |
| | | NH ₃ | 4.02 | — | | | |

Major NSR Summary Table

| Permit Numbers: 146425 and PSDTX1518 | | | | | Issuance Date: November 27, 2019 | | |
|--------------------------------------|--------------------|--------------------------------|----------------|---------|---|---|---|
| Emission Point No. (1) | Source Name (2) | Air Contaminant Name (3) | Emission Rates | | Monitoring and Testing Requirements | Recordkeeping Requirements | Reporting Requirements |
| | | | lbs/hour | TPY (4) | Special Condition/Application Information | Special Condition/Application Information | Special Condition/Application Information |
| USSG01B | Utilities Boiler B | NO _x | 35.25 | — | 5, 7, 18, 20, 23, 62, 63, 64, 66 | 5, 7, 18, 20, 23, 62, 63, 64, 66, 67 | 5, 7, 62, 66 |
| | | CO | 186.00 | — | | | |
| | | PM | 7.82 | — | | | |
| | | PM ₁₀ | 7.82 | — | | | |
| | | PM _{2.5} | 7.82 | — | | | |
| | | VOC | 5.66 | — | | | |
| | | SO ₂ | 5.22 | — | | | |
| | | H ₂ SO ₄ | 0.07 | — | | | |
| | | NH ₃ | 4.02 | — | | | |
| USSG01C | Utilities Boiler C | NO _x | 35.25 | — | 5, 7, 18, 20, 23, 62, 63, 64, 66 | 5, 7, 18, 20, 23, 62, 63, 64, 66, 67 | 5, 7, 62, 66 |
| | | CO | 186.00 | — | | | |
| | | PM | 7.82 | — | | | |
| | | PM ₁₀ | 7.82 | — | | | |
| | | PM _{2.5} | 7.82 | — | | | |
| | | VOC | 5.66 | — | | | |

Major NSR Summary Table

| Permit Numbers: 146425 and PSDTX1518 | | | | | Issuance Date: November 27, 2019 | | |
|--------------------------------------|---------------------------|--------------------------------|----------------|---------|---|---|---|
| Emission Point No. (1) | Source Name (2) | Air Contaminant Name (3) | Emission Rates | | Monitoring and Testing Requirements | Recordkeeping Requirements | Reporting Requirements |
| | | | lbs/hour | TPY (4) | Special Condition/Application Information | Special Condition/Application Information | Special Condition/Application Information |
| USSG01CAP | Utilities Boiler Cap | SO ₂ | 5.22 | — | 5, 7, 20, 23 | 5, 7, 20, 23, 67 | 5, 7, 20, 66 |
| | | H ₂ SO ₄ | 0.07 | — | | | |
| | | NH ₃ | 4.02 | — | | | |
| | | NO _x | 39.66 | 69.02 | | | |
| | | CO | 198.85 | 239.40 | | | |
| | | PM | — | 47.57 | | | |
| | | PM ₁₀ | — | 47.57 | | | |
| | | PM _{2.5} | — | 47.57 | | | |
| | | VOC | — | 34.43 | | | |
| UFF01A | Shared Thermal Oxidizer A | SO ₂ | 8.03 | 5.18 | 18, 41, 42, 46, 62, 63, 64, 66 | 18, 41, 42, 46, 62, 63, 64, 66, 67 | 42, 46, 62, 66 |
| | | H ₂ SO ₄ | — | 0.48 | | | |
| | | NH ₃ | — | 29.07 | | | |
| | | NO _x | — | — | | | |
| | | CO | — | — | | | |
| | | PM | — | — | | | |
| | | | | | | | |

Major NSR Summary Table

| Permit Numbers: 146425 and PSDTX1518 | | | | | Issuance Date: November 27, 2019 | | |
|--------------------------------------|-----------------|--------------------------|----------------|---------|---|---|---|
| Emission Point No. (1) | Source Name (2) | Air Contaminant Name (3) | Emission Rates | | Monitoring and Testing Requirements | Recordkeeping Requirements | Reporting Requirements |
| | | | lbs/hour | TPY (4) | Special Condition/Application Information | Special Condition/Application Information | Special Condition/Application Information |
| | | PM ₁₀ | — | — | | | |
| | | PM _{2.5} | — | — | | | |
| | | VOC | — | — | | | |
| | | SO ₂ | — | — | | | |

Major NSR Summary Table

| Permit Numbers: 146425 and PSDTX1518 | | | | | Issuance Date: November 27, 2019 | | |
|--------------------------------------|--|--------------------------|----------------|---------|---|---|---|
| Emission Point No. (1) | Source Name (2) | Air Contaminant Name (3) | Emission Rates | | Monitoring and Testing Requirements | Recordkeeping Requirements | Reporting Requirements |
| | | | lbs/hour | TPY (4) | Special Condition/Application Information | Special Condition/Application Information | Special Condition/Application Information |
| UFF01B | Shared Thermal Oxidizer B | NO _x | — | — | 18, 41, 42, 46, 62, 63, 64, 66 | 18, 41, 42, 46, 62, 63, 64, 66, 67 | 42, 46, 62, 66 |
| | | CO | — | — | | | |
| | | PM | — | — | | | |
| | | PM ₁₀ | — | — | | | |
| | | PM _{2.5} | — | — | | | |
| | | VOC | — | — | | | |
| | | SO ₂ | — | — | | | |
| UFF01 | Total emissions from EPNs UFF01A, UFF01B | NO _x | 18.80 | 29.11 | 18, 41, 42 | 18, 41, 42, 67 | 42, 66 |
| | | CO | 25.81 | 39.95 | | | |
| | | PM | 2.34 | 3.61 | | | |
| | | PM ₁₀ | 2.34 | 3.61 | | | |
| | | PM _{2.5} | 2.34 | 3.61 | | | |
| | | VOC | 114.96 | 63.33 | | | |
| | | SO ₂ | 1.13 | 1.49 | | | |
| U_FUG | Utilities Fugitives (5) | VOC | 0.95 | 4.18 | 5, 7, 33, 34, 35, 54 | 5, 7, 33, 34, 35, 54, 67 | 5, 7, 33 |

Major NSR Summary Table

| Permit Numbers: 146425 and PSDTX1518 | | | | | Issuance Date: November 27, 2019 | | |
|--------------------------------------|-----------------------------------|--------------------------------|----------------|---------|---|---|---|
| Emission Point No. (1) | Source Name (2) | Air Contaminant Name (3) | Emission Rates | | Monitoring and Testing Requirements | Recordkeeping Requirements | Reporting Requirements |
| | | | lbs/hour | TPY (4) | Special Condition/Application Information | Special Condition/Application Information | Special Condition/Application Information |
| | | NH ₃ | 0.22 | 0.96 | | | |
| | | CO | < 0.01 | 0.02 | | | |
| | | H ₂ SO ₄ | < 0.01 | < 0.01 | | | |
| EMGGEN01 | Olefins Emergency Generator No. 1 | NO _x | — | — | 5, 7, 60 | 5, 7, 60, 67 | 5, 7 |
| | | CO | — | — | | | |
| | | PM | — | — | | | |
| | | PM ₁₀ | — | — | | | |
| | | PM _{2.5} | — | — | | | |
| | | VOC | — | — | | | |
| | | SO ₂ | — | — | | | |

Major NSR Summary Table

| Permit Numbers: 146425 and PSDTX1518 | | | | | Issuance Date: November 27, 2019 | | |
|--------------------------------------|-------------------------------------|--------------------------|----------------|---------|---|---|---|
| Emission Point No. (1) | Source Name (2) | Air Contaminant Name (3) | Emission Rates | | Monitoring and Testing Requirements | Recordkeeping Requirements | Reporting Requirements |
| | | | lbs/hour | TPY (4) | Special Condition/Application Information | Special Condition/Application Information | Special Condition/Application Information |
| EMGGEN02 | Utilities Emergency Generator No. 2 | NO _x | — | — | 5, 7, 60 | 5, 7, 60, 67 | 5, 7 |
| | | CO | — | — | | | |
| | | PM | — | — | | | |
| | | PM ₁₀ | — | — | | | |
| | | PM _{2.5} | — | — | | | |
| | | VOC | — | — | | | |
| | | SO ₂ | — | — | | | |
| ADMINGEN | Admin Emergency Generator No. 1 | NO _x | — | — | 5, 7, 60 | 5, 7, 60, 67 | 5, 7 |
| | | CO | — | — | | | |
| | | PM | — | — | | | |
| | | PM ₁₀ | — | — | | | |
| | | PM _{2.5} | — | — | | | |
| | | VOC | — | — | | | |
| | | SO ₂ | — | — | | | |

Major NSR Summary Table

| Permit Numbers: 146425 and PSDTX1518 | | | | | Issuance Date: November 27, 2019 | | |
|--------------------------------------|-----------------------|--------------------------|----------------|---------|---|---|---|
| Emission Point No. (1) | Source Name (2) | Air Contaminant Name (3) | Emission Rates | | Monitoring and Testing Requirements | Recordkeeping Requirements | Reporting Requirements |
| | | | lbs/hour | TPY (4) | Special Condition/Application Information | Special Condition/Application Information | Special Condition/Application Information |
| U_GEN4 | Emergency Generator 4 | NO _x | — | — | 5, 7, 60 | 5, 7, 60, 67 | 5, 7 |
| | | CO | — | — | | | |
| | | PM | — | — | | | |
| | | PM ₁₀ | — | — | | | |
| | | PM _{2.5} | — | — | | | |
| | | VOC | — | — | | | |
| | | SO ₂ | — | — | | | |

Major NSR Summary Table

| Permit Numbers: 146425 and PSDTX1518 | | | | | Issuance Date: November 27, 2019 | | |
|--------------------------------------|-----------------------|--------------------------|----------------|---------|---|---|---|
| Emission Point No. (1) | Source Name (2) | Air Contaminant Name (3) | Emission Rates | | Monitoring and Testing Requirements | Recordkeeping Requirements | Reporting Requirements |
| | | | lbs/hour | TPY (4) | Special Condition/Application Information | Special Condition/Application Information | Special Condition/Application Information |
| U_GEN5 | Emergency Generator 5 | NO _x | — | — | 5, 7, 60 | 5, 7, 60, 67 | 5, 7 |
| | | CO | — | — | | | |
| | | PM | — | — | | | |
| | | PM ₁₀ | — | — | | | |
| | | PM _{2.5} | — | — | | | |
| | | VOC | — | — | | | |
| | | SO ₂ | — | — | | | |
| FWP1 | Firewater Pump No. 1 | NO _x | | | 5, 7, 60 | 5, 7, 60, 67 | 5, 7 |
| | | CO | | | | | |
| | | PM | | | | | |
| | | PM ₁₀ | | | | | |
| | | PM _{2.5} | | | | | |
| | | VOC | | | | | |
| | | SO ₂ | | | | | |

Major NSR Summary Table

| Permit Numbers: 146425 and PSDTX1518 | | | | | Issuance Date: November 27, 2019 | | |
|--------------------------------------|----------------------|--------------------------|----------------|---------|---|---|---|
| Emission Point No. (1) | Source Name (2) | Air Contaminant Name (3) | Emission Rates | | Monitoring and Testing Requirements | Recordkeeping Requirements | Reporting Requirements |
| | | | lbs/hour | TPY (4) | Special Condition/Application Information | Special Condition/Application Information | Special Condition/Application Information |
| FWP2 | Firewater Pump No. 2 | NO _x | — | — | 5, 7, 60 | 5, 7, 60, 67 | 5, 7 |
| | | CO | — | — | | | |
| | | PM | — | — | | | |
| | | PM ₁₀ | — | — | | | |
| | | PM _{2.5} | — | — | | | |
| | | VOC | — | — | | | |
| | | SO ₂ | — | — | | | |

Major NSR Summary Table

| Permit Numbers: 146425 and PSDTX1518 | | | | | Issuance Date: November 27, 2019 | | |
|--------------------------------------|--------------------------------------|--------------------------|----------------|---------|---|---|---|
| Emission Point No. (1) | Source Name (2) | Air Contaminant Name (3) | Emission Rates | | Monitoring and Testing Requirements | Recordkeeping Requirements | Reporting Requirements |
| | | | lbs/hour | TPY (4) | Special Condition/Application Information | Special Condition/Application Information | Special Condition/Application Information |
| FWPCAP | Total Emissions from EPNs FWP1, FWP2 | NO _x | 16.85 | 0.84 | 5, 7, 60 | 5, 7, 60, 67 | 5, 7 |
| | | CO | 9.21 | 0.46 | | | |
| | | PM | 0.53 | 0.03 | | | |
| | | PM ₁₀ | 0.53 | 0.03 | | | |
| | | PM _{2.5} | 0.53 | 0.03 | | | |
| | | VOC | 16.85 | 0.84 | | | |
| | | SO ₂ | 0.02 | < 0.01 | | | |
| GLYGEN01 | Glycol Emergency Generator No. 1 | NO _x | — | — | 5, 7, 60 | 5, 7, 60, 67 | 5, 7 |
| | | CO | — | — | | | |
| | | PM | — | — | | | |
| | | PM ₁₀ | — | — | | | |
| | | PM _{2.5} | — | — | | | |
| | | VOC | — | — | | | |
| | | SO ₂ | — | — | | | |
| EGENGCAP | | NO _x | 5.42 | 0.27 | 5, 7, 60 | 5, 7, 60, 67 | 5, 7 |

Major NSR Summary Table

| Permit Numbers: 146425 and PSDTX1518 | | | | | Issuance Date: November 27, 2019 | | |
|--------------------------------------|--|--------------------------|----------------|---------|---|---|---|
| Emission Point No. (1) | Source Name (2) | Air Contaminant Name (3) | Emission Rates | | Monitoring and Testing Requirements | Recordkeeping Requirements | Reporting Requirements |
| | | | lbs/hour | TPY (4) | Special Condition/Application Information | Special Condition/Application Information | Special Condition/Application Information |
| | Total emissions from EPNs EMGGEN01, EMGGEN02, ADMINGEN, U_GEN4, U_GEN5, GLYGEN01 | CO | 20.04 | 1.00 | | | |
| | | PM | 0.26 | 0.01 | | | |
| | | PM ₁₀ | 0.26 | 0.01 | | | |
| | | PM _{2.5} | 0.26 | 0.01 | | | |
| | | SO ₂ | 0.03 | < 0.01 | | | |
| | | VOC | 1.09 | 0.05 | | | |
| LIQLOAD | Truck/Railcar Liquid Loading (Uncaptured Emissions) | VOC | 4.19 | 2.35 | 28, 31 | 28, 29, 30, 32, 67 | |
| | | NaOH | 1.31 | 0.06 | | | |
| WWTP | Wastewater Plant (Uncontrolled emissions) | VOC | 1.05 | 4.58 | 37,38, 39, 40 | 37,38, 39, 40, 67 | |
| | | NH ₃ | < 0.01 | < 0.01 | | | |
| | | Acetone | < 0.01 | < 0.01 | | | |
| | | H ₂ S | < 0.01 | 0.01 | | | |

Major NSR Summary Table

| Permit Numbers: 146425 and PSDTX1518 | | | | | Issuance Date: November 27, 2019 | | |
|--------------------------------------|--|--------------------------|----------------|---------|---|---|---|
| Emission Point No. (1) | Source Name (2) | Air Contaminant Name (3) | Emission Rates | | Monitoring and Testing Requirements | Recordkeeping Requirements | Reporting Requirements |
| | | | lbs/hour | TPY (4) | Special Condition/Application Information | Special Condition/Application Information | Special Condition/Application Information |
| ZWSRCO1A/B | Equalization Tanks Catalytic Oxidizer | VOC | 0.04 | 0.18 | 39, 62 | 39, 62, 67 | 62 |
| | | NH ₃ | < 0.01 | < 0.01 | | | |
| | | Acetone | < 0.01 | < 0.01 | | | |
| | | H ₂ S | < 0.01 | < 0.01 | | | |
| | | NO _x | 0.06 | 0.26 | | | |
| | | CO | 0.02 | 0.10 | | | |
| | | PM | < 0.01 | 0.03 | | | |
| | | PM ₁₀ | < 0.01 | 0.03 | | | |
| | | PM _{2.5} | < 0.01 | 0.03 | | | |
| | | SO ₂ | 0.01 | 0.06 | | | |
| | | HCl | < 0.01 | 0.01 | | | |
| MSSATM | Maintenance, Startup and Shutdown (Uncontrolled emissions) | VOC | 445.47 | 4.44 | 50, 53, 54 | 48, 49, 50, 53, 54, 67 | |
| | | PM | 12.98 | 0.08 | | | |
| | | PM ₁₀ | 12.98 | 0.08 | | | |
| | | PM _{2.5} | 12.98 | 0.08 | | | |

Major NSR Summary Table

| Permit Numbers: 146425 and PSDTX1518 | | | | | Issuance Date: November 27, 2019 | | |
|--------------------------------------|--|--------------------------|----------------|---------|---|---|---|
| Emission Point No. (1) | Source Name (2) | Air Contaminant Name (3) | Emission Rates | | Monitoring and Testing Requirements | Recordkeeping Requirements | Reporting Requirements |
| | | | lbs/hour | TPY (4) | Special Condition/Application Information | Special Condition/Application Information | Special Condition/Application Information |
| MSSILE | Inherently Low Emitting Activities | VOC | 11.49 | 1.05 | | 48, 49, 67 | |
| | | PM | 0.02 | 0.01 | | | |
| MSSVAC | MSS Vacuum Trucks | VOC | 72.16 | 1.82 | 55 | 48, 49, 55, 67 | |
| MSSFRAC | MSS Frac Tanks | VOC | 0.03 | 0.03 | 56 | 48, 49, 56, 67 | |
| TMPCTRL | MSS Temporary Control Devices identified in Special Condition 57 | NO _x | 3.06 | 0.20 | 57 | 48, 49, 57, 67 | |
| | | CO | 8.80 | 0.66 | | | |
| | | PM | 0.30 | 0.02 | | | |
| | | PM ₁₀ | 0.30 | 0.02 | | | |
| | | PM _{2.5} | 0.30 | 0.02 | | | |
| | | VOC | 24.26 | 0.68 | | | |
| | | SO ₂ | 0.56 | 0.04 | | | |
| MSSTANK | Tank Maintenance Activities (Uncontrolled) | VOC | 20.11 | 3.53 | 51, 52, 54, 56 | 48, 49, 51, 52, 54, 56, 67 | |
| REFUSTN | Vehicle Refueling Station | VOC | 2.03 | 0.17 | | | |

Major NSR Summary Table

| Permit Numbers: 146425 and PSDTX1518 | | | | | Issuance Date: November 27, 2019 | | |
|--------------------------------------|---|--------------------------|----------------|---------|---|---|---|
| Emission Point No. (1) | Source Name (2) | Air Contaminant Name (3) | Emission Rates | | Monitoring and Testing Requirements | Recordkeeping Requirements | Reporting Requirements |
| | | | lbs/hour | TPY (4) | Special Condition/Application Information | Special Condition/Application Information | Special Condition/Application Information |
| ELDC01, E_LLFB_001 | EPE feed bin dust collectors | VOC | — | — | 15, 16 | 15, 16, 67 | |
| | | PM | — | — | | | |
| | | PM ₁₀ | — | — | | | |
| | | PM _{2.5} | — | — | | | |
| EDFAN01 | EPE granules hopper vent dust collector | VOC | — | — | 15, 16 | 15, 16, 67 | |
| | | PM | — | — | | | |
| | | PM ₁₀ | — | — | | | |
| | | PM _{2.5} | — | — | | | |
| E_DLSB_001, EDDC04 | EPE seed bed dust collectors | VOC | — | — | 15, 16 | 15, 16, 67 | |
| | | PM | — | — | | | |
| | | PM ₁₀ | — | — | | | |
| | | PM _{2.5} | — | — | | | |
| ELDC03, E_MPPX_001 | EPE extruder dust collectors | VOC | — | — | 15, 16 | 15, 16, 67 | |
| | | PM | — | — | | | |
| | | PM ₁₀ | — | — | | | |

Major NSR Summary Table

| Permit Numbers: 146425 and PSDTX1518 | | | | | Issuance Date: November 27, 2019 | | |
|--|---|--------------------------|----------------|---------|---|---|---|
| Emission Point No. (1) | Source Name (2) | Air Contaminant Name (3) | Emission Rates | | Monitoring and Testing Requirements | Recordkeeping Requirements | Reporting Requirements |
| | | | lbs/hour | TPY (4) | Special Condition/Application Information | Special Condition/Application Information | Special Condition/Application Information |
| | | PM _{2.5} | — | — | | | |
| EPFAN01, E_PLDS_007, E_PLDS_008, E_PLDS_009, E_PLDS_010 | EPE pellet silo vents | VOC | — | — | 15, 16 | 15, 16, 67 | |
| | | PM | — | — | | | |
| | | PM ₁₀ | — | — | | | |
| | | PM _{2.5} | — | — | | | |
| EMDC01, EMFAN01, EMFAN02 | EPE pellet surge bin dust collector, and pellet dryer vents | VOC | — | — | 15, 62 | 15, 62, 67 | 62 |
| | | PM | — | — | | | |
| | | PM ₁₀ | — | — | | | |
| | | PM _{2.5} | — | — | | | |
| ELFAN04, ELDC06, ELB01, ELB03, ELB05, ELFAN01 | EPE dry additive weigh feed hopper extraction vent, additive drying hopper dust collector, and four vacuum blower vents for additive transfer | VOC | — | — | 15, 16 | 15, 16, 67 | |
| | | PM | — | — | | | |
| | | PM ₁₀ | — | — | | | |
| | | PM _{2.5} | — | — | | | |
| EBFIL01, E_BCTS_002, E_BCTS_003, ECFIL04, ECFIL05, ECFIL06 | EPE catalyst vents | VOC | — | — | 15 | 15, 67 | |
| | | PM | — | — | | | |

Major NSR Summary Table

| Permit Numbers: 146425 and PSDTX1518 | | | | | Issuance Date: November 27, 2019 | | |
|--------------------------------------|---------------------------------------|--------------------------|----------------|---------|---|---|---|
| Emission Point No. (1) | Source Name (2) | Air Contaminant Name (3) | Emission Rates | | Monitoring and Testing Requirements | Recordkeeping Requirements | Reporting Requirements |
| | | | lbs/hour | TPY (4) | Special Condition/Application Information | Special Condition/Application Information | Special Condition/Application Information |
| | | PM ₁₀ | — | — | | | |
| | | PM _{2.5} | — | — | | | |
| E_LFBF_001 | EPE finishing building vent | VOC | — | — | 15, 16 | 15, 16, 67 | |
| | | PM | — | — | | | |
| | | PM ₁₀ | — | — | | | |
| | | PM _{2.5} | — | — | | | |
| E_VENTCAP | EPE Vents Cap (6) | VOC | 35.68 | 37.08 | 13, 14 | 13, 14, 67 | |
| | | PM | 1.26 | 2.77 | | | |
| | | PM ₁₀ | 1.26 | 2.77 | | | |
| | | PM _{2.5} | 1.26 | 2.77 | | | |
| CLDC01, C_LLFB_001 | CPE granules feed bin dust collectors | VOC | — | — | 15, 16 | 15, 16, 67 | |
| | | PM | — | — | | | |
| | | PM ₁₀ | — | — | | | |
| | | PM _{2.5} | — | — | | | |
| CDFAN01 | | VOC | — | — | 15, 16 | 15, 16, 67 | |

Major NSR Summary Table

| Permit Numbers: 146425 and PSDTX1518 | | | | | Issuance Date: November 27, 2019 | | |
|---|---|--------------------------|----------------|---------|---|---|---|
| Emission Point No. (1) | Source Name (2) | Air Contaminant Name (3) | Emission Rates | | Monitoring and Testing Requirements | Recordkeeping Requirements | Reporting Requirements |
| | | | lbs/hour | TPY (4) | Special Condition/Application Information | Special Condition/Application Information | Special Condition/Application Information |
| | CPE granules hopper vent dust collector | PM | — | — | | | |
| | | PM ₁₀ | — | — | | | |
| | | PM _{2.5} | — | — | | | |
| C_DLSB_001, CDDC04 | CPE seed bed dust collectors | VOC | — | — | 15, 16 | 15, 16, 67 | |
| | | PM | — | — | | | |
| | | PM ₁₀ | — | — | | | |
| | | PM _{2.5} | — | — | | | |
| CLDC03, C_MPPX_001 | CPE extruder vents | VOC | — | — | 15, 16 | 15, 16, 67 | |
| | | PM | — | — | | | |
| | | PM ₁₀ | — | — | | | |
| | | PM _{2.5} | — | — | | | |
| CPFAN01, C_PLDS_007, C_PLDS_008, C_PLDS_009, C_PLDS_010 | CPE pellet silo vents | VOC | — | — | 15, 16 | 15, 16, 67 | |
| | | PM | — | — | | | |
| | | PM ₁₀ | — | — | | | |
| | | PM _{2.5} | — | — | | | |

Major NSR Summary Table

| Permit Numbers: 146425 and PSDTX1518 | | | | | Issuance Date: November 27, 2019 | | |
|--|---|--------------------------|----------------|---------|---|---|---|
| Emission Point No. (1) | Source Name (2) | Air Contaminant Name (3) | Emission Rates | | Monitoring and Testing Requirements | Recordkeeping Requirements | Reporting Requirements |
| | | | lbs/hour | TPY (4) | Special Condition/Application Information | Special Condition/Application Information | Special Condition/Application Information |
| CMD01, CMFAN01, CMFAN02 | CPE pellet surge bin dust collector, and CPE pellet dryer vents | VOC | — | — | 15, 62 | 15, 62, 67 | 62 |
| | | PM | — | — | | | |
| | | PM ₁₀ | — | — | | | |
| | | PM _{2.5} | — | — | | | |
| CLFAN04, CLDC06, ELB02, ELB04, CLB03, C_LADD_007 | CPE dry additive vents | VOC | — | — | 15, 16 | 15, 16, 67 | |
| | | PM | — | — | | | |
| | | PM ₁₀ | — | — | | | |
| | | PM _{2.5} | — | — | | | |
| CBFIL01, C_BCTS_002, C_BCTS_003, CCFIL04, CCFIL05, CCFIL06 | CPE catalyst vents | VOC | — | — | 15 | 15, 67 | |
| | | PM | — | — | | | |
| | | PM ₁₀ | — | — | | | |
| | | PM _{2.5} | — | — | | | |

Major NSR Summary Table

| Permit Numbers: 146425 and PSDTX1518 | | | | | Issuance Date: November 27, 2019 | | |
|--------------------------------------|---|--------------------------|----------------|---------|---|---|---|
| Emission Point No. (1) | Source Name (2) | Air Contaminant Name (3) | Emission Rates | | Monitoring and Testing Requirements | Recordkeeping Requirements | Reporting Requirements |
| | | | lbs/hour | TPY (4) | Special Condition/Application Information | Special Condition/Application Information | Special Condition/Application Information |
| C_LFBF_001 | CPE finishing building vent | VOC | — | — | 15, 16 | 15, 16, 67 | |
| | | PM | — | — | | | |
| | | PM ₁₀ | — | — | | | |
| | | PM _{2.5} | — | — | | | |
| C_VENTCAP | CPE Vents Cap (7) | VOC | 35.68 | 37.08 | 13, 14 | 13, 14, 67 | |
| | | PM | 1.26 | 2.79 | | | |
| | | PM ₁₀ | 1.26 | 2.79 | | | |
| | | PM _{2.5} | 1.26 | 2.79 | | | |
| PE-REGEN | PE Regeneration Vent | VOC | < 0.01 | < 0.01 | 10 | | |
| E_FUG, C_FUG | EPE and CPE Fugitives (5) | VOC | 4.38 | 19.17 | 5, 7, 33, 34, 54 | 5, 7, 33, 34, 54, 67 | 5, 7, 33 |
| | | CO | 0.07 | 0.32 | | | |
| UTTK101T | PyGas Day Tank 1 | VOC | — | — | 5, 24, 25 | 5, 24, 25, 26, 67 | 5 |
| UTTK102T | PyGas Day Tank 2 | VOC | — | — | 5, 24, 25 | 5, 24, 25, 26, 67 | 5 |
| CAPTPYG | Total emissions from EPNs UTTK101T and UTTK102T | VOC | 2.26 | 2.43 | 5, 24, | 5, 24, 26, 67 | 5 |

Major NSR Summary Table

| Permit Numbers: 146425 and PSDTX1518 | | | | | Issuance Date: November 27, 2019 | | |
|--------------------------------------|---|--------------------------|----------------|---------|---|---|---|
| Emission Point No. (1) | Source Name (2) | Air Contaminant Name (3) | Emission Rates | | Monitoring and Testing Requirements | Recordkeeping Requirements | Reporting Requirements |
| | | | lbs/hour | TPY (4) | Special Condition/Application Information | Special Condition/Application Information | Special Condition/Application Information |
| UTTK103T | Sulfidic Caustic Day Tank 1 | VOC | — | — | 5, 24, 25 | 5, 24, 25, 26, 67 | 5 |
| | | NaOH | — | — | | | |
| | | H ₂ S | — | — | | | |
| UTTK104T | Sulfidic Caustic Day Tank 2 | VOC | — | — | 5, 24, 25 | 5, 24, 25, 26, 67 | 5 |
| | | NaOH | — | — | | | |
| | | H ₂ S | — | — | | | |
| CAPTSC | Total Emissions from EPNs UTTK103T and UTTK104T | VOC | < 0.01 | < 0.01 | 5, 24 | 5, 24, 26, 67 | 5 |
| | | NaOH | 0.78 | 0.17 | | | |
| | | H ₂ S | < 0.01 | < 0.01 | | | |
| UTTK100T | Diesel Day Tank 1 | VOC | 0.33 | 0.04 | 24, 25 | 24, 25, 26, 67 | |
| ELD01 | EPE Primary Run Tank | VOC | — | — | 24, 25 | 24, 25, 26, 67 | |
| ELD02 | EPE Secondary Run Tank | VOC | — | — | 24, 25 | 24, 25, 26, 67 | |
| EM_ETANK_3 | EPE Additive Tank 3 | VOC | — | — | 24, 25 | 24, 25, 26, 67 | |
| EM_ETANK_4 | EPE Additive Tank 4 | VOC | — | — | 24, 25 | 24, 25, 26, 67 | |
| CAPTADD | Total Emissions from | VOC | 0.93 | < 0.01 | 24 | 24, 26, 67 | |

Major NSR Summary Table

| Permit Numbers: 146425 and PSDTX1518 | | | | | Issuance Date: November 27, 2019 | | |
|--------------------------------------|---|--------------------------|----------------|---------|---|---|---|
| Emission Point No. (1) | Source Name (2) | Air Contaminant Name (3) | Emission Rates | | Monitoring and Testing Requirements | Recordkeeping Requirements | Reporting Requirements |
| | | | lbs/hour | TPY (4) | Special Condition/Application Information | Special Condition/Application Information | Special Condition/Application Information |
| | EPNs ELD01, ELD02, EM_ETANK_3, EM_ETANK_4 | | | | | | |
| CPETANK_1 | CPE Seal Oil Tank 1 | VOC | — | — | 24, 25 | 24, 25, 26, 67 | |
| CPETANK_2 | CPE Seal Oil Tank 2 | VOC | — | — | 24, 25 | 24, 25, 26, 67 | |
| CPETANK_3 | CPE Seal Oil Tank 3 | VOC | — | — | 24, 25 | 24, 25, 26, 67 | |
| CAPTSO | Total Emissions from EPNs CPETANK_1, CPETANK_2, CPETANK_3 | VOC | < 0.01 | < 0.01 | 24 | 24, 26, 67 | |
| CPETANK_4 | CPE Additive Tank 1 | VOC | — | — | 24, 25 | 24, 25, 26, 67 | |
| CCD81 | CPE Seal Pot | VOC | — | — | 24, 25 | 24, 25, 26, 67 | |
| CPETANK_6 | CPE Additive Tank 3 | VOC | — | — | 24, 25 | 24, 25, 26, 67 | |
| CAPTMO | Total Emissions from EPNs CPETANK_4, CCD81, CPETANK_6 | VOC | < 0.01 | < 0.01 | 24, | 24, 26, 67 | |
| GETK02A | MEG Rundown Tank 2A | VOC | — | — | 24, 25 | 24, 25, 26, 67 | |
| GETK02B | MEG Rundown Tank 2B | VOC | — | — | 24, 25 | 24, 25, 26, 67 | |
| GTK_502C | Glycol Rail and Truck Tank | VOC | — | — | 24, 25, | 24, 25, 26, 67 | |

Major NSR Summary Table

| Permit Numbers: 146425 and PSDTX1518 | | | | | Issuance Date: November 27, 2019 | | |
|--------------------------------------|--|--------------------------|----------------|---------|---|---|---|
| Emission Point No. (1) | Source Name (2) | Air Contaminant Name (3) | Emission Rates | | Monitoring and Testing Requirements | Recordkeeping Requirements | Reporting Requirements |
| | | | lbs/hour | TPY (4) | Special Condition/Application Information | Special Condition/Application Information | Special Condition/Application Information |
| CAPMEG | Total Emissions from EPNs GETK02A, GETK02B, GTK-502C | VOC | 2.73 | 0.29 | 24 | 24, 26, 67 | |
| GDTK01 | Glycol Catalyst Storage Tank | VOC | 0.43 | 0.01 | 24, 25, | 24, 25, 26, 67 | |
| GDD08 | Glycol Catalyst Charge Vessel | VOC | 0.32 | 0.01 | 24, 25, | 24, 25, 26, 67 | |
| GDD09 | Glycol Catalyst Drips Vessel | VOC | 0.04 | < 0.01 | 24, 25, | 24, 25, 26, 67 | |
| GETK01 | Glycol Slops Tank | VOC | 0.91 | 0.03 | 24, 25, | 24, 25, 26, 67 | |
| SCTOTE-GLY | Spent Glycol Catalyst Tote | VOC | 0.05 | < 0.01 | 24, 25, | 24, 25, 26, 67 | |
| ZTTK02 | Heavy Glycol Storage Tank | VOC | — | — | 24, 25, | 24, 25, 26, 67 | |
| ZTTK08T | Heavy Glycol Tank 2 | VOC | — | — | 24, 25, | 24, 25, 26, 67 | |
| CAPTHE | Total Emissions from EPNs ZTTK02, ZTTK08T | VOC | 1.82 | 0.01 | 24 | 24, 26, 67 | |
| ZTTK03 | Glycol Bleed Storage Tank | VOC | — | — | 24, 25 | 24, 25, 26, 67 | |
| GED04 | Glycol Drain Collection Vessel | VOC | — | — | 24, 25 | 24, 25, 26, 67 | |
| CAPTGB | Total Emissions from EPNs ZTTK03, GED04 | VOC | 0.64 | 0.01 | | 24, 26, 67 | |

Major NSR Summary Table

| Permit Numbers: 146425 and PSDTX1518 | | | | | Issuance Date: November 27, 2019 | | |
|--------------------------------------|--|--------------------------|----------------|---------|---|---|---|
| Emission Point No. (1) | Source Name (2) | Air Contaminant Name (3) | Emission Rates | | Monitoring and Testing Requirements | Recordkeeping Requirements | Reporting Requirements |
| | | | lbs/hour | TPY (4) | Special Condition/Application Information | Special Condition/Application Information | Special Condition/Application Information |
| ZTTK05 | Hexene Storage Tank | VOC | — | — | 5, 24, 25, | 5, 24, 25, 26, 67 | |
| ZTTK04 | EPE Hexene | VOC | — | — | 5, 24, 25, | 5, 24, 25, 26, 67 | |
| CAPTHEX | Total Emissions from EPNs ZTTK05, ZTTK04 | VOC | 1.34 | 3.31 | 5, 24, | 5, 24,26, 67 | |
| ZTTK06A | Heavy Fuel Oil Storage Tank 6A | VOC | — | — | 5, 7, 24, 25 | 5, 7, 24, 25, 26, 67 | 5, 7 |
| ZTTK06B | Heavy Fuel Oil Storage Tank 6B | VOC | — | — | 5, 7, 24, 25 | 5, 7, 24, 25, 26, 67 | 5, 7 |
| CAPTHFO | Total Emissions from EPNs ZTTK06A, ZTTK06B | VOC | 3.12 | 0.71 | 5, 7, 24 | 5,7, 24, 26, 67 | 5, 7 |
| ZTTK04 | Slop Oil Tank 1 | VOC | — | — | 5, 6, 7, 24, 25 | 5, 6, 7, 24, 25, 26, 67 | 5, 6, 7 |
| ZWTK17T | Slop Oil Tank 2 | VOC | — | — | 5, 6, 7, 24, 25 | 5, 6, 7, 24, 25, 26, 67 | 5, 6, 7 |
| CAPTSLO | Total Emissions from EPNs ZTTK04, ZWTK17T | VOC | 1.33 | 3.07 | 5, 6, 7, 24, | 5, 6, 7, 24, 26, 67 | 5, 6, 7 |
| ZWTK19 | WWTP Loading Spill Sump | VOC | — | — | 27 | | |
| ZWTK20 | WWTP Centrifuge Sump | VOC | — | — | 27 | | |
| ZTTK10 | OSBL Tankage Sump | VOC | — | — | 27 | | |

Major NSR Summary Table

| Permit Numbers: 146425 and PSDTX1518 | | | | | Issuance Date: November 27, 2019 | | |
|--------------------------------------|--------------------------------|--------------------------|----------------|---------|---|---|---|
| Emission Point No. (1) | Source Name (2) | Air Contaminant Name (3) | Emission Rates | | Monitoring and Testing Requirements | Recordkeeping Requirements | Reporting Requirements |
| | | | lbs/hour | TPY (4) | Special Condition/Application Information | Special Condition/Application Information | Special Condition/Application Information |
| ZFTK05 | Heat Exchanger Cleaning Sump | VOC | — | — | 27 | | |
| EM_ETANK_S | EPE Sump | VOC | — | — | 27 | | |
| CPETANK_S | CPE Sump | VOC | — | — | 27 | | |
| FZTK01 | Olefins Decoke Condensate Sump | VOC | — | — | 27 | | |
| OTANK_S2 | Olefins Sump 2 | VOC | — | — | 27 | | |
| OTANK_S3 | Olefins Sump 3 | VOC | — | — | 27 | | |
| OTANK_S4 | Olefins Sump 4 | VOC | — | — | 27 | | |
| OTANK_S5 | Olefins Sump 5 | VOC | — | — | 27 | | |
| GFTK01 | Glycol Flare Seal Sump | VOC | — | — | 27 | | |
| UTANK_S | Utilities Sump | VOC | — | — | 27 | | |

Major NSR Summary Table

| Permit Numbers: 146425 and PSDTX1518 | | | | | Issuance Date: November 27, 2019 | | |
|--------------------------------------|--|--------------------------|----------------|---------|---|---|---|
| Emission Point No. (1) | Source Name (2) | Air Contaminant Name (3) | Emission Rates | | Monitoring and Testing Requirements | Recordkeeping Requirements | Reporting Requirements |
| | | | lbs/hour | TPY (4) | Special Condition/Application Information | Special Condition/Application Information | Special Condition/Application Information |
| CAPTSUM | Total Emissions from EPNs ZWTK19, ZWTK20, ZTTK10, ZFTK05, EM_ETANK_S, CPETANK_S, FZTK01, OTANK_S2, OTANK_S3, OTANK_S4, OTANK_S5, GFTK01, UTANK_S | VOC | 5.69 | 0.10 | 27 | | |
| ZWTK07 | Wastewater Slop Tank 1 | VOC | — | — | 5, 7, 24, 25 | 5, 7, 24, 25, 26, 67 | 5, 7 |
| ZWTK06 | Wastewater Slop Tank 2 | VOC | — | — | 5, 7, 24, 25, | 5, 7, 24, 25, 26, 67 | 5, 7 |
| CAPTWWSL | Total Emissions from EPNs ZWTK07, ZWTK06 | VOC | 0.48 | 0.15 | 5, 7, 24, | 5, 7, 24, 26, 67 | 5, 7 |
| ZFTK02B | Firewater Pump Diesel Tank 2B | VOC | — | — | 24, 25 | 24, 25, 26, 67 | |
| ZMTK02 | Infrastructure Diesel Tank | VOC | — | — | 24, 25 | 24, 25, 26, 67 | |
| CAPTDSL | Total Emissions from EPNs ZFTK02B, ZMTK02 | VOC | 0.04 | < 0.01 | 24 | 24, 26, 67 | |
| UKDGEN01TK | Olefins Emergency Generator No. 1 Diesel Tank | VOC | — | — | 24, 25 | 24, 25, 26, 67 | |

Major NSR Summary Table

| Permit Numbers: 146425 and PSDTX1518 | | | | | Issuance Date: November 27, 2019 | | |
|--------------------------------------|---|--------------------------|----------------|---------|---|---|---|
| Emission Point No. (1) | Source Name (2) | Air Contaminant Name (3) | Emission Rates | | Monitoring and Testing Requirements | Recordkeeping Requirements | Reporting Requirements |
| | | | lbs/hour | TPY (4) | Special Condition/Application Information | Special Condition/Application Information | Special Condition/Application Information |
| UKDGEN02TK | Utilities Emergency Generator No. 2 Diesel Tank | VOC | — | — | 24, 25 | 24, 25, 26, 67 | |
| ADMINGENTK | Admin Emergency Generator No 1 Diesel Tank | VOC | — | — | 24, 25 | 24, 25, 26, 67 | |
| TKUGEN4 | Generator 4 Diesel Tank | VOC | — | — | 24, 25 | 24, 25, 26, 67 | |
| TKUGEN5 | Generator 5 Diesel Tank | VOC | — | — | 24, 25 | 24, 25, 26, 67 | |
| ZFTK02C | Firewater Pump Diesel Tank 2C | VOC | — | — | 24, 25 | 24, 25, 26, 67 | |
| GUDGEN01TK | Glycol Generator Diesel Tank | VOC | — | — | 24, 25 | 24, 25, 26, 67 | |
| CAPEDSL | Total Emissions from EPNs UKDGEN01TK, UKDGEN02TK, ADMINGENTK, TKUGEN4, TKUGEN5, ZFTK02C, GUDGEN01TK | VOC | 0.08 | < 0.01 | 24 | 24, 26, 67 | |
| ZMTK01 | Infrastructure Gasoline Tank | VOC | — | — | 24, 25 | 24, 25, 26, 67 | |
| ZFTK04 | Fire Training Gasoline Tank | VOC | — | — | 24, 25 | 24, 25, 26, 67 | |

Major NSR Summary Table

| Permit Numbers: 146425 and PSDTX1518 | | | | | Issuance Date: November 27, 2019 | | |
|--------------------------------------|--|--------------------------------|----------------|---------|---|---|---|
| Emission Point No. (1) | Source Name (2) | Air Contaminant Name (3) | Emission Rates | | Monitoring and Testing Requirements | Recordkeeping Requirements | Reporting Requirements |
| | | | lbs/hour | TPY (4) | Special Condition/Application Information | Special Condition/Application Information | Special Condition/Application Information |
| CAPTGAS | Total Emissions from EPNs ZMTK01, ZFTK04 | VOC | 11.57 | 1.78 | 24, | 24, 26, 67 | |
| TOTES | Site Totes | VOC | 0.86 | < 0.01 | | | |
| INORG | Inorganic Chemicals Storage | H ₂ SO ₄ | < 0.01 | < 0.01 | | | |
| | | NaOCl | 0.29 | < 0.01 | | | |
| U_NH3SMP | Ammonia Diffusion Chamber | NH ₃ | 0.14 | 0.01 | 61 | | |
| U_NH3WW | Ammonia Wastewater Collection Vessel | NH ₃ | 0.39 | 0.04 | 61 | 61 | |
| U_LAB | Laboratory | VOC | 9.43 | 1.72 | 59 | 59 | |

(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_x - total oxides of nitrogen

SO₂ - sulfur dioxide

PM - total particulate matter, suspended in the atmosphere, including PM₁₀ and PM_{2.5}, as represented

PM₁₀ - total particulate matter equal to or less than 10 microns in diameter, including PM_{2.5}, as represented

PM_{2.5} - particulate matter equal to or less than 2.5 microns in diameter

CO - carbon monoxide

NaOH - sodium hydroxide

NH₃ - ammonia

HCl - hydrogen chloride

HI - hydrogen iodide

H₂SO₄ - sulfuric acid mist

H₂S - hydrogen sulfide

Total Halide - combined emissions of hydrogen chloride and hydrogen iodide.

- (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.
- (6) Includes total emissions for the following sources of emissions (designated by EPN): ELDC01, E_LLFB_001, EDFAN01, E_DLSB_001, EDDC04, ELDC03, E_MPPX_001, EPFAN01, E_PLDS_007, E_PLDS_008, E_PLDS_009, E_PLDS_010, EMDC01, EMFAN01, EMFAN02, ELFAN04, ELDC06, ELB01, ELB03, ELB05, ELFAN01, EBFIL01, E_BCTS_002, E_BCTS_003, ECFIL04, ECFIL05, ECFIL06, E_LFBF_001
- (7) Includes total emissions for the following sources of emissions (designated by EPN): CLDC01, C_LLFB_001, CDFAN01, C_DLSB_001, CDDC04, CLDC03, C_MPPX_001, CPFAN01, C_PLDS_007, C_PLDS_008, C_PLDS_009, C_PLDS_010, CMDC01, CMFAN01, CMFAN02, CLFAN04, CLDC06, ELB02, ELB04, CLB03, C_LADD_007, CBFIL01, C_BCTS_002, C_BCTS_003, CCFIL04, CCFIL05, CCFIL06, C_LFBF_001
- (8) Alternate operating mode as defined in Special Condition 48.

Major NSR Summary Table

| Permit Number: GHGPSDTX170 | | | | Issuance Date: November 27, 2019 | | |
|----------------------------|---------------------|--------------------------|----------------|---|---|---|
| Emission Point No. (1) | Source Name (2) | Air Contaminant Name (3) | Emission Rates | Monitoring and Testing Requirements | Recordkeeping Requirements | Reporting Requirements |
| | | | TPY (4) | Special Condition/Application Information | Special Condition/Application Information | Special Condition/Application Information |
| O_FAF01 | Pyrolysis Furnace A | CO ₂ (5) | — | 5, 7 | 5, 7 | |
| | | CH ₄ (5) | — | | | |
| | | N ₂ O (5) | — | | | |
| | | CO ₂ e | — | | | |
| O_FBF01 | Pyrolysis Furnace B | CO ₂ (5) | — | 5, 7 | 5, 7 | |
| | | CH ₄ (5) | — | | | |
| | | N ₂ O (5) | — | | | |
| | | CO ₂ e | — | | | |
| O_FCF01 | Pyrolysis Furnace C | CO ₂ (5) | — | 5, 7 | 5, 7 | |
| | | CH ₄ (5) | — | | | |
| | | N ₂ O (5) | — | | | |
| | | CO ₂ e | — | | | |
| O_FDF01 | Pyrolysis Furnace D | CO ₂ (5) | — | 5, 7 | 5, 7 | |
| | | CH ₄ (5) | — | | | |
| | | N ₂ O (5) | — | | | |
| | | CO ₂ e | — | | | |
| O_FEF01 | Pyrolysis Furnace E | CO ₂ (5) | — | 5, 7 | 5, 7 | |
| | | CH ₄ (5) | — | | | |

Major NSR Summary Table

| Permit Number: GHGPSDTX170 | | | | Issuance Date: November 27, 2019 | | |
|----------------------------|--|--------------------------|----------------|---|---|---|
| Emission Point No. (1) | Source Name (2) | Air Contaminant Name (3) | Emission Rates | Monitoring and Testing Requirements | Recordkeeping Requirements | Reporting Requirements |
| | | | TPY (4) | Special Condition/Application Information | Special Condition/Application Information | Special Condition/Application Information |
| | | N ₂ O (5) | — | | | |
| | | CO ₂ e | — | | | |
| O_FFF01 | Pyrolysis Furnace F | CO ₂ (5) | — | 5, 7 | 5, 7 | |
| | | CH ₄ (5) | — | | | |
| | | N ₂ O (5) | — | | | |
| | | CO ₂ e | — | | | |
| O_FGF01 | Pyrolysis Furnace G | CO ₂ (5) | — | 5, 7 | 5, 7 | |
| | | CH ₄ (5) | — | | | |
| | | N ₂ O (5) | — | | | |
| | | CO ₂ e | — | | | |
| O_FHF01 | Pyrolysis Furnace H | CO ₂ (5) | — | 5, 7 | 5, 7 | |
| | | CH ₄ (5) | — | | | |
| | | N ₂ O (5) | — | | | |
| | | CO ₂ e | — | | | |
| O_F_CAP | Total Emissions from EPNs O_FAF01, O_FBF01, O_FCF01, O_FDF01, O_FEF01, O_FFF01, O_FGF01, O_FHF01 | CO ₂ (5) | 1555774 | 5, 7 | 5, 7 | |
| | | CH ₄ (5) | 129.8 | | | |
| | | N ₂ O (5) | 25.96 | | | |
| | | CO ₂ e | 1566756 | | | |

Major NSR Summary Table

| Permit Number: GHGPSDTX170 | | | | Issuance Date: November 27, 2019 | | |
|----------------------------|--|--------------------------|----------------|---|---|---|
| Emission Point No. (1) | Source Name (2) | Air Contaminant Name (3) | Emission Rates | Monitoring and Testing Requirements | Recordkeeping Requirements | Reporting Requirements |
| | | | TPY (4) | Special Condition/Application Information | Special Condition/Application Information | Special Condition/Application Information |
| UFFLARE01 | Multi-point Ground Flare | CO ₂ (5) | — | 8 | 8 | |
| | | CH ₄ (5) | — | | | |
| | | N ₂ O (5) | — | | | |
| | | CO ₂ e | — | | | |
| UFFLARE02 | Shared Elevated Flare | CO ₂ (5) | — | 8 | 8 | |
| | | CH ₄ (5) | — | | | |
| | | N ₂ O (5) | — | | | |
| | | CO ₂ e | — | | | |
| CAPUFFLR | Total Emissions from EPNs UFFLARE 01, UFFLARE02 | CO ₂ (5) | 137888 | 8 | 8 | |
| | | CH ₄ (5) | 86.3 | | | |
| | | N ₂ O (5) | 1.38 | | | |
| | | CO ₂ e | 140456 | | | |
| CAPUFFLR | Total Emissions from EPNs UFFLARE 01, UFFLARE02 (Shakedown Period) | CO ₂ (5) | 176085 | 8, 11 | 8, 11 | |
| | | CH ₄ (5) | 106.8 | | | |
| | | N ₂ O (5) | 1.76 | | | |
| | | CO ₂ e | 179256 | | | |
| O-REGEN | Olefins Regeneration Vent | CO ₂ (5) | 17 | | | |
| | | CO ₂ e | 17 | | | |

Major NSR Summary Table

| Permit Number: GHGPSDTX170 | | | | Issuance Date: November 27, 2019 | | |
|----------------------------|---|--------------------------|----------------|---|---|---|
| Emission Point No. (1) | Source Name (2) | Air Contaminant Name (3) | Emission Rates | Monitoring and Testing Requirements | Recordkeeping Requirements | Reporting Requirements |
| | | | TPY (4) | Special Condition/Application Information | Special Condition/Application Information | Special Condition/Application Information |
| GFFLARE01 | MEG Elevated Flare | CO ₂ (5) | — | 9 | 9 | |
| | | CH ₄ (5) | — | | | |
| | | N ₂ O (5) | — | | | |
| | | CO ₂ e | — | | | |
| GBX02 | MEG Thermal Oxidizer | CO ₂ (5) | — | 9 | 9 | |
| | | CH ₄ (5) | — | | | |
| | | N ₂ O (5) | — | | | |
| | | CO ₂ e | — | | | |
| GLYCAP | Total Emissions from EPNs GFFLARE01, GBX02 | CO ₂ (5) | 425835 | 9 | 9 | |
| | | CH ₄ (5) | 193.2 | | | |
| | | N ₂ O (5) | 0.91 | | | |
| | | CO ₂ e | 430938 | | | |
| GLYCAP | Total Emissions from EPNs GFFLARE01, GBX02 (Shakedown Period) | CO ₂ (5) | 431785 | 9, 11 | 9, 11 | |
| | | CH ₄ (5) | 197.0 | | | |
| | | N ₂ O (5) | 0.97 | | | |
| | | CO ₂ e | 436999 | | | |
| USSG01A | Utilities Boiler A | CO ₂ (5) | — | 5, 6 | 5, 6 | |
| | | CH ₄ (5) | — | | | |

Major NSR Summary Table

| Permit Number: GHGPSDTX170 | | | | Issuance Date: November 27, 2019 | | |
|----------------------------|---|--------------------------|----------------|---|---|---|
| Emission Point No. (1) | Source Name (2) | Air Contaminant Name (3) | Emission Rates | Monitoring and Testing Requirements | Recordkeeping Requirements | Reporting Requirements |
| | | | TPY (4) | Special Condition/Application Information | Special Condition/Application Information | Special Condition/Application Information |
| | | N ₂ O (5) | — | | | |
| | | CO ₂ e | — | | | |
| USSG01B | Utilities Boiler B | CO ₂ (5) | — | 5, 6 | 5, 6 | |
| | | CH ₄ (5) | — | | | |
| | | N ₂ O (5) | — | | | |
| | | CO ₂ e | — | | | |
| USSG01C | Utilities Boiler C | CO ₂ (5) | — | 5, 6 | 5, 6 | |
| | | CH ₄ (5) | — | | | |
| | | N ₂ O (5) | — | | | |
| | | CO ₂ e | — | | | |
| USSG01CAP | Total Emissions from EPNs USSG01A, USSG01B, USSG01C | CO ₂ (5) | 676557 | 5, 6 | 5, 6 | |
| | | CH ₄ (5) | 45.6 | | | |
| | | N ₂ O (5) | 9.13 | | | |
| | | CO ₂ e | 680418 | | | |
| UFF01A | Shared Thermal Oxidizer A | CO ₂ (5) | — | 8 | 8 | |
| | | CH ₄ (5) | — | | | |
| | | N ₂ O (5) | — | | | |
| | | CO ₂ e | — | | | |

Major NSR Summary Table

| Permit Number: GHGPSDTX170 | | | | Issuance Date: November 27, 2019 | | |
|----------------------------|--|--------------------------|----------------|---|---|---|
| Emission Point No. (1) | Source Name (2) | Air Contaminant Name (3) | Emission Rates | Monitoring and Testing Requirements | Recordkeeping Requirements | Reporting Requirements |
| | | | TPY (4) | Special Condition/Application Information | Special Condition/Application Information | Special Condition/Application Information |
| UFF01B | Shared Thermal Oxidizer B | CO ₂ (5) | — | 8 | 8 | |
| | | CH ₄ (5) | — | | | |
| | | N ₂ O (5) | — | | | |
| | | CO ₂ e | — | | | |
| UFF01 | Total Emissions from EPNs UFF01A, UFF01B | CO ₂ (5) | 63537 | 8 | 8 | |
| | | CH ₄ (5) | 191.8 | | | |
| | | N ₂ O (5) | 0.64 | | | |
| | | CO ₂ e | 68522 | | | |
| EMGGEN01 | Olefins Emergency Generator No. 1 | CO ₂ (5) | — | | | |
| | | CH ₄ (5) | — | | | |
| | | N ₂ O (5) | — | | | |
| | | CO ₂ e | — | | | |
| EMGGEN02 | Utilities Emergency Generator No. 2 | CO ₂ (5) | — | | | |
| | | CH ₄ (5) | — | | | |
| | | N ₂ O (5) | — | | | |
| | | CO ₂ e | — | | | |
| ADMINGEN | Admin Emergency Generator No. 1 | CO ₂ (5) | — | | | |
| | | CH ₄ (5) | — | | | |

Major NSR Summary Table

| Permit Number: GHGPSDTX170 | | | | Issuance Date: November 27, 2019 | | |
|----------------------------|----------------------------------|--------------------------|----------------|---|---|---|
| Emission Point No. (1) | Source Name (2) | Air Contaminant Name (3) | Emission Rates | Monitoring and Testing Requirements | Recordkeeping Requirements | Reporting Requirements |
| | | | TPY (4) | Special Condition/Application Information | Special Condition/Application Information | Special Condition/Application Information |
| | | N ₂ O (5) | — | | | |
| | | CO ₂ e | — | | | |
| U_GEN4 | Emergency Generator 4 | CO ₂ (5) | — | | | |
| | | CH ₄ (5) | — | | | |
| | | N ₂ O (5) | — | | | |
| | | CO ₂ e | — | | | |
| U_GEN5 | Emergency Generator 5 | CO ₂ (5) | — | | | |
| | | CH ₄ (5) | — | | | |
| | | N ₂ O (5) | — | | | |
| | | CO ₂ e | — | | | |
| FWP | Firewater Pump No.1 | CO ₂ (5) | — | | | |
| | | CH ₄ (5) | — | | | |
| | | N ₂ O (5) | — | | | |
| | | CO ₂ e | — | | | |
| EMGGEN3 | Glycol Emergency Generator No. 3 | CO ₂ (5) | — | | | |
| | | CH ₄ (5) | — | | | |
| | | N ₂ O (5) | — | | | |
| | | CO ₂ e | — | | | |

Major NSR Summary Table

| Permit Number: GHGPSDTX170 | | | | Issuance Date: November 27, 2019 | | |
|----------------------------|---|--------------------------|----------------|---|---|---|
| Emission Point No. (1) | Source Name (2) | Air Contaminant Name (3) | Emission Rates | Monitoring and Testing Requirements | Recordkeeping Requirements | Reporting Requirements |
| | | | TPY (4) | Special Condition/Application Information | Special Condition/Application Information | Special Condition/Application Information |
| ENGINECAP | Total Emissions from EPNs EMGGEN01, EMGGEN02, ADMINGEN, U_GEN4, U_GEN5, FWP, GLYGEN01 | CO ₂ (5) | 72 | | | |
| | | CH ₄ (5) | < 0.1 | | | |
| | | N ₂ O (5) | < 0.01 | | | |
| | | CO ₂ e | 72 | | | |
| MSS_CAP | Maintenance, Startup and Shutdown Cap | CO ₂ (5) | 79 | 11 | 11 | |
| | | CH ₄ (5) | 0.2 | | | |
| | | N ₂ O (5) | < 0.01 | | | |
| | | CO ₂ e | 85 | | | |
| MSS_TANK | Tank Maintenance, Startup and Shutdown Cap | CO ₂ (5) | 314 | 11 | 11 | |
| | | CH ₄ (5) | 1.0 | | | |
| | | N ₂ O (5) | < 0.01 | | | |
| | | CO ₂ e | 339 | | | |
| O_FUG | Olefins Unit Fugitives | CH ₄ (5) | 10.5 | 10 | 10 | |
| | | CO ₂ e | 262 | 10 | 10 | |
| E_FUG | EM PE Unit Fugitives | CH ₄ (5) | — | 10 | 10 | |
| | | CO ₂ e | — | | | |

Major NSR Summary Table

| Permit Number: GHGPSDTX170 | | | | Issuance Date: November 27, 2019 | | |
|----------------------------|--|--------------------------|----------------|---|---|---|
| Emission Point No. (1) | Source Name (2) | Air Contaminant Name (3) | Emission Rates | Monitoring and Testing Requirements | Recordkeeping Requirements | Reporting Requirements |
| | | | TPY (4) | Special Condition/Application Information | Special Condition/Application Information | Special Condition/Application Information |
| C_FUG | CPE Unit Fugitives | CH ₄ (5) | — | 10 | 10 | |
| | | CO ₂ e | — | | | |
| PE_FUG | Total Emissions from EPNs E_FUG, C_FUG | CH ₄ (5) | 0.1 | 10 | 10 | |
| | | CO ₂ e | 2 | | | |
| GFUG | Glycol Unit Fugitives | CH ₄ (5) | 0.8 | 10 | 10 | |
| | | CO ₂ e | 2 | | | |
| U_FUG | Utilities Fugitives | CH ₄ (5) | 6.3 | 10 | 10 | |
| | | CO ₂ e | 157 | | | |
| PE_REGEN | PE Treater Regeneration | CO ₂ (5) | 38 | | | |
| | | CO ₂ e | 38 | | | |
| ZWSRCO1A/B | Equalization Tanks Catalytic Oxidizer | CO ₂ (5) | 574 | 8 | 8 | |
| | | CH ₄ (5) | 1.7 | | | |
| | | N ₂ O (5) | < 0.01 | | | |
| | | CO ₂ e | 619 | | | |

- (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) CO₂ - carbon dioxide
 N₂O - nitrous oxide
 CH₄ - methane
 CO₂e - carbon dioxide equivalents based on the following Global Warming Potentials (1/2015):

CO₂ (1), N₂O (298), CH₄(25), SF₆ (22,800), HFC (various), PFC (various)

- (4) Compliance with annual emission limits (tons per year) is based on a 12-month rolling period. These rates include emissions from maintenance, startup, and shutdown.
- (5) Emission rate is given for informational purposes only and does not constitute enforceable limit.



Texas Commission on Environmental Quality Air Quality Permit

A Permit Is Hereby Issued To
Gulf Coast Growth Ventures LLC
Authorizing the Construction and Operation of
Gulf Coast Growth Ventures Project
Located at **Gregory, San Patricio County, Texas**
Latitude 27° 55' 47" *Longitude* -97° 19' 19"

Permits: 146425 and PSDTX1518

Revision Date: November 27, 2019

Expiration Date: June 12, 2029



For the Commission

1. **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 (TAC) Section 116.116 (30 TAC § 116.116)]¹
2. **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]
3. **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)]
4. **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)]
5. **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 in a timely manner; comply with any additional recordkeeping requirements specified in special conditions in 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)] ¹
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 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 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 "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. ¹

¹ Please be advised that the requirements of this provision of the general conditions may not be applicable to greenhouse gas emissions.

Common Acronyms in Air Permits

| | |
|--|---|
| °C = Temperature in degrees Celsius | GLCmax = maximum (predicted) ground-level concentration |
| °F = Temperature in degrees Fahrenheit | gpm = gallon per minute |
| °K = Temperature in degrees Kelvin | gr/1000scf = grain per 1000 standard cubic feet |
| µg = microgram | gr/dscf = grain per dry standard cubic feet |
| µg/m ³ = microgram per cubic meter | H ₂ CO = formaldehyde |
| acfm = actual cubic feet per minute | H ₂ S = hydrogen sulfide |
| AMOC = alternate means of control | H ₂ SO ₄ = sulfuric acid |
| AOS = alternative operating scenario | HAP = hazardous air pollutant as listed in § 112(b) of the Federal Clean Air Act or Title 40 Code of Federal Regulations Part 63, Subpart C |
| AP-42 = Air Pollutant Emission Factors, 5th edition | HC = hydrocarbons |
| APD = Air Permits Division | HCl = hydrochloric acid, hydrogen chloride |
| API = American Petroleum Institute | Hg = mercury |
| APWL = air pollutant watch list | HGB = Houston/Galveston/Brazoria |
| BPA = Beaumont/ Port Arthur | hp = horsepower |
| BACT = best available control technology | hr = hour |
| BAE = baseline actual emissions | IFR = internal floating roof tank |
| bbl = barrel | in H ₂ O = inches of water |
| bbl/day = barrel per day | in Hg = inches of mercury |
| bhp = brake horsepower | IR = infrared |
| BMP = best management practices | ISC3 = Industrial Source Complex, a dispersion model |
| Btu = British thermal unit | ISCST3 = Industrial Source Complex Short-Term, a dispersion model |
| Btu/scf = British thermal unit per standard cubic foot or feet | K = Kelvin; extension of the degree Celsius scaled-down to absolute zero |
| CAA = Clean Air Act | LACT = lease automatic custody transfer |
| CAM = compliance-assurance monitoring | LAER = lowest achievable emission rate |
| CEMS = continuous emissions monitoring systems | lb = pound |
| cfm = cubic feet (per) minute | hp = horsepower |
| CFR = Code of Federal Regulations | hr = hour lb/day = pound per day |
| CN = customer ID number | lb/hr = pound per hour |
| CNG = compressed natural gas | lb/MMBtu = pound per million British thermal units |
| CO = carbon monoxide | LDAR = Leak Detection and Repair (Requirements) |
| COMS = continuous opacity monitoring system | LNG = liquefied natural gas |
| CPMS = continuous parametric monitoring system | LPG = liquefied petroleum gas |
| DFW = Dallas/ Fort Worth (Metroplex) | LT/D = long ton per day |
| DE = destruction efficiency | m = meter |
| DRE = destruction and removal efficiency | m ³ = cubic meter |
| dscf = dry standard cubic foot or feet | m/sec = meters per second |
| dscfm = dry standard cubic foot or feet per minute | MACT = maximum achievable control technology |
| ED = (TCEQ) Executive Director | MAERT = Maximum Allowable Emission Rate Table |
| EF = emissions factor | MERA = Modeling and Effects Review Applicability |
| EFR = external floating roof tank | mg = milligram |
| EGU = electric generating unit | mg/g = milligram per gram |
| EI = Emissions Inventory | mL = milliliter |
| ELP = El Paso | MMBtu = million British thermal units |
| EPA = (United States) Environmental Protection Agency | MMBtu/hr = million British thermal units per hour |
| EPN = emission point number | MSDS = material safety data sheet |
| ESL = effects screening level | MSS = maintenance, startup, and shutdown |
| ESP = electrostatic precipitator | MW = megawatt |
| FCAA = Federal Clean Air Act | NAAQS = National Ambient Air Quality Standards |
| FCCU = fluid catalytic cracking unit | NESHAP = National Emission Standards for Hazardous Air Pollutants |
| FID = flame ionization detector | NGL = natural gas liquids |
| FIN = facility identification number | NNSR = nonattainment new source review |
| ft = foot or feet | NO _x = total oxides of nitrogen |
| ft/sec = foot or feet per second | |
| g = gram | |
| gal/wk = gallon per week | |
| gal/yr = gallon per year | |
| GLC = ground level concentration | |

NSPS = New Source Performance Standards
 PAL = plant-wide applicability limit
 PBR = Permit(s) by Rule
 PCP = pollution control project
 PEMS = predictive emission monitoring system
 PID = photo ionization detector
 PM = periodic monitoring
 PM = total particulate matter, suspended in the atmosphere, including PM₁₀ and PM_{2.5}, as represented
 PM_{2.5} = particulate matter equal to or less than 2.5 microns in diameter
 PM₁₀ = total particulate matter equal to or less than 10 microns in diameter, including PM_{2.5}, as represented
 POC = products of combustion
 ppb = parts per billion
 ppm = parts per million
 ppmv = parts per million (by) volume
 psia = pounds (per) square inch, absolute
 psig = pounds (per) square inch, gage
 PTE = potential to emit
 RA = relative accuracy
 RATA = relative accuracy test audit
 RM = reference method
 RVP = Reid vapor pressure
 scf = standard cubic foot or feet
 scfm = standard cubic foot or feet (per) minute
 SCR = selective catalytic reduction
 SIL = significant impact levels
 SNCR = selective non-catalytic reduction
 SO₂ = sulfur dioxide
 SOCM = synthetic organic chemical manufacturing industry
 SRU = sulfur recovery unit
 TAC = Texas Administrative Code
 TCAA = Texas Clean Air Act
 TCEQ = Texas Commission on Environmental Quality
 TD = Toxicology Division
 TLV = threshold limit value
 TMDL = total maximum daily load
 tpd = tons per day
 tpy = tons per year
 TVP = true vapor pressure
 VOC = volatile organic compounds as defined in Title 30 Texas Administrative Code § 101.1
 VRU = vapor recovery unit or system

Special Conditions

Permit Numbers 146425 and PSDTX1518

1. This permit covers only those sources of emissions listed in the attached table entitled "Emission Sources - Maximum Allowable Emission Rates" (MAERT), and those sources are limited to the emission limits and other conditions specified in that table.

The names of chemical species referred to in these Special Conditions may be abbreviated as indicated in the attached MAERT.

Definitions

2. Terms used in this permit shall have the following meanings:
 - A. *Standard conditions* has the meaning assigned to it at 30 TAC § 101.1(99).
 - B. *Pyrolysis furnace* means a process heater subject to Special Condition 1 that produces hydrocarbon products from the endothermic cracking of feedstocks such as ethane, propane, butane, and naphtha using combustion to provide indirect heating for the cracking process.
 - C. *Boiler* means any combustion equipment other than a pyrolysis furnace which is subject to Special Condition 1 and is used to produce steam or to heat water.
 - D. *Combustion unit* means a boiler or pyrolysis furnace.
 - E. The following definitions apply to pyrolysis furnaces.
 - (1) *Non-routine operation* means decoking, hot steam standby, feed in, feed out, startup or shutdown.
 - (2) *Routine operation* means any period of operation other than non-routine operation.
 - (3) *Startup* means the period beginning when fuel is first introduced to the furnace, during either initial startup or following a shutdown; and ending when the SCR catalyst bed reaches its design operating temperature.
 - (4) *Shutdown* means the period beginning when the SCR catalyst bed drops below its design operating temperature and ending when all fuel is removed from the furnace.
 - (5) *Decoking* means the period beginning when air is introduced to the furnace cracking coils for the purpose of decoking, and ending when decoking air is removed.
 - (6) *Feed in* means the period beginning when hydrocarbon feed is first introduced to the furnace, following decoking, hot steam standby, or startup, and ending when the furnace reaches 70% of its design firing rate.
 - (7) *Feed out* means the period beginning when the furnace drops below 70% of its design firing rate and remains below that level; and ending when hydrocarbon feed is isolated from the furnace.
 - (8) *Hot steam standby* means operations occurring when the furnace is firing at or below 50% of its design firing rate and no hydrocarbon feed is being charged to the furnace, and the furnace is not in start-up or shut-down.
 - F. The following definitions apply to boilers.
 - (1) *Non-routine operation* means startup, shutdown, or low firing.
 - (2) *Startup* and *shutdown* have the meanings specified in 40 CFR § 63.7575.

- (3) *Low firing* means:
 - (a) With respect to an emission limitation for NO_x, operation of a boiler at a firing rate that is no greater than the lesser of:
 - i. 30% of the maximum rated heat duty for the boiler; or
 - ii. The firing rate at which the flue gas temperature is at the minimum design operating temperature of the SCR catalyst bed.
 - (b) With respect to any other requirement of the permit, operation of a boiler at a firing rate of no greater than 30% of the maximum rated heat duty of the boiler.
- G. *Flare Gas Recovery Unit* means a system of one or more compressors, piping and the associated water seal, rupture disk or similar device used to divert gas from the flare and direct the gas to the fuel gas system.
- H. The following engineering abbreviations shall have their customary meanings, reproduced as follows:
 - (1) HHV: Higher Heating Value
 - (2) LHV: Lower Heating Value, or Net Heating Value
 - (3) MMBtu: Million British Thermal Units
 - (4) ppbw: Parts per billion by weight
 - (5) ppmv: Parts per million by volume
 - (6) ppmvd: Parts per million by volume, dry basis
 - (7) ppmw: Parts per million by weight
 - (8) dscf: Dry standard cubic feet
 - (9) gr: Grains
 - (10) MMlb: million pounds
 - (11) gpm: Gallons per minute
 - (12) μmho/cm: micromho per centimeter
 - (13) mg/L: milligram per liter
 - (14) cfm: cubic feet per minute
- I. Other abbreviations shall have the following meanings:
 - (1) CEMS: continuous emissions monitoring system
 - (2) SCR: selective catalytic reduction
 - (3) CAS: carbon adsorption system
 - (4) EPN: emission point number
 - (5) TDS: total dissolved solids
 - (6) CFR: Code of Federal Regulations
 - (7) IFR: Internal Floating Roof Tank
 - (8) VFT: Vertical Fixed Roof Tank

- (9) HFT: Horizontal Fixed Roof Tank
- (10) TAC: Texas Administrative Code
- (11) CFR: Code of Federal Regulations
- (12) FR: *Federal Register*
- (13) EPA: U.S. Environmental Protection Agency
- (14) API: American Petroleum Institute
- (15) HAP: Hazardous Air Pollutants listed in § 112(b) of the Federal Clean Air Act, as modified in 40 CFR Part 63, Subpart C
- (16) TPDES: Texas Pollutant Discharge Elimination System

J. The following definitions apply to closed vent systems and control devices.

- (1) *Shared vent system* means a closed vent system which is designed and operated to collect air contaminant vapors and route the collected vapors to one or more of the following control devices or recovery systems:
 - (a) Either of the shared thermal oxidizers (EPNs UFF01A or UFF01B), operated as specified in Special Condition 46;
 - (b) The shared elevated flare (EPN UFFLARE02), operated as specified in Special Condition 45;
 - (c) The multi-point ground flare (EPN UFFLARE01), operated as specified in Special Condition 44; or
 - (d) The Flare Gas Recovery Unit.
- (2) *Glycol vent system* means a closed vent system which is designed and operated to collect air contaminant vapors and route the collected vapors to one or more of the following control devices:
 - (a) The MEG thermal oxidizer (EPN GBX02), operated as specified in Special Condition 46; or
 - (b) The MEG elevated flare (EPN GFFLARE01), operated as specified in Special Condition 45.

K. *Shakedown period* means:

- (1) With respect to any emission limitation applying on a rolling 12-month basis, the 12-month period beginning with the initial start-up of the source of emissions subject to such emission limitation; and
- (2) With respect to any other emission limitation, the period beginning with the initial start-up of the source subject to the emission limitation, and ending either:
 - (a) 180 days following start-up of the source; or
 - (b) Upon completion of stack sampling required under Special Condition 62 for the source and pollutant to which the emission limitation applies;

Whichever is sooner.

3. Emission or operating limits identified in Special Conditions 21 and 23 of this permit, which are expressed using units of heat, are based on the higher heating value of the fuel input to a combustion unit.
4. Except where otherwise indicated, emission limits expressed in terms of concentration of a pollutant in the exhaust of a combustion unit or control device shall be evaluated on a dry basis, corrected to 3% oxygen.

Federal Applicability

5. These facilities shall comply with all applicable requirements of the 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):
 - A. Subpart A, General Provisions.
 - B. Subpart Db, Industrial-Commercial-Institutional Steam Generating Units.
 - C. Subpart Kb, Volatile Organic Liquid Storage Vessels.
 - D. Subpart VVa, Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry (SOCMI).
 - E. Subpart DDD, Polymer Manufacturing Industry.
 - F. Subpart NNN, SOCMI Distillation Operations.
 - G. Subpart RRR, SOCMI Reactor Processes.
 - H. Subpart IIII, Stationary Compression Ignition Internal Combustion Engines.
6. These facilities shall comply with all applicable requirements of the EPA regulations on National Emission Standards for Hazardous Air Pollutants in 40 CFR Part 61:
 - A. Subpart A, General Provisions.
 - B. Subpart J, Equipment Leaks of Benzene.
 - C. Subpart FF, Benzene Waste Operations.
7. These facilities shall comply with all applicable requirements of the U.S. Environmental Protection Agency (EPA) regulations on National Emission Standards for Hazardous Air Pollutants for Source Categories in 40 CFR Part 63:
 - A. Subpart A, General Provisions.
 - B. Subpart F, SOCMI.
 - C. Subpart G, SOCMI Process Vents, Storage Vessels, Transfer Operations, and Wastewater.
 - D. Subpart H, Equipment Leaks.
 - E. Subpart UU, Equipment Leaks— Control Level 2 Standards.
 - F. Subpart SS, Closed Vent Systems, Control Devices, Recovery Devices and Routing to a Fuel Gas System or a Process.

- G. Subpart WW, Storage Vessels— Control Level 2 Standards.
- H. Subpart XX, Ethylene Manufacturing Process Units: Heat Exchange Systems and Waste Operations
- I. Subpart YY, Generic Maximum Achievable Control Technology Standards.
- J. Subpart EEEE, Organic Liquids Distribution (Non-Gasoline).
- K. Subpart FFFF, Miscellaneous Organic Chemical Manufacturing.
- L. Subpart ZZZZ, Stationary Reciprocating Internal Combustion Engines.
- M. Subpart DDDDD, Industrial, Commercial, and Institutional Boilers and Process Heaters.

Process Vents

- 8. Non-fugitive emissions of gases containing volatile organic compounds (VOC) at a concentration of greater than 1 percent from relief valves, safety valves, or rupture discs are not authorized by this permit unless authorized on the MAERT. With the exception of devices which relieve to the atmosphere only in the event of a fire, any releases directly to atmosphere from relief valves, safety valves, or rupture discs of gases containing VOC at a concentration greater than 1 weight percent are not consistent with good practice for minimizing emissions.
- 9. All process vents from vacuum producing equipment in the Glycols plant shall be controlled using the MEG I Thermal Oxidizer (EPN GBX02) or the MEG Elevated Flare (GFFLARE01). This requirement does not apply, and the vents may be directed to the atmosphere, in case both of the following criteria are satisfied:
 - A. Atmospheric venting occurs during planned start-up or shut-down of the Glycols plant.
 - B. The MEG Thermal Oxidizer (EPN GBX02) is out of service for planned maintenance.

Records of thermal oxidizer downtime shall be retained, and the permit holder shall make all reasonable efforts to limit the duration of maintenance outages which occur during plant operations.

- 10. Prior to any uncontrolled venting from the Olefins Regeneration Vent (EPN O-REGEN) and the PE Regeneration Vent (EPN PE-REGEN), the associated vent streams shall be directed to the shared vent system for control to the maximum extent practicable.
- 11. All emissions from filling or depressurization of the Glycol Moderator Drum shall be directed to a CAS (EPN GAD09A-D) satisfying the requirements of Special Condition 47.

Polyethylene Residual VOC Emissions

- 12. Total VOC emitted to the atmosphere after the purge column through product loadout from each polyethylene unit shall not exceed 50 pounds per million pounds of polyethylene pellets produced.
- 13. Ongoing compliance with VOC emission limits specified in Special Condition 12 shall be determined by calculation using monthly production rates and monthly average sampling and testing of the polyethylene for residual VOC.

- A. Samples of resin shall be collected at the following locations: ("point A") immediately after the purge column, and ("point B") at the final product loadout station.
 - B. Sampling shall be performed for each product type produced during a calendar month. An exemption from sampling may be claimed for a particular product type if both of the following conditions are satisfied:
 - (1) The product is produced for 72 hours or less during the month; and
 - (2) Sampling has been conducted at the plant for the same product during the preceding 60 months, and documentation of the sampling results has been retained. The most recent such results shall be used in the calculations specified in Special Condition 14.
 - C. Prior to the initial start-up of any polyethylene unit, the permit holder shall obtain a permit alteration to attach a VOC head space sampling protocol to the permit Special Conditions. The sampling protocol shall ensure measurement of the total residual VOC content of the polymer being sampled.
14. Polymer production rates, monitoring records, and emission calculations shall be maintained at the plant site:
- A. Production and sampling records shall include (but are not limited to):
 - (1) Day and time of sample.
 - (2) Actual plant production rate at the time of sampling and monthly production rate.
 - (3) Product number, resin type and melt index.
 - (4) Sampled residual VOC concentrations for each product type at each sampling point.
 - B. Polymer handling emissions for a product type shall be calculated as follows:

$$E_{Res} = C_A - C_B$$

Where:

E_{Res} is the total polymer handling emission rate, expressed in units of lb VOC per MMlb polymer.

C_A is the residual VOC concentration of a representative sample of a particular polymer grade, taken at point A, expressed in units of ppmw; and

C_B is the residual VOC concentration of a representative sample of the same polymer grade, taken at point B, expressed in units of ppmw.
 - C. Monthly average VOC emissions for the polyethylene unit shall be calculated as follows:

$$E_{Res,Avg} = \sum_{i=1}^n w_i \times E_{Res}$$

Where:

$E_{Res,Avg}$ is the monthly average polymer handling emission rate, expressed in units of lb VOC per MMlb polymer.

n is the total number of product types produced during the month.

w_i is the mass fraction of total production at the unit consisting of product type i

E_{Res} is the residual VOC concentration calculated following paragraph B of this Special Condition.

Solids Handling

15. Particulate matter outlet grain loading shall not exceed 0.005 gr/dscf of air from any vent. There shall be no visible emissions exceeding 30 seconds in any six-minute period as determined using EPA Test Method 22.

The vents identified in Special Condition 17 shall not operate unless any control devices and associated equipment are maintained in good working order and operating. All vents identified in Special Condition 17 shall be inspected for visible emissions once per day and a spare parts filter inventory will be maintained on site. Records shall be maintained of all inspections and maintenance performed.

16. The following requirements apply to the particulate control devices identified in Special Condition 17.
- A. The differential pressure across each particulate control device shall be continuously monitored and be recorded at least once an hour.
 - B. Prior to the start of operation of any polyethylene unit, the permit holder shall obtain a permit alteration which specifies the parametric monitoring requirements for each control device, using pressure drop across the device as a monitoring parameter. An alternate monitoring parameter may be specified for a particular control device if a pressure monitoring device is not incorporated into the design of such control device. The alternate monitoring parameter shall ensure that necessary preventative maintenance on the control device is completed in a timely manner.
 - C. Each monitoring device shall be calibrated at a frequency in accordance with the manufacturer's specifications or at least annually, whichever is more frequent, and shall be accurate to within 0.5 inches water gauge pressure or 0.5 percent of span.
 - D. Quality assured (or valid) data must be generated when the polyethylene unit is operating except during the performance of a daily zero check. Loss of valid data due to periods of monitor breakdown, 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 hours) that the polyethylene unit operated over the previous rolling 12-month period. The measurements missed shall be estimated using engineering judgment and the methods used recorded.
17. The following sources of particulate emissions at the polyethylene units are covered by the permit.

- A. Plant "E" vents

| Source Name | Vent type | EPN |
|---|-----------|------------|
| EPE granules feed bin dust collector | Bag House | ELDC01 |
| EPE granules hopper vent dust collector | Bag House | EDFAN01 |
| EPE feed bin exit dust collector | Bag House | E_LLFB_001 |
| EPE seed bed bin dust collector | Bag House | EDDC04 |

| Source Name | Vent type | EPN |
|--|-----------------------|---|
| EPE extruder feed conveyor dust collector | Bag House | ELDC03 |
| EPE granule filter receiver (seed bed filter) | Bag House | E_DLSB_001 |
| EPE pellet silo vents | Bag House | EPFAN01, E_PLDS_007, E_PLDS_008, E_PLDS_009, E_PLDS_010 |
| EPE pellet dryer vents | Uncontrolled | EMFAN01, EMFAN02 |
| EPE film test extruder filter receiver | Bag House | E_MPPX_001 |
| Dry additive weigh feed hopper extraction vent | Sock Filter | ELFAN04 |
| Additive drying hopper dust collector | Bag House | ELDC06 |
| Vacuum blower vents for additive transfer | Bag House | ELB01, ELB03, ELB05, ELFAN01 |
| EPE Catalyst handling cylinder vent filters | Sintered Metal Filter | EBFIL01, E_BCTS_002, E_BCTS_003 |
| EPE Catalyst hold tank filters | Sintered Metal Filter | ECFIL04, ECFIL05, ECFIL06 |
| EPE pellet surge bin dust collector | Bag House | EMDC01 |
| EPE finishing building vent | Bag House | E_LFBF_001 |

B. Plant "C" vents

| Source Name | Vent type | EPN |
|--|--------------|---|
| CPE granules feed bin dust collector | Bag House | CLDC01 |
| CPE granules hopper vent dust collector | Bag House | CDFAN01 |
| CPE feed bin exit dust collector | Bag House | C_LLFB_001 |
| CPE seed bed bin dust collector | Bag House | CDDC04 |
| CPE extruder feed conveyor dust collector | Bag House | CLDC03 |
| CPE granule filter receiver (seed bed filter) | Bag House | C_DLSB_001 |
| CPE pellet silo vents | Bag House | CPFAN01, C_PLDS_007, C_PLDS_008, C_PLDS_009, C_PLDS_010 |
| CPE pellet dryer vents | Uncontrolled | CMFAN01, CMFAN02 |
| Film test extruder filter receiver | Bag House | C_MPPX_001 |
| CPE dry additive weigh feeder hopper extraction vent | Sock Filter | CLFAN04 |
| CPE additive drying hopper dust collector | Bag House | CLDC06 |
| Vacuum blower vents for additive transfer | Bag House | ELB02, ELB04, CLB03, C_LADD_007 |

| Source Name | Vent type | EPN |
|---|-----------------------|---------------------------------|
| CPE catalyst handling cylinder vent filters | Sintered Metal Filter | CBFIL01, C_BCTS_002, C_BCTS_003 |
| CPE catalyst hold tank filters | Sintered Metal Filter | CCFIL04, CCFIL05, CCFIL06 |
| CPE pellet surge bin vent | Bag House | CMDC01 |
| CPE finishing building vent | Bag House | C_LFBF_001 |

Combustion Devices

18. Opacity of emissions from each combustion unit and thermal oxidizer authorized by this permit shall not exceed 5 percent averaged over any six minute period.

Opacity shall be determined by the U.S. Environmental Protection Agency (EPA) Test Method 9 during the initial compliance testing and at least once per year thereafter. In lieu of performing a required opacity test, the permit holder may verify that there are no visible emissions as determined by EPA Test Method 22. For opacity or visible emissions determinations other than those required during the initial compliance testing, determination of opacity or visible emissions for each pyrolysis furnace shall take place during decoking.

19. Reserved.

20. Combustion units are subject to the following requirements for fuel sulfur:

- A. Pyrolysis furnaces shall be fired with natural gas, olefins unit tail gas, and/or ethane.
- B. Boilers shall be fired with natural gas, olefins unit tail gas, ethane, and/or flare gas recovery unit vent gas with a combined total sulfur content not to exceed 3.7 gr per 100 dscf on a rolling 365-day average.
- C. Natural gas, olefins unit tail gas, and ethane shall have a total sulfur content not to exceed 5 gr per 100 dscf on a 1-hr average and 0.5 gr per 100 dscf on a rolling 12-month average.
- D. Compliance with the requirements of paragraph C of this Special Condition shall be verified through sampling of fuel gas at least semi-annually. Fuel gas streams identified in paragraph C may be sampled individually, or a representative sample of blended fuel gas may be taken from the fuel gas header.

For natural gas and commercial ethane, tariff sheets documenting the sulfur content of the fuel may be retained in lieu of performing sampling.

21. Emissions Standards for Pyrolysis Furnaces.

- A. Except where provided otherwise in Paragraph D of this Special Condition, emissions of NO_x, CO, and NH₃ from each pyrolysis furnace shall not exceed the following values. Compliance with the NO_x emissions limits shall be achieved through the use of an SCR system.

- (1) Short-term average limits:

| Pollutant | Emission Limit | Averaging Period |
|-----------------|----------------|------------------|
| NO _x | 0.015 lb/MMBtu | 1-hr |

| | | |
|-----------------|----------|-------|
| CO | 50 ppmvd | 1-hr |
| NH ₃ | 10 ppmvd | 24-hr |

(2) Long-term average limits:

| Pollutant | Emission Limit | Averaging Period |
|-----------------|----------------|------------------|
| NO _x | 0.010 lb/MMBtu | Annual |

- B. Compliance with the NO_x and CO emission limits of paragraph A shall be demonstrated through use of CEMS.
- C. Compliance with the NH₃ emission limits of paragraph A shall be continuously demonstrated using one of the following options.
 - (1) Install an NH₃ CEMS satisfying the requirements of Special Condition 66.
 - (2) In addition to the NO_x CEMS required under paragraph B of this Special Condition, install a second NO_x CEMS upstream of the SCR system. Perform the measurements and calculations associated with the mass balance method specified in 30 TAC § 117.8130(1), using NO_x CEMS data to determine the NO_x concentration differential across the control device.
- D. The NO_x and CO emission limits of subparagraph A(1) of this Special Condition shall not apply to a pyrolysis furnace during non-routine operation of the pyrolysis furnace, and shall not apply during the shakedown period.

22. During decoking operations, pyrolysis furnace effluent shall be captured and conveyed to a cyclone system, and the gaseous exhaust stream from the decoking system shall be directed to the flame zone of a pyrolysis furnace.

23. Emissions Standards for Boilers.

- A. Except where provided otherwise in Paragraph C of this Special Condition, emissions of NO_x, CO, and NH₃ from each boiler shall not exceed the following values.

(1) Short-term average limits:

| Pollutant | Emission Limit | Averaging Period |
|-----------------|----------------|------------------|
| NO _x | 0.015 lb/MMBtu | 1-hr |
| CO | 100 ppmvd | 1-hr |
| NH ₃ | 10 ppmvd | 24-hr |

(2) Long-term average limits:

| Pollutant | Emission Limit | Averaging Period |
|-----------------|----------------|------------------|
| NO _x | 0.010 lb/MMBtu | Annual |

- B. Compliance with the NO_x and CO emission limits of paragraph A shall be demonstrated through use of CEMS.
- C. Compliance with the NH₃ emission limits of paragraph A shall be continuously demonstrated using one of the following options.
 - (1) Install an NH₃ CEMS satisfying the requirements of Special Condition 66.
 - (2) In addition to the NO_x CEMS required under paragraph B of this Special Condition, install a second NO_x CEMS upstream of the SCR system. Perform the measurements

and calculations associated with the mass balance method specified in 30 TAC § 117.8130(1), using NO_x CEMS data to determine the NO_x concentration differential across the control device.

- D. During non-routine operations for a boiler, and during the shakedown period, the requirements of subparagraph A(1) shall not apply.

Records of boiler startup, shutdown, and low firing events shall specify the time and duration of the event.

Liquids Storage and Transfer Operations

Storage Facilities

24. Storage tanks are subject to the following requirements: The control requirements specified in paragraphs A–E of this Special 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.

The control requirements specified in paragraph F of this Special Condition shall not apply to a tank which has a maximum working volume of less than 25,000 gallons and stores a liquid with an aggregate VOC partial pressure of less than 0.50 psia at 95° F.

- A. The tank emissions must be controlled as specified in one of the sections below. Tanks complying with section (2) or (3) are exempt from the requirements of paragraphs B–F of this Special Condition.
- (1) An internal floating deck or “roof” shall be installed. A domed external floating roof tank is equivalent to an internal floating roof tank.
- The floating deck shall be of welded construction.
- 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 floating roof:
- (a) a liquid-mounted seal,
- (b) two continuous seals mounted one above the other, or
- (c) a mechanical shoe seal.
- (2) All vents from the tank shall be captured using a closed vent system and directed to a control device as specified in Special Condition 25.
- (3) The tank is a pressure vessel designed to operate without emissions to the atmosphere.
- B. For any tank equipped with a floating roof, the permit holder shall perform the visual inspections and any seal gap measurements 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 inspection was performed, any measurements made, results of inspections and measurements made (including raw data), and actions taken to correct any deficiencies noted.
- C. The floating roof design shall incorporate sufficient flotation to conform to the requirements of API Code 650 dated November 1, 1998 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.

- D. The tanks shall be designed to completely drain its entire contents to a sump in a manner that limits the volume of free-standing liquid in the tank or the sump as follows:

| NPS (in.) | V _U (gal.) |
|-----------|-----------------------|
| 2 | 9 |
| 3 | 14 |
| 4 | 32 |
| 6 | 75 |

Where: NPS is the nominal piping size of the sump pipe; and

V_U is the maximum volume of free-standing liquid in the tank or sump.

- E. Tanks shall be constructed or equipped with a connection to a vapor recovery system that routes vapors from the vapor space under the landed roof to a control device.
- F. Except for labels, logos, etc. not to exceed 15 percent of the tank total surface area, uninsulated tank exterior surfaces exposed to the sun shall be white or unpainted aluminum. Storage tanks must be equipped with permanent submerged fill pipes.
- G. The permit holder shall 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.
25. Emissions from tanks shall be calculated using the methods that were used to determine the MAERT limits in the permit application (Form PI-1 dated April 19, 2017, as revised). Sample calculations from the application shall be retained at the plant site and made available upon request to authorized representatives of TCEQ. The following control requirements apply to the storage tanks specified below.
- A. The light oil tank (FIN UTTK107T) shall be directed to the shared vent system for control.
- B. The catalyst tanks (EPNs CPETANK_4, CCD81, CPETANK_6) shall be equipped with a blanketing and vapor recovery system which creates an inert atmosphere inside of the storage tank, and directs recovered vapors to a control device covered by the permit, or to a diffusion chamber designed to absorb catalyst vapors in a mineral oil solution.
- C. The space between the fixed roof and the floating roof of the sulfidic caustic tanks (EPNs UTTK103T, UTTK104T) shall have an H₂S concentration not to exceed 24 ppmv as determined through annual monitoring using Draeger tubes or equivalent.
26. Tank service and filling rates shall be limited as follows.

| Tank EPN | Type | Service | Maximum total working volume for tank group (gal) |
|--------------------|------|--------------------|---|
| UTTK101T, UTTK102T | IFR | Pyrolysis Gasoline | 256693 |

| Tank EPN | Type | Service | Maximum total working volume for tank group (gal) |
|--|------|------------------------|---|
| UTTK103T, UTTK104T | IFR | Spent Sulfidic Caustic | 35355 |
| UTTK107T | VFT | Light Pyrolysis Oil | 36717 |
| U_NH3WW | VFT | Ammonia Wastewater | 32403 |
| ELD01, ELD02, EM_ETANK_3, EM_ETANK_4 | VFT | PE additive | 2937 |
| CPETANK_1, CPETANK_2, CPETANK_3 | VFT | Seal Oil | 2062 |
| CPETANK_4 | VFT | Catalyst Solution | 164 |
| CCD81, CPETANK_6 | HFT | Catalyst Solution | 1316 |
| GETK02A GETK02B, GTK_502C | VFT | Monoethylene Glycol | 5537096 |
| GDTK01, GDD08, GDD09 | VFT | Catalyst Solution | 477384 |
| SCTOTE-GLY | VFT | Catalyst Solution | 6234 |
| GETK01 | VFT | Crude Glycols | 2740937 |
| ZTTK02, ZTTK08T | VFT | Heavy Glycols | 610789 |
| ZTTK03, GED04 | VFT | Crude Glycols | 276350 |
| ZTTK05, ZTTK04 | IFR | 1-Hexene | 1691936 |
| ZTTK06A, ZTTK06B | VFT | Pyrolysis Fuel Oil | 149172 |
| ZTTK04, ZWTK17T | IFR | Olefins Slop Oil | 943959 |
| ZWTK06, ZWTK07 | IFR | Wastewater Slop Oil | 415464 |
| ZMTK02 | HFT | Diesel | 14687 |
| UKDGEN01TK, UKDGEN02TK, ADMINGENTK, TKUGEN4, TKUGEN5, ZFTK02C, GUDGEN01TK, UTTK100T, ZFTK02B | HFT | Diesel | 39809 |
| ZMTK01 | HFT | Motor Gasoline | 14687 |
| ZFTK04 | HFT | Motor Gasoline | 1175 |

27. The following requirements apply to sumps covered by the permit (EPNs ZWTK19, ZWTK20, ZTTK10, ZFTK05, FZTK01, OTANK_S2, OTANK_S3, OTANK_S4, OTANK_S5, GFTK01, EM_ETANK_S, CPETANK_S, UTANK_S).

- A. Any standing liquid with an aggregate VOC partial pressure of 0.50 psia or greater at 95°F shall be pumped down to the maximum extent practicable and removed to a closed vessel or treatment system. Pumping down of the sump shall commence within one hour of liquid entering the sump, and shall be completed as soon as practicable.

Tanker Truck and Railcar Loading Operations

28. All lines and connectors shall be visually inspected for any defects prior to hookup. Lines and connectors that are visibly damaged shall be removed from service. Operations shall cease immediately upon detection of any liquid leaking from the lines or connections.

29. The following requirements apply to any tanker truck or railcar to be loaded with a liquid with a VOC vapor pressure of 0.50 psia or greater at 95° F.
- A. Each tank truck shall pass vapor-tight testing every 12 months using the methods described in 40 CFR Part 60, Subpart XX. The permit holder shall not allow a tank truck to be filled unless it has passed a leak-tight test within the past year as evidenced by a certificate which shows the date the tank truck last passed the leak-tight test required by this condition and the identification number of the tank truck.
 - B. The permit holder shall not allow a railcar to be filled unless it has a current certification in accordance with U.S. Department of Transportation (DOT) pressure test requirements of 49 CFR §173.31.
30. The loading of any liquid with a VOC vapor pressure of 0.50 psia or greater at 95° F shall be controlled through a closed vent system and a control device satisfying the applicable requirements of this permit. Truck Loading operations are limited to the liquids and rates specified below.

| Product | Maximum Fill Rate (gal/hr) | Required Controls |
|---|----------------------------|---|
| Pyrolysis Gasoline, Heavy Fuel Oil, Slop Oil | 24,000 | Shared Vent System |
| Monoethylene Glycol, Heavy Glycols (henceforth "Glycols") | 110,000 | None |
| Waste Solvent | 12,000 | None |
| Methanol (MSS) | 12,000 | Control device listed in Special Condition 57. |

Railcar loading of Glycols shall be limited to a maximum fill rate of 110,000 gal/hr. The combined fill rate for simultaneous tanker truck and railcar loading of Glycols shall not exceed 110,000 gal/hr.

31. Prior to venting any transfer line/hose to the atmosphere, the following procedure shall be performed following transfer of liquids with a VOC vapor pressure of 0.50 psia or greater at 95° F.
- Upon completion of loading, the loading line/hose shall be isolated at the connection to the transfer rack piping. Pressurized nitrogen shall be connected to one end of the line/hose to purge liquids and vapors in the loading line/hose into the tanker truck/railcar per the site operating procedure. The tanker truck/railcar shall remain connected to the loading rack closed vent system and control shall be maintained as required in Special Condition 30 during purging of the transfer line/hose.
32. The permit holder shall maintain and update a monthly emissions record which includes calculated emissions of VOC from all loading operations over the previous rolling 12-month period. The record shall include the loading spot, control method used, quantity loaded in gallons, name of the liquid loaded, vapor molecular weight, liquid temperature in degrees Fahrenheit, liquid vapor pressure at the liquid temperature in psia, liquid throughput for the previous month and rolling 12 months to date. Records of VOC temperature are not required to be kept for liquids loaded from unheated tanks which receive liquids at or below ambient temperatures. Emissions shall be calculated using the TCEQ publication titled "Technical Guidance Package for Chemical Sources - Loading Operations."

Equipment Leaks

33. Piping, Valves, Connectors, Pumps, Agitators, and Compressors – 28VHP

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 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 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 30 TAC Chapter 115, 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 Paragraph A above. 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. A difficult to monitor component for which quarterly monitoring is specified may instead be monitored annually.
- 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 within 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. 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. If a relief valve is equipped with rupture disc, a pressure-sensing device shall be installed between the relief valve and rupture disc to monitor disc integrity.

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. All leaking discs shall be replaced at the earliest opportunity but no later than the next process shutdown.

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, 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.

Replacements for leaking components shall be re-monitored within 15 days of being placed back into VOC service.

- G. Except as may be provided for in the special conditions of this permit, all pump, compressor, and agitator seals shall be monitored with an approved gas analyzer at least quarterly or be equipped with a shaft sealing system that prevents or detects emissions of VOC from the seal. Seal systems designed and operated to prevent emissions or seals equipped with automatic seal failure detection and alarm system need not be monitored. These seal systems 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.

- H. Damaged or leaking valves or connectors found to be emitting VOC in excess of 500ppmv or found by visual inspection to be leaking (e.g., dripping process fluids) shall be tagged and replaced or repaired. Damaged or leaking pump, compressor, and agitator seals found to be emitting VOC in excess of 2,000 ppmv or found by visual inspection to be leaking (e.g., dripping process fluids) shall be tagged and replaced or repaired. A first attempt to repair the leak must be made within 5 days and a record of the attempt shall be maintained.
- I. 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 within 15 days of the detection of the leak. 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 Manager and any local programs shall be notified and may require early unit shut down 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.
- J. 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.
- K. Alternative monitoring frequency schedules of 30 TAC 115.352 - 115.359 or National Emission Standards for Organic Hazardous Air Pollutants, 40 CFR Part 63, Subpart H, may be used in lieu of Items G through H of this condition.
- 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.

34. Quarterly Monitoring of Connectors — 28CNTQ

In addition to the weekly physical inspection required by paragraph E of Special Condition 33, all accessible connectors in gas/vapor or light liquid service shall be monitored quarterly with an approved gas analyzer in accordance with paragraphs F–J of Special Condition 33.

- A. Allowance for reduced monitoring frequencies.

- (1) The frequency of monitoring may be reduced from quarterly to semiannually if the percent of connectors leaking for two consecutive quarterly monitoring periods is less than 0.5 percent.
 - (2) The frequency of monitoring may be reduced from semiannually to annually if the percent of connectors leaking for two consecutive semiannual monitoring periods is less than 0.5 percent.
- B. 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 used in paragraph A 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 monitoring requirements, as of the last day of the monitoring period, not including nonaccessible and unsafe-to-monitor connectors.

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

35. SCR System Piping, Valves, Pumps, and Compressors in contact with NH₃— 28AVO

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

- A. Audio, olfactory, and visual checks for leaks within the operating area shall be made once per shift.
- B. Immediately, but no later than one hour upon detection of a leak, plant personnel shall take at least one of the following actions:
 - (1) Isolate the leak.
 - (2) Commence repair or replacement of the leaking component.
 - (3) Use a leak collection/containment system to prevent the leak until repair or replacement can be made if immediate repair is not possible.

Date and time of each inspection shall be noted in the operator's log or equivalent. Records shall be maintained at the plant site of all repairs and replacements made due to leaks. These records shall be made available to representatives of the Texas Commission on Environmental Quality (TCEQ) upon request.

Heat Exchange Systems

36. The cooling tower (EPN UCCT01) and associated heat exchange systems shall be operated and monitored in accordance with the following:

- A. The actual cooling water circulation rate shall be measured at least hourly. Measurements shall be reduced to an hourly average and recorded for use in emission calculations. If multiple sampling points are used, then the actual cooling water circulation rate associated with each sampling point shall be determined and recorded. The circulation rate associated with a particular sampling point can be estimated using engineering judgment. The method used to estimate flow associated with a sampling point shall be documented.
- B. The VOC associated with cooling tower (EPN UCCT01) water shall be monitored with an air stripping system meeting the requirements of the TCEQ Sampling Procedures Manual, Appendix P (dated January 2003 or a later edition), a continuous on-line monitor conforming to the requirements of 30 TAC § 115.764(a)(6), or an approved equivalent sampling method.

The results of the monitoring, cooling water flow rate and maintenance activities on the cooling water system shall be recorded. The monitoring results and cooling water hourly mass flow rate shall be used to determine cooling tower hourly VOC emissions. The rolling 12-month cooling water emission rate shall be recorded on a monthly basis and be determined by summing the VOC emissions between VOC monitoring instances over the rolling 12-month period. The emissions between VOC monitoring instances shall be obtained by multiplying the total cooling water mass flow between cooling water monitoring instances by the higher of the two VOC monitored results.

- C. The required frequency of sampling specified in paragraph B shall be at least once per week per sampling point. If no leak is identified during 26 consecutive weeks of weekly monitoring, the frequency of sampling may be reduced to monthly, and shall revert to weekly upon detection of a leak.
- D. Equipment shall be maintained so as to minimize VOC emissions into the cooling water. A leak (faulty equipment) is indicated by:

- (1) Cooling tower water VOC concentrations above 80 ppbw at any sampling point; or
- (2) For any sampling point covering cooling tower water associated with the Olefins Plant, a cooling tower water VOC concentration C (measured in units of ppbw) at such sampling point, such that:

$$500 \times 10^{-9} \times CR \times C \geq 6.73$$

Where: CR is the actual cooling water circulation rate in units of gpm, measured as required under paragraph A of this Special Condition.

Use of list of HAP at 40 CFR Part 63, Subpart XX in lieu of total VOC:

- (a) "Table 1 HAP" means the list of HAP appearing at 40 CFR Part 63, Subpart XX, Table 1.
- (b) The term "C" in the equation above shall refer to the total concentration of Table 1 HAP in the cooling tower water if either of the following are satisfied:
 - i. Sampling is conducted using a continuous on-line monitor conforming to the requirements of 30 TAC § 115.764(a)(6), which is capable of

determining total Table 1 HAP and speciated Table 1 HAP concentrations in the cooling tower water; or

- ii. Sampling is conducted following Section 6.2 of the TCEQ Sampling Procedures Manual, Appendix P to determine total Table 1 HAP and speciated Table 1 HAP concentrations in the cooling tower water.

Emissions from the cooling tower are not authorized if the VOC concentration of the water returning to the cooling tower exceeds 800 ppbw at any sampling point. Leaks associated with VOC concentrations above 800 ppbw are not subject to extensions for delay of repair under paragraph F of this permit condition.

- E. Leaks (faulty equipment) shall be repaired at the earliest opportunity but no later than 45 calendar days after a leak is detected, unless the leak qualifies for delayed repair under paragraph F of this Special Condition. If the leak qualifies for delayed repair, then the leak shall be repaired according to the schedule specified in paragraph F of this Special Condition. In no case may repairs be delayed beyond the next shutdown.
- F. The provisions of 40 CFR § 63.1088 (version published at 67 FR 46274; July 12, 2002), relating to situations where required repairs may be delayed, are incorporated by reference, except that each appearance of "HAP" shall be replaced by "VOC".
- G. Cooling towers shall each be equipped with drift eliminators having manufacturer's design assurance of 0.0005% drift or less. Drift eliminators shall be maintained and inspected at least annually. The permit holder shall maintain records of all inspections and repairs.
- H. The TDS content of the cooling water shall not exceed 5600 ppmw in any sample.
- I. Cooling towers shall be analyzed for particulate emissions using one of the following methods:
 - (1) Cooling water shall be sampled at least once per day for TDS; or
 - (2) TDS monitoring may be reduced to weekly if conductivity is monitored daily and TDS is calculated using a ratio of TDS-to-conductivity (in ppmw per $\mu\text{mho}/\text{cm}$ or ppmw/siemens). The ratio of TDS-to-conductivity shall be determined by concurrently monitoring TDS and conductivity on a weekly basis. The permit holder may use the average of two consecutive TDS-to-conductivity ratios to calculate daily TDS.
- J. Cooling water sampling shall be representative of the cooling tower feed water and shall be conducted using approved methods.
 - (1) The analysis method for TDS shall be EPA Method 160.1, ASTM D5907, or SM 2540 C [SM - 19th edition of Standard Methods for Examination of Water]. Water samples should be capped upon collection, and transferred to a laboratory area for analysis.
 - (2) The analysis method for conductivity shall be either ASTM D1125-95A (field or routine laboratory testing) or ASTM D1125-95B (continuous monitor). The analysis may be conducted at the sample site or with a calibrated process conductivity meter. If a conductivity meter is used, it shall be calibrated at least annually. Documentation of the method and any associated calibration records shall be maintained.
 - (3) Alternate sampling and analysis methods may be used to comply with D(1) and D(2) with written approval from the TCEQ Regional Director.
 - (4) Records of all instrument calibrations and test results and process measurements used for the emission calculations shall be retained.

- K. Emission rates of total particulate shall be calculated using the measured TDS, the design drift rate, the calculation methodology specified in the permit application (form PI-1 dated April 19, 2017, as updated), and the daily maximum and average actual cooling water circulation rate for the short term and annual average rates. Alternately, the design maximum circulation rate may be used for all calculations.

Emission rates of PM₁₀ and PM_{2.5} shall be calculated as follows.

- (1) The calculated PM₁₀ emission rate shall equal 70% of the total particulate emission rate; and
- (2) The calculated PM_{2.5} emission rate shall equal 42% of the total particulate emission rate.

Emission records shall be updated monthly.

Wastewater Treatment Facilities

37. Process wastewater drains shall be equipped with water seals or equivalent. Lift stations, manholes, junction boxes, any other wastewater collection system components, and conveyances used to convey wastewater generated at the Olefins Plant or the Glycols Plant shall be equipped with a closed vent system that routes all organic vapors to a control device covered by this permit. Wastewater system components whose use is limited to the draining of process vessels during planned MSS activities, and which are not capable of receiving any continuously generated process wastewater stream, are exempt from the requirements of this Special Condition.

Water seals shall be checked by visual or physical inspection quarterly for indications of low water levels or other conditions that would reduce the effectiveness of water seal controls. Water seals shall be restored as necessary within 24 hours. Records shall be maintained of these inspections and any corrective actions taken.

38. The daily wastewater flow into the wastewater treatment plant shall be monitored and recorded. The rolling 12-month wastewater flow shall be totaled on a monthly basis. Wastewater flow shall be measured immediately downstream of the point where the outlets of the two Equalization Tanks are combined.
39. The minimum mixed liquor total suspended solids (MLSS) concentration in the aeration basins on a daily average basis shall not be less than 2000 mg/L. The MLSS concentration is the arithmetic average of all samples collected during the 24-hour period. The MLSS concentrations shall be monitored and recorded daily using Method 160.2 (Methods for Chemical Analysis of Water and Wastes, EPA-600/4-79-020 or Method 2540D (Standard Methods of the Examination of Water and Wastewater, 18th Edition, American Public Health Association).

Emissions of VOC from the Wastewater Equalization Tanks (FINs ZWTK01 and ZWTK02) shall be controlled by a catalytic oxidizer (EPN ZWSRCO1A/B) which achieves 99% control of VOC, or has a VOC exhaust concentration not to exceed 10 ppmvd, corrected to 3% oxygen. The temperature at the inlet of the catalyst bed shall be maintained at no less than 700° F prior to the initial stack test. After the initial stack test has been completed, the six minute average temperature shall be equal to, or greater than the respective hourly average maintained during the most recent satisfactory stack testing required by Special Condition 62.

The temperature at the inlet to the catalyst bed shall be continuously monitored and recorded when waste gas is directed to the oxidizer. 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 ± 0.75 percent of the temperature being measured expressed in degrees Celsius or $\pm 2.5^{\circ}\text{C}$.

40. Wastewater treatment plant emissions shall be estimated every month using the following procedure.

- A. The permit holder shall sample the wastewater prior to the equalization tanks monthly to determine the concentrations of all air contaminants. Sampling locations, sampling procedures, test methods and calculations shall be as follows:
- (1) The sampling locations shall be at the inlets to each Equalization Tank;
 - (2) Sampling procedures shall be as specified in the TPDES permit applicable to the site. A copy of the TPDES permit and any precedent application representations shall be submitted for inclusion in the file for this permit prior to the start of operation of the facilities covered by this permit;
 - (3) Test methods shall include EPA SW-846 methods 8260B, 8270C, and 8015B; and
 - (4) Calculations shall be as specified in permit application, PI-1 dated April 19, 2017, as updated.

The influent wastewater flow rates shall be measured and recorded when a sample required by this condition is collected. Records of sampling results shall be maintained for all air contaminants.

- B. The permit holder shall calculate short term loading rate in terms of lb/hr and rolling 12-month loading rate in terms of tpy for each air contaminant. The measured concentrations of each speciated air contaminant shall be converted to an equivalent mass emission rate based upon the flow rates during the sample collection period using the calculation methods and assumptions in the permit application, PI-1 dated April 19, 2017, as updated. The MLSS used in the emission calculation shall be either the minimum identified in Special Condition 39 or the measured concentration for the day the sampling required for this condition is completed. The short term emission rate calculations for such air contaminants shall be based on the concentrations and flow rates measured during sampling. The rolling 12-month emission rate calculation for each air contaminant shall be based on the rolling 12-month average contaminant concentration and the rolling 12-month wastewater flow. All other inputs into the calculation shall match those in the permit application for that averaging period (worst case). Total VOC mass emission rates shall be calculated as the sum of the individual speciated VOC mass emission rates.
- C. All air contaminants ascertained by the analytical methods shall be evaluated. For any tentatively identified air contaminant that can be confirmed as present and that would have a calculated air contaminant mass emission rate more than 0.04 pound per hour (lb/hr) above that represented in the permit application (PI-1 dated April 19, 2017, as updated), the total emissions of that compound must satisfy the following:
- (1) The Effect Screening Level (ESL) for an air contaminant shall be obtained from the current TCEQ ESL list or by written request to the TCEQ Toxicology Section.

- (2) The information below shall be recorded for the air contaminant.
 - (a) Chemical name(s), composition, and chemical abstract registry number if available.
 - (b) True vapor pressure at maximum hourly and annual average temperature.
 - (c) Molecular weight.
 - (d) Date air contaminant was detected in the sample.
 - (e) Material Safety Data Sheet or equivalent.
 - (f) Concentration of air contaminant detected in the wastewater.
- D. Records of sampling location, sampling procedures, sample chain of custody forms, test methods, sampling results, calculated emission rates, and sample of calculations shall be maintained.

Control Device and Capture System Operational Specifications

- 41. The following requirements apply to vent gas combusted in any thermal control device (EPNs UFFLARE01, UFFLARE02, GFFLARE01, UFF01A, UFF01B, and GBX02).
 - A. Vent gas in the glycol vent system shall have a total sulfur content not to exceed 5 gr per 100 dscf on a 3 hour average.
 - B. Compliance with the requirements of Special Condition 1 and paragraph A of this Special Condition shall be demonstrated as follows:
 - (1) A continuous total sulfur analyzer shall be installed on the vent gas stream to the shared thermal oxidizers, the multi-point ground flare, the shared elevated flare, and to the utility boilers.
 - (a) The analyzer shall be installed and operated as specified by the manufacturer.
 - (b) Prior to the start of operation of the facilities covered by this permit, the permit holder shall obtain approval from the TCEQ Air Permits Division for proposed periodic performance evaluations and quality assurance procedures for the analyzer.
 - (2) A sample of the vent gas to the MEG thermal oxidizer and the MEG elevated flare shall be taken on a semi-annual basis and analyzed for total sulfur.
- 42. The following requirements apply to capture systems for each of the thermal control devices (EPNs UFFLARE01, UFFLARE02, GFFLARE01, UFF01A, UFF01B, and GBX02).
 - A. Complete either of the following.
 - (1) 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; or
 - (2) Once a year, verify the capture system is leak-free by inspecting in accordance with 40 CFR Part 60, Appendix A, Test Method 21. Leaks shall be indicated by an instrument reading greater than or equal to 500 ppmv above background.

- B. Bypass of control devices shall be prevented through compliance with one of the following options:
- (1) The control device shall not have a bypass; or
 - (2) If there is a bypass for the control device, comply with either of the following requirements:
 - (a) Install a position indicator that records the valve position, or a flow indicator that records the flow immediately downstream of each valve that if opened would allow a vent stream to bypass the control device and be emitted, either directly or indirectly, to the atmosphere. The indicator must record flow or position and verify zero flow at least once every 15 minutes; or
 - (b) Once a month, inspect the valves, verifying that the position of the valves and the condition of the car seals 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.

- C. Records of the inspections required shall be maintained and if the results of any of the above inspections are not satisfactory, the permit holder shall promptly take necessary corrective action.

43. Reserved.

Multi-Point Ground Flare

44. The multi-point ground flare (EPN UFFLARE01) shall be designed and operated in accordance with the following requirements:
- A. The requirements published at 81 FR 23480, 23484–23486 are incorporated herein by reference, except that the required minimum net heating value or lower flammability limit shall be that specified in the conditions of an Alternate Means of Control (AMOC) authorized by TCEQ or an Alternative Means of Emission Limitation (AMEL) authorized by EPA.

Elevated Flare

45. Elevated flares (EPNs UFFLARE02 and GFFLARE01) shall be designed and operated in accordance with the following requirements:
- A. The flare systems shall be designed such that the combined assist natural gas and waste stream to each flare meets the 40 CFR § 60.18 specifications of minimum heating value and maximum tip velocity at all times when emissions may be vented to them.
- The heating value and velocity requirements shall be satisfied during operations authorized by this permit. Flare testing per 40 CFR § 60.18(f) may be requested by the appropriate regional office to demonstrate compliance with these requirements.
- B. The flare shall be operated with a flame present at all times and/or have a constant pilot flame. The pilot flame shall be continuously monitored by a thermocouple, infrared monitor,

or ultraviolet 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.

- C. The flare shall be operated with no visible emissions except periods not to exceed a total of five minutes during any two consecutive hours. Compliance with this requirement shall be demonstrated by monitoring the flare tip with a video camera and retaining copies of video recordings.
- D. The permit holder shall install a continuous flow monitor and calorimeter that provides a record of the actual flow rate and the net heating value of the vent stream to the flare. The flow monitor sensor and analyzer sample points shall be installed in the vent stream as near as possible to the flare inlet such that the total vent stream to the flare is measured and analyzed. Readings shall be taken at least once every 15 minutes and the average hourly values of the flow and composition (or Btu content) shall be recorded each hour.

The monitors shall be calibrated or have a calibration check performed on an annual basis to meet the following accuracy specifications: the flow monitor shall be accurate to $\pm 5.0\%$ of flow for velocities greater than 1 ft/s, and accurate to $\pm 20\%$ of flow for velocities between 0.1 ft/s and 1 ft/s; the temperature monitor shall be accurate to $\pm 2.0\%$ at absolute temperature; and pressure monitor shall be accurate to ± 5.0 mm Hg.

The calorimeter shall be calibrated, installed, operated, and maintained, in accordance with manufacturer recommendations, to continuously measure and record the net heating value of the gas sent to the flare, in British thermal units/standard cubic foot of the gas.

The monitors and analyzers shall operate as required by this section at least 95% of the time when the flare is operational, averaged over a rolling 12-month period. Flared gas net heating value and actual exit velocity determined in accordance with 40 CFR §§60.18(f)(3) and 60.18(f)(4) shall be recorded at least once every hour. Hourly mass emission rates shall be determined and recorded using the above readings and the emission factors used in the permit application, April 19, 2017, as updated.

- E. [Reserved for additional requirements].

Thermal Oxidizers

- 46. The following requirements apply to the thermal oxidizers (EPNs UFF01A, UFF01B, and GBX02).
 - A. Each of the shared thermal oxidizers (EPNs UFF01A and UFF01B) shall maintain the VOC concentration in the exhaust gas less than 10 ppmv, or achieve a VOC destruction efficiency greater than:
 - (1) 99.9 percent for low-pressure vents from the olefins plant, resin degassing operations, storage tank emissions, and truck/railcar loading operations.
 - (2) 99 percent:
 - (a) During planned maintenance, startup or shutdown activities employing the shared thermal oxidizers as control; and
 - (b) for any combination of vent streams which includes spent nitrogen from polyethylene reactor grade transitions or from the regeneration of polyethylene feed treater beds.

- B. The MEG thermal oxidizer (EPN GBX02) shall maintain the VOC concentration in the exhaust gas less than 10 ppmv, or achieve a VOC destruction efficiency greater than:
- (1) 99.9 percent for the glycol purge vent stream.
 - (2) 99 percent for all other vent streams.
- C. The firebox exit temperature of each thermal oxidizer shall be maintained at not less than 1400° F and exhaust oxygen concentration not less than 3 percent on a six-minute average while waste gas is being fed into the oxidizer prior to initial stack testing. After the initial stack test has been completed, the six minute average temperature shall be equal to, or greater than the respective hourly average maintained during the most recent satisfactory stack testing required by Special Condition 62 as follows:
- (1) For each shared thermal oxidizers, the minimum temperature shall be the higher of the hourly average temperatures maintained under the two sampling scenarios referred to in Special Conditions 62.H(3)(a)–(b).
 - (2) For the MEG thermal oxidizer, the minimum temperature shall be the higher of the hourly average temperatures maintained under the two sampling scenarios referred to in Special Condition 62.H(4)(a)–(b).
- D. The firebox exit temperature of each thermal oxidizer shall be continuously monitored and recorded when waste gas is directed to the oxidizer. 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 ± 0.75 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 thermal oxidizer 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 thermal oxidizer operated over the previous rolling 12-month period. The measurements missed shall be estimated using engineering judgment and the methods used recorded.
- E. The oxygen analyzer used to satisfy Paragraph C of this Special Condition shall continuously monitor and record oxygen concentration when waste gas is directed to the oxidizer. It shall reduce the oxygen readings to an averaging period of 6 minutes or less and record it at that frequency.
- F. The oxygen analyzer shall be zeroed and spanned daily and corrective action taken when the 24-hour span drift exceeds two times the amounts specified Performance Specification No. 3, 40 CFR Part 60, Appendix B. Zero and span is not required on weekends and plant holidays if instrument technicians are not normally scheduled on those days.

The analyzer shall be quality-assured at least semiannually using cylinder gas audits (CGAs) in accordance with 40 CFR Part 60, Appendix F, Procedure 1, § 5.1.2, with the following exception: a relative accuracy test audit is not required once every four quarters (i.e., two successive semiannual CGAs may be conducted). Successive semiannual audits shall occur no closer than four months. Necessary corrective action shall be taken for all CGA exceedances of ± 15 percent accuracy and any continuous emissions monitoring system downtime in excess of 5 percent of the incinerator operating time. These occurrences and corrective actions shall be reported to the appropriate TCEQ Regional Director on a quarterly

basis. Supplemental stack concentration measurements may be required at the discretion of the appropriate TCEQ Regional Director.

Quality-assurance methods equivalent to those specified in this paragraph may be approved by the TCEQ Regional Director or via alteration of this Special Condition.

- G. The permit holder shall install a continuous flow monitor that provides a record of the actual flow rate of the vent stream to each thermal oxidizer. The flow monitor sensor shall be installed in the vent stream as near as possible to the control device inlet such that the total vent stream to the control device is measured and analyzed. Readings shall be taken at least once every 15 minutes and the average hourly values of the flow shall be recorded each hour.
- H. The monitors shall be calibrated or have a calibration check performed on an annual basis to meet the following accuracy specifications: the flow monitor shall be $\pm 5.0\%$, temperature monitor shall be $\pm 2.0\%$ at absolute temperature, and pressure monitor shall be ± 5.0 mm Hg.
- I. Quality assured (or valid) data must be generated when the thermal oxidizer 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 thermal oxidizer operated over the previous rolling 12-month period. The measurements missed shall be estimated using engineering judgment and the methods used recorded.
- J. Collateral emissions of NO_x shall not exceed 0.06 lb/MMBtu (HHV basis) from each thermal oxidizer.

Carbon Adsorption Systems

- 47. Except where otherwise noted in the Special Conditions of this permit, the following requirements apply to each CAS required by the permit.
 - A. The CAS shall be sampled once per hour when organic compounds may be directed to it, to determine breakthrough of VOC. The sampling point shall be at the outlet of the initial canister but before the inlet to the second or final polishing canister. Sampling shall be done during transfer of organic liquids into the Glycol Moderator Drum.
 - B. The VOC sampling and analysis shall be performed using an instrument with a flame ionization detector (FID), or a TCEQ-approved alternative detector. The instrument/FID must meet all requirements specified in Section 8.1 of EPA Method 21 (40 CFR 60, Appendix A). Sampling and analysis for VOC breakthrough shall be performed as follows:
 - (1) Immediately prior to performing sampling, the instrument/FID shall be calibrated with zero and span calibration gas mixtures. Zero gas shall be certified to contain less than 0.1 ppmv total hydrocarbons. Span calibration gas shall be methane at a concentration within ± 10 percent of 100 ppmv, and certified by the manufacturer to be ± 2 percent accurate. Calibration error for the zero and span calibration gas checks must be less than ± 5 percent of the span calibration gas value before sampling may be conducted.
 - (2) The sampling point shall be at the outlet of the initial canister but before the inlet to the second or final polishing canister. Sample ports or connections must be designed such that air leakage into the sample port does not occur during sampling.

- (3) During sampling, data recording shall not begin until after two times the instrument response time. The VOC concentration shall be monitored for at least 5 minutes, and readings shall be recorded at least once per minute.
- C. Breakthrough shall be defined as the highest 1 minute average measured VOC concentration at or exceeding 100 ppmv. 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 prior to the commencement of the next loading activity. 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.
- D. Records of the CAS monitoring maintained at the plant site, shall include (but are not limited to) the following:
 - (1) Sample time and date.
 - (2) Monitoring results (ppmv).
 - (3) Corrective action taken including the time and date of that action.
 - (4) Process operations occurring at the time of sampling.
- E. Alternate monitoring or sampling requirements that are equivalent or better may be approved by the TCEQ Regional Manager. Alternate requirements must be approved in writing before they can be used for compliance purposes.
- F. The design of the CAS shall satisfy either of the following options:
 - (1) Either canister is capable of adsorbing all vapors generated from a transfer activity under anticipated worst-case operating conditions, and the permit holder retains the following records:
 - (a) Documentation of the anticipated worst-case operating conditions; and
 - (b) A copy of the CAS vendor or EPC contractor's statement as to the canister capacity for the specific VOC constituent(s) to be adsorbed; or
 - (2) The requirements of subparagraph (1) are not satisfied, and the required interval for replacement of canisters specified in paragraph C of this Special Condition shall be reduced to one hour.

Maintenance, Startup and Shutdown Activities

General

48. This permit authorizes the planned maintenance, startup, and shutdown (MSS) activities summarized in the MSS Activity Summary (Special Condition 49.C) attached to this permit.

Special Condition 49.A identifies the inherently low emitting MSS activities that may be performed at the plant. Emissions from activities identified in Special Condition 49.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 Special Condition 49.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 Special Condition 49.B may be tracked through the work orders or equivalent. Emissions from activities identified in Special Condition 49.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 Paragraphs A and B of Special Condition 49 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.

The permit additionally authorizes the alternate operating mode summarized below. Records shall be created for each such activity containing the information specified in paragraphs A–E of this Special Condition, except that each instance of the phrase “MSS activity” or “planned MSS activity” shall be replaced by “activity.”

| Facility | Activity | EPN |
|--|--|--------------------|
| Olefins, EPE, CPE and Utilities Plants | Operating during planned outage or low firing of two or more boilers; and operation during planned outage of both of the shared thermal oxidizers. | Shared Vent System |

49. All MSS emissions shall be summed monthly and the rolling 12-month emissions shall be updated on a monthly basis. This permit authorizes emissions from the following temporary facilities used to support planned MSS activities at permanent site facilities: vacuum trucks, portable control devices identified in Special Condition 57, and controlled recovery systems. Emissions from temporary facilities are authorized provided the temporary facility (a) does not remain on the plant site for more than 12 consecutive months, (b) is used solely to support planned MSS activities at the permanent site facilities listed in this Special Condition, and (c) does not operate as a replacement for an existing authorized facility.

Planned startup and shutdown emissions due to the activities identified in this Special Condition are authorized from the facilities and temporary equipment and control devices identified in the Special Conditions of the permit.

- A. Inherently low emitting maintenance activities
 - Reactor sampling
 - Low point drains
 - Management of sludge from pits, ponds, sumps, and water conveyances

Aerosol cans
Calibration of analytical equipment
Carbon canister replacement
Instrumentation/analyzer maintenance
Meter proving
Replacement of analyzer filters and screens
Pipeline pigging
Filter/strainer changeouts
Steam condensate drum flash

B. Routine maintenance

Pump repair/replacement
Fugitive component (valve, pipe, flange) repair/replacement (isolated volume $\leq 150 \text{ ft.}^3$)
Compressor repair/replacement (not including cracked gas compressor, propylene refrigerant compressor or ethylene refrigerant compressor)
Heat exchanger repair/replacement
Vessel repair/replacement (isolated volume $\leq 50 \text{ ft.}^3$)
Transfer of solid catalyst and desiccant to/from process equipment
Instrument/analyzer maintenance

C. MSS Activity Summary

| Facility | Activity | EPN |
|---|---|--|
| Olefins, EPE, CPE and Utilities plants | Process startup and shutdown | Shared Vent System |
| Glycol plant | Process startup and shutdown | Glycol Vent System |
| Olefins, EPE, CPE, Utilities and Glycol plants | Depressurize and drain equipment following shutdown | Shared Vent System, Glycol Vent System |
| Floating roof storage tanks | Operate tank with landed roof, controlled degassing | TMPCTRL |
| All storage tanks | Ventilation, cleaning and inspection | MSSTANK |
| Vacuum trucks | Operate vacuum truck | MSSVAC |
| Frac Tanks | Operate frac tank | MSSFRAC |
| Olefins, EPE, CPE and Utilities plant piping, compressors, process vessels and reactors | Cleaning, inspection and maintenance activities not identified in paragraph B | MSSATM, TMPCTRL, Shared Vent System |
| Storage tanks, loading facilities, and wastewater facilities | Cleaning, inspection and maintenance activities not identified in paragraph B | MSSATM, TMPCTRL, Shared Vent System |

| Facility | Activity | EPN |
|---|---|---|
| Glycol plant piping, process vessels and reactors | Cleaning, inspection and maintenance activities not identified in paragraph B | MSSATM, TMPCTRL, Glycol Vent System |
| Routine maintenance activities | See paragraph B | MSSATM, TMPCTRL, Shared Vent System, Glycol Vent System |
| Inherently low emitting activities | See paragraph A | MSSILE |

De-inventory of process units

50. Process units and facilities, with the exception of those identified in Special Conditions 26, 27, 49.A, and 56 shall be depressurized, emptied, degassed, and placed in service in accordance with the following requirements.
- 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 or closed liquid recovery system 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 Special Condition 49.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 54. 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. If there is not a connection (such as a sample, vent, or drain valve) available from which a representative sample may be obtained, a sample may be taken upon entry into the system after degassing has been completed. The sample shall be taken from inside the vessel so as to minimize any air or dilution from the entry point. The facilities shall be degassed to a control device or controlled recovery system until the VOC concentration is less than 10,000 ppmv 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.

All instances of venting directly to atmosphere provided for under paragraph E of this Special Condition shall be documented when occurring as part of any MSS activity. The emissions associated with venting without control must be included in the work order or equivalent for those planned MSS activities identified in Attachment B.

Storage Tanks

51. This permit authorizes emissions from EPNs MSSTANK and from control devices identified in Special Condition 57 (controlled sources) for the floating roof storage tanks identified in Special Condition 26 during planned floating roof landings. 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 in the MAERT. The following requirements apply to tank roof landings.
- A. At all times that the roof is resting on its leg supports, the tank emissions shall be controlled by a closed vent system and control device meeting the following specifications:

- (1) The closed vent system shall be designed to collect all VOC vapors and gases discharged from the storage vessel and operated with no detectable emissions as indicated by an instrument reading of less than 500 ppm above background and visual inspections, as determined in 40 CFR Part 60, Subpart VV, § 60.485(b).
- (2) 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 the vapor space is directed to the control device. The vapor recovery system collection rate shall be no less than 100 cubic feet per minute when the tank is idle or the tank is being drained, and two times the fill rate when the tank is being refilled.
- (3) The control device shall be operated as required by Special Condition No 57.

The roof shall be landed on its lowest legs unless entry or inspection is planned.

The requirements of this Paragraph do not apply to uncontrolled degassing and/or ventilation conducted pursuant to Paragraphs C–E of this Special Condition.

- B. The control requirements of Paragraph A of this Special Condition may be waived during emptying and set-up for tank degassing if the following conditions are met:
- (1) The tank will be completely emptied for the purposes of inspection and maintenance.
 - (2) The process of emptying the tank when the roof is resting on the leg supports shall be continuous and shall be accomplished as rapidly as practicable.
 - (3) Degassing of the vapor space under the landed roof begins within 24 hours after the tank has been emptied.
- C. After the tank has been completely emptied, the tank shall not be opened except as necessary to set up for degassing and cleaning. Floating roof tanks with liquid capacities less than 100,000 gallons may be degassed without control if the VOC partial pressure of the standing liquid in the tank has been reduced to less than 0.02 psia prior to ventilating the tank. Controlled degassing of the vapor space under the landed roof 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 controlled recovery system and controlled degassing must be maintained until the VOC concentration is less than 10,000 ppmv 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 flushed 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 No. 54.

- (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) Degassing must be performed every 24 hours unless there is no standing liquid in the tank or the VOC partial pressure of the remaining liquid in the tank is less than 0.15 psia.
- D. The tank shall not be opened or ventilated without control, except as allowed by (1) or (2) below until one of the criteria in Paragraph E of this Special Condition is satisfied.
 - (1) Minimize air circulation in the tank vapor space.
 - (a) 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.
 - (b) Access points shall be closed when not in use.
 - (2) Minimize time and VOC partial pressure. (this option may be used only if justified by the applicant)
 - (a) The VOC partial pressure of the liquid remaining in the tank shall not exceed 0.044 psia as documented by the method specified in subparagraph D(1) of this condition;
 - (b) Blowers may be used to move air through the tank without emission control at a rate not to exceed 1000 cfm for no more than 72 hours. All standing liquid shall be removed from the tank during this period; and
 - (c) Records shall be maintained of the blower circulation rate, the duration of uncontrolled ventilation, and the date and time all standing liquid was removed from the tank.
- E. The tank may be opened without restriction and ventilated without control after all standing liquid has been removed from the tank or the liquid remaining in the tank has a VOC partial pressure of less than 0.02 psia. These criteria shall be demonstrated in one of the following ways:
 - (1) Low VOC partial pressure liquid that is soluble with the liquid previously stored may be added to the tank to lower the VOC partial pressure of the liquid mixture remaining in the tank to less than 0.02 psia. This liquid shall be added during tank degassing if practicable. The estimated volume of liquid remaining in the drained tank and the volume and type of liquid added shall be recorded. The liquid VOC partial pressure may be estimated based on this information and engineering calculations.
 - (2) If water is added or sprayed into the tank to remove standing VOC, one of the following must be demonstrated:
 - (a) Take a representative sample of the liquid remaining in the tank and verify no visible sheen using the static sheen test from 40 CFR Part 435, Subpart A, Appendix 1.

- (b) Take a representative sample of the liquid remaining in the tank and verify that the hexane soluble VOC concentration is less than 1000 ppmw using EPA method 1664.
- (c) Stop ventilation and close the tank for at least 24 hours. When the tank manway is opened after this period, verify that the VOC concentration is less than 1000 ppmw through the procedure in Special Condition No 54.

(3) No standing liquid, verified through visual inspection.

The permit holder shall maintain records to document the method used to release the tank.

- F. 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 (as applicable):
- (1) The identification of the tank and emission point number, and any control devices or controlled 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 liquid was pumped from the tank to the extent practicable;
 - (c) Start and completion of controlled degassing, and total volumetric flow;
 - (d) All standing liquid was removed from the tank or any transfers of low VOC partial pressure liquid to or from the tank including volumes and vapor pressures to reduce tank liquid VOC partial pressure to < 0.02 psia.
 - (e) If there is liquid 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 (or later edition) and the permit application.

52. Fixed roof storage tanks are subject to the requirements of Special Condition 51.D and 51.E. If the ventilation of the vapor space is controlled, the emission control system shall meet the requirements of Special Condition 51.C(1)–(4). Records shall be maintained per Special Condition 51.F(3)(c)–(e) and 51.F(4).

Solids Handling

53. Transfer of solid materials, including catalyst and desiccant, to or from process equipment shall be conducted consistent with the following requirements:

- A. Particulate emissions shall be minimized as follows during loading of solids into process equipment:
 - (1) Equipment for loading solids shall be designed and configured such that solids are dropped from a height not to exceed 2 feet; or
 - (2) A vacuum or vacuum truck shall be used to convey solids, where the vacuum/vacuum truck exhaust is controlled using a HEPA filter or portable dust collector.
- B. Particulate emissions shall be minimized as follows during unloading of solids from process equipment using one of the following methods:
 - (1) Process equipment shall be flooded with water prior to transfer of solids;
 - (2) Solids shall be transferred to a bin or container which minimize the action of wind currents on dust formation; or
 - (3) If a portable vacuum or vacuum truck is used to remove solids, the system shall be enclosed such that the only vent to the atmosphere is through the vacuum/vacuum truck exhaust, and such exhaust shall be controlled using a HEPA filter or portable dust collector.
- C. The permit holder shall record the type of solids transferred, the method of transfer, and the type of control device employed (if any).

Analytical Methods

- 54. 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 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:
$$\text{VOC Concentration} = \text{Concentration as read from the instrument} \times \text{RF}$$

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 as defined in (3) is less than 80 percent of the range of the tube and 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 calibration gas shall be documented in the site safety procedures.
- (2) The detector shall be calibrated within 30 days of use with a certified gas standard at 25% of the lower explosive limit (LEL) for the calibration gas. Records of the calibration date/time and calibration result (pass/fail) shall be maintained.
- (3) 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 the calibration gas. 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.
- (4) A certified methane gas standard equivalent to 25% of the LEL for the calibration gas may be used for calibration and functionality tests provided that the LEL response is within 95% of that for the calibration gas.

Temporary facilities and control devices

55. The following requirements apply to vacuum and air mover truck operations to support planned MSS at this site:
 - A. Prior to initial use, identify any liquid in the truck. Record the liquid level and document the VOC partial pressure. After each liquid transfer, identify the liquid, the volume transferred, and its VOC partial pressure.
 - B. If vacuum pumps or blowers are operated when liquid is in or being transferred to the truck, the following requirements apply:
 - (1) If the VOC partial pressure of the liquid in or being transferred to the truck is greater than 0.50 psi at 95°F, the vacuum/blower exhaust shall be routed to a control device or a controlled recovery system.
 - (2) Equip fill line intake with a "duckbill" or equivalent attachment if the hose end cannot be submerged in the liquid being collected.

- (3) A daily record containing the information identified below is required for each vacuum truck in operation at the site each day.
 - (a) 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.
 - (b) 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 54.A or 54.B.
 - C. Record 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 permit holder determines that the VOC partial pressure of all the liquids vacuumed into the truck is less than 0.10 psi, such determination 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 Paragraphs A–D do not apply.
- 56. The following requirements apply to frac, or temporary, tanks and vessels used in support of MSS activities.
 - A. The exterior surfaces of these tanks/vessels that are exposed to the sun shall be white or aluminum. This requirement does not apply to tanks/vessels that only vent to atmosphere when being filled, sampled, gauged, or when removing material.
 - 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 450 gallons of liquid that are closed such that the vessel does not vent to atmosphere except when filling, sampling, gauging, or when removing material.
 - 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. This record must be updated by the last day of the month following. 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.
57. 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 5 minutes during any two consecutive hours. Each device used must meet all the requirements identified for that type of control device.

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.
- (3) The method of VOC sampling and analysis shall be by detector meeting the requirements of Special Condition 54.A or 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 4 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. Thermal Oxidizer.

- (1) The thermal oxidizer firebox exit temperature shall be maintained at not less than 1400°F and waste gas flows shall be limited to assure at least a 0.5 second residence time in the fire box while waste gas is being fed into the oxidizer.
- (2) The thermal oxidizer exhaust temperature shall be continuously monitored and recorded when waste gas is directed to the oxidizer. The temperature measurements shall be made at intervals of six minutes or less and recorded 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 ± 0.75 percent of the temperature being measured expressed in degrees Celsius or $\pm 2.5^{\circ}\text{C}$.

C. 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 subparagraph 3 below. VOC shall be measured in accordance with the applicable 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 54.A 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 Subparagraph (2) above.

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 54.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 54.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 Subparagraph (2) above.

- D. A permanent control device specified in the permit, operated as required in the applicable permit Special Conditions.
- E. 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 54.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.
- F. 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 ensure 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 54.
 - (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.

Use of permits by rule

- 58. Additional occurrences of MSS activities authorized by this permit may be authorized under permit by rule only if conducted in compliance with this permit's procedures, emission controls, monitoring, and recordkeeping requirements applicable to the activity.

Miscellaneous Sources

- 59. During laboratory operations (EPN U_LAB), gas sample cylinders shall be depressurized to a CAS which ensures an outlet VOC concentration of no greater than 100 ppmv prior to cleaning. The permit holder shall obtain and adhere to all manufacturers' recommendations for replacing carbon canisters at appropriate intervals to ensure that breakthrough does not occur.

60. The following requirements apply to emergency generators (EPNs EMGGEN01, EMGGEN02, ADMINGEN, U_GEN4, U_GEN5, GLYGEN01) and the emergency firewater pump (EPN FWP1, FWP2).
- A. Fuel for the engine shall be limited to ultra-low sulfur diesel (ULSD) containing no more than 15 ppmw total sulfur.
 - B. The engine shall be limited to 100 hours per year during non-emergency situations, as defined at 40 CFR § 63.6640(f).
 - C. The engine shall be equipped with a non-resettable hour meter.
 - D. Each emergency generator shall satisfy the Tier 4 exhaust emission standards specified at 40 CFR § 1039.101 for model years 2015 and later.
 - E. Each firewater pump shall satisfy the Tier 3 exhaust emission standards specified at 40 CFR § 89.112.
 - F. Compliance with the emission limits of paragraph D and E of this Special Condition shall be demonstrated by retaining a copy of the manufacturers' certificate of conformity, or through other methods receiving prior written approval of the TCEQ Executive Director.
61. All ammonia vapors generated during unloading of ammonia and depressurization of ammonia storage and transport vessels shall be captured and directed to the ammonia diffusion chamber (EPN U_NH3SMP). The ammonia diffusion chamber shall capture 100% of ammonia vapors directed to it, as demonstrated through compliance with paragraphs A–B of this Special Condition.
- A. Prior to introduction of ammonia, the ammonia diffusion chamber shall be filled with no less than two gallons of fresh water per pound of ammonia vapors that may be discharged into the chamber.
 - B. The ammonia diffusion chamber shall be designed to ensure complete mixing of ammonia vapors into the standing water.
 - C. The permit holder shall complete removal of wastewater from the diffusion chamber to a closed storage vessel or treatment system as soon as practicable, and removal shall commence within one hour of completion of the transfer or depressurization activity.

Initial Demonstration of Compliance

62. The permit holder shall perform stack sampling and other testing as required to establish the actual pattern and quantities of air contaminants being emitted into the atmosphere from the sources of emissions specified in Paragraph G of this Special Condition, and to demonstrate compliance with Special Conditions 1, 21, 23, 39, and 46. The permit holder is responsible for providing sampling and testing facilities and conducting the sampling and testing operations at his expense. Sampling shall be conducted in accordance with the appropriate procedures of the TCEQ Sampling Procedures Manual and the EPA Reference Methods.

Requests to waive testing for any pollutant specified in this condition shall be submitted to the TCEQ Office of Air, Air Permits Division. Test waivers and alternate/equivalent procedure proposals for Title 40 Code of Federal Regulation Part 60 (40 CFR Part 60) testing which must have EPA approval shall be submitted to the TCEQ Regional Director.

- A. The appropriate TCEQ Regional Office shall be notified not less than 45 days prior to sampling. The notice shall include:
- (1) Proposed date for pretest meeting.
 - (2) Date sampling will occur.
 - (3) Name of firm conducting sampling.
 - (4) Type of sampling equipment to be used.
 - (5) Method or procedure to be used in sampling.
 - (6) Description of any proposed deviation from the sampling procedures specified in this permit or TCEQ/EPA sampling procedures.
 - (7) Procedure/parameters to be used to determine worst case emissions during the sampling period.

The purpose of the pretest meeting is to review the necessary sampling and testing procedures, to provide the proper data forms for recording pertinent data, and to review the format procedures for the test reports. The TCEQ Regional Director must approve any deviation from specified sampling procedures.

- B. Air contaminants to be tested for include (but are not limited to) those specified in paragraph G of this Special Condition. Sampling for SO₂ shall be required for one of the utility boilers and for one of the shared thermal oxidizers. Sampling for VOC shall be required for one dryer per PE unit.
- C. Sampling shall occur within 60 days after achieving the maximum operating rate, but no later than 180 days after initial start-up of the facilities and at such other times as may be required by the TCEQ Executive Director. Additionally, sampling for CO and NO_x shall be repeated at an interval of once every five years for the MEG Thermal Oxidizer. The requirement to complete sampling for shared thermal oxidizers shall be extended to no later than 365 days after initial start-up of any polyethylene unit. Requests for additional time to perform sampling shall be submitted to the appropriate TCEQ Regional Office.
- D. The facility being sampled shall operate as indicated in Paragraph H during stack emission testing. These conditions/parameters and any other primary operating parameters that affect the emission rate shall be monitored and recorded during the stack test. Any additional parameters shall be determined at the pretest meeting and shall be stated in the sampling report. Permit conditions and parameter limits may be waived during stack testing performed under this condition if the proposed condition/parameter range is identified in the test notice specified in Paragraph A and accepted by the TCEQ Regional Office. Permit allowable emissions and emission control requirements are not waived and still apply during stack testing periods.

During subsequent operations, stack sampling shall be performed within 120 days for the following sources if the following requirements are satisfied. This sampling may be waived by the TCEQ Air Section Manager for the Region.

- (1) For each combustion unit, with respect to sampling for NO_x, if the 3-hr average firing rate exceeds the higher of:
 - (a) the firing rate demonstrated during the most recent stack test for the combustion unit; or

- (b) the firing rate demonstrated during the most recent stack test for any identical combustion unit.
- (2) For any pyrolysis furnace, sampling for PM₁₀ shall be required if a violation of Special Condition 18 occurs during decoking operations. The time required to complete sampling shall be extended to 365 days. This requirement shall not apply more than one time per furnace.
- (3) For each dryer vent, if the unit produces a grade of resin with a total residual VOC content that exceeds 150% of that determined during the most recent stack test.
- E. Copies of the final sampling report shall be forwarded to the offices below within 60 days after sampling is completed. Sampling reports shall comply with the attached provisions entitled "Chapter 14, Contents of Sampling Reports" of the TCEQ Sampling Procedures Manual. The reports shall be distributed as follows:
- One copy to the appropriate TCEQ Regional Office.
One copy to each local air pollution control program.
- F. Sampling ports and platform(s) shall be incorporated into the design of each source listed in paragraph G according to the specifications set forth in the attachment entitled "Chapter 2, Guidelines For Stack Sampling Facilities" of the TCEQ Sampling Procedures Manual. Alternate sampling facility designs must be submitted for approval to the TCEQ Regional Director.
- G. Sources of Emissions subject to stack sampling requirements, and pollutants to be tested, are as follows:

| EPN | Source Name | Pollutant (required sampling indicated by X; conditional sampling indicated by †) | | | | | |
|------------|--|---|----|-----------------|-----------------|------------------|-----------------|
| | | VOC | CO | NO _x | NH ₃ | PM ₁₀ | SO ₂ |
| O_FAF01 | Pyrolysis Furnace A | | X | X | X | † | |
| O_FBF01 | Pyrolysis Furnace B | | X | X | X | | |
| O_FCF01 | Pyrolysis Furnace C | | X | X | X | | |
| O_FDF01 | Pyrolysis Furnace D | | X | X | X | | |
| O_FEF01 | Pyrolysis Furnace E | | X | X | X | | |
| O_FFF01 | Pyrolysis Furnace F | | X | X | X | | |
| O_FGF01 | Pyrolysis Furnace G | | X | X | X | | |
| O_FHF01 | Pyrolysis Furnace H | | X | X | X | | |
| USSG01A | Utilities Boiler A | | X | X | X | | X |
| USSG01B | Utilities Boiler B | | X | X | X | | |
| USSG01C | Utilities Boiler C | | X | X | X | | |
| UFF01A | Shared Thermal Oxidizer A | X | X | X | | | X |
| UFF01B | Shared Thermal Oxidizer B | X | X | X | | | |
| GBX02 | MEG Thermal Oxidizer | X | X | X | | | |
| ZWSRCO1A/B | Equalization Tanks Catalytic Oxidizer | X | | | | | |
| EMFAN01 | EPE Pellet Dryer 1 Vent | X | | | | | |
| EMFAN02 | EPE Pellet Dryer 2 Vent | | | | | | |
| CMFAN01 | CPE Pellet Dryer 1 Vent | X | | | | | |
| CMFAN02 | CPE Pellet Dryer 2 Vent | | | | | | |

- H. Facilities shall operate as follows during sampling:

- (1) For pyrolysis furnaces, sampling shall occur at the maximum heat duty that can be reasonably achieved during sampling (NO_x , CO and NH_3). In case sampling for PM_{10} is required for any furnace, such sampling shall occur during decoking operations.
- (2) For utility boilers, sampling shall occur at the maximum heat duty that can be reasonably achieved during sampling. During sampling for SO_2 , the sulfur content of the fuel shall be monitored.
- (3) For the shared thermal oxidizers:
 - (a) Sampling to determine compliance with Special Condition 46.A(2) shall occur when the thermal oxidizer receives a nitrogen-rich vent gas stream during purging of a polyethylene unit reactor for a grade transition or shutdown.
 - (b) Sampling to determine compliance with Special Condition 46.A(1) shall occur at any time that the Olefins plant is in operation.
 - (c) Sampling referred to in subsections (a) and (b) may consist of a single test, if the relevant conditions for each test are satisfied.
- (4) For the MEG thermal oxidizers:
 - (a) Sampling to determine compliance with Special Condition 46.B(2) shall occur when the Glycol plant is in operation, and the glycol purge vent stream is redirected to the MEG Elevated flare.
 - (b) Sampling to determine compliance with Special Condition 46.B(1) shall occur when the Glycol plant is in operation and the glycol purge vent stream is routed to the thermal oxidizer.
 - (c) Sampling referred to in subsections (a) and (b) may consist of a single test, if the relevant conditions for each test are satisfied.
- (5) For each pellet dryer vent, sampling shall occur during production of a resin expected to have the maximum total residual VOC content, at the maximum achievable production rate for the unit. A sample of the resin being produced during the stack test shall be collected and analyzed using the methods referred to in Special Condition 13.C.
- (6) For the wastewater treatment plant catalytic oxidizer, sampling shall occur when the Equalization Tanks are receiving influent wastewater.

Continuous Demonstration of Compliance

63. The permit holder shall install and operate a fuel flow meter to measure the gas fuel usage for each device listed in Special Condition 65. The monitored data shall be reduced to an hourly average flow rate at least once every day, using a minimum of four equally-spaced data points from each one-hour period. Each monitoring device shall be calibrated at a frequency in accordance with the manufacturer's specifications or at least annually, whichever is more frequent, and shall be accurate to within 5 percent. In lieu of monitoring fuel flow, the permit holder may monitor stack exhaust flow using the flow monitoring specifications of 40 CFR Part 60, Appendix B, Performance Specification 6 or 40 CFR Part 75, Appendix A.
64. The permit holder shall install and operate an analyzer which continuously monitors the heat content of fuel supplied to each combustion unit and the shared thermal oxidizers. For combustion

devices which receive fuel from a common fuel gas header, a single analyzer may be installed in the fuel gas header.

65. CEMS shall be installed and operated as follows for equipment covered by the permit. Special Condition 23.C specifies acceptable alternatives to installation of an NH₃ CEMS.

| EPN | Source Name | CEMS required for pollutant (indicated by X) | | | |
|---------|---------------------------|--|----|-----------------|-----------------|
| | | O ₂ | CO | NO _x | NH ₃ |
| O_FAF01 | Pyrolysis Furnace A | X | X | X | X |
| O_FBF01 | Pyrolysis Furnace B | X | X | X | X |
| O_FCF01 | Pyrolysis Furnace C | X | X | X | X |
| O_FDF01 | Pyrolysis Furnace D | X | X | X | X |
| O_FEF01 | Pyrolysis Furnace E | X | X | X | X |
| O_FFF01 | Pyrolysis Furnace F | X | X | X | X |
| O_FGF01 | Pyrolysis Furnace G | X | X | X | X |
| O_FHF01 | Pyrolysis Furnace H | X | X | X | X |
| USSG01A | Utilities Boiler A | X | X | X | X |
| USSG01B | Utilities Boiler B | X | X | X | X |
| USSG01C | Utilities Boiler C | X | X | X | X |
| UFF01A | Shared Thermal Oxidizer A | X | X | X | |
| UFF01B | Shared Thermal Oxidizer B | X | X | X | |

66. Each CEMS required under this permit shall satisfy the following requirements.

- A. The CEMS shall meet the design and performance specifications, pass the field tests, and meet the installation requirements and the data analysis and reporting requirements specified in the applicable Performance Specification Nos. 1 through 9, 40 CFR Part 60, Appendix B. If there are no applicable performance specifications in 40 CFR Part 60, Appendix B, contact the TCEQ Office of Air, Air Permits Division for requirements to be met.
- B. Subparagraph (1) below applies to sources subject to the quality-assurance requirements of 40 CFR Part 60, Appendix F; and Subparagraph (2) applies to all other sources. Subparagraph (3) applies to all sources:
 - (1) The permit holder shall assure that the CEMS meets the applicable quality-assurance requirements specified in 40 CFR Part 60, Appendix F, Procedure 1. Relative accuracy exceedances, as specified in 40 CFR Part 60, Appendix F, § 5.2.3 and any CEMS downtime shall be reported to the appropriate TCEQ Regional Manager, and necessary corrective action shall be taken. Supplemental stack concentration measurements may be required at the discretion of the appropriate TCEQ Regional Manager.
 - (2) Unless Appendix F is otherwise required by NSPS, state law or regulation, or permit or approval, in lieu of the requirements of 40 CFR Part 60 Appendix F 5.1.1, 5.1.3, and 5.1.4, the permit holder may conduct:
 - (a) either a Relative Accuracy Audit (RAA) or a Relative Accuracy Test Audit (RATA) once every three (3) years; and
 - (b) a Cylinder Gas Audit (CGA) each calendar quarter in which the RAA or RATA is not performed.

- (3) The system shall be zeroed and spanned daily, and corrective action taken when the 24-hour span drift exceeds two times the amounts specified in the applicable Performance Specification Nos. 1 through 9, 40 CFR Part 60, Appendix B, or as specified by the TCEQ if not specified in Appendix B. Zero and span is not required on weekends and plant holidays if instrument technicians are not normally scheduled on those days.

Each monitor shall be quality-assured at least quarterly using Cylinder Gas Audits (CGA) in accordance with 40 CFR Part 60, Appendix F, Procedure 1, Section 5.1.2, with the following exception: a relative accuracy test audit (RATA) is not required once every four quarters (i.e., four successive quarterly CGA may be conducted). An equivalent quality-assurance method approved by the TCEQ may also be used. Successive quarterly audits shall occur no closer than two months.

All CGA exceedances of ± 15 percent accuracy indicate that the CEMS is out of control.

- C. The monitoring data shall be reduced to (averaging period) average concentrations at least once every day, using a minimum of four equally-spaced data points from each one-hour period. The individual average concentrations shall be reduced to units of ppmvd, lb/MMBtu, and/or lb/hr, as applicable at least once every week as follows:
 - (1) The measured 1-hr average concentration (in units of ppmvd) from the CEMS shall be converted to a dry basis and corrected to the reference oxygen concentration.
 - (2) The converted concentration, corrected for oxygen, shall be converted to an emissions factor (in units of lb/MMBtu) by using an appropriate F-factor determined as specified in EPA Method 19, Equation 19-13, determined using the measured hydrogen content of the fuel gas.
 - (3) The emission rate (in units of lb/hr) shall be determined by multiplying the emission factor by the fuel flow rate and fuel heat content measured as required under Special Conditions 63–64.
 - (4) In case the permit holder elects to monitor stack exhaust flow as provided for in Special Condition 63, the emission rate (in units of lb/hr) shall be determined by multiplying the measured concentration (converted and corrected as needed) by the exhaust flow rate; and the emission factor (in units of lb/MMBtu) shall be determined by dividing the emission rate by the monitored fuel flow rate, using fuel flow rate and fuel heat content data measured as required under Special Conditions 63–64.

A CEMS may be shared between two stacks if it is capable of generating quality-assured data at the frequency required by this Special Condition for each stack.

- D. All monitoring data and quality-assurance data shall be maintained by the source. The data from the CEMS may, at the discretion of the TCEQ, be used to determine compliance with the conditions of this permit.
- E. The appropriate TCEQ Regional Office shall be notified at least 30 days prior to any required RATA in order to provide them the opportunity to observe the testing.
- F. Quality-assured (or valid) data must be generated when the source generating air emissions 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 source operated over the previous rolling 12-month

period. The measurements missed shall be estimated using engineering judgment and the methods used recorded. Options to increase system reliability to an acceptable value, including a redundant CEMS, may be required by the TCEQ Regional Manager.

Recordkeeping

- 67. The records retention period specified under General Condition 7 shall be extended to five years.
- 68. Reserved.

Miscellaneous Provisions

- 69. Prior to the start of operations of the facilities covered by this permit, the permit holder shall obtain a permit alteration or permit amendment which updates the permit representations and these Special Conditions as follows:
 - A. Individual emission limitations shall be specified for the storage tanks and sumps covered by the permit.
 - B. Individual emission limitations shall be specified for the emergency-use diesel engines covered by the permit.
 - C. A revised TCEQ Table 7 shall be submitted which reflects that as-built design of each storage tank, if the design differs from that specified in the permit application (form PI-1 dated April 17, 2017, as revised).
 - D. The as-installed maximum power rating for each engine shall be specified, if the engine design differs from that specified in the permit application (form PI 1 dated April 17, 2017, as revised).
 - E. The as-installed design firing rate for each boiler and each pyrolysis furnace shall be specified, if such design differs from that specified in the permit application (form PI-1 dated April 17, 2017, as revised).

Date: November 27, 2019

Emission Sources - Maximum Allowable Emission Rates

Permit Numbers 146425 and PSDTX1518

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) |
| O_FAFO1 | Pyrolysis Furnace A | CO | 165.16 | — |
| | | NO _x | 25.20 | — |
| | | PM | 4.32 | — |
| | | PM ₁₀ | 4.32 | — |
| | | PM _{2.5} | 4.32 | — |
| | | VOC | 3.12 | — |
| | | SO ₂ | 0.34 | — |
| | | H ₂ SO ₄ | 0.03 | — |
| | | NH ₃ | 2.51 | — |
| O_FBFO1 | Pyrolysis Furnace B | CO | 165.16 | — |
| | | NO _x | 25.20 | — |
| | | PM | 4.32 | — |
| | | PM ₁₀ | 4.32 | — |
| | | PM _{2.5} | 4.32 | — |
| | | VOC | 3.12 | — |
| | | SO ₂ | 0.34 | — |
| | | H ₂ SO ₄ | 0.03 | — |
| | | NH ₃ | 2.51 | — |

Emission Sources - Maximum Allowable Emission Rates

| Emission Point No. (1) | Source Name (2) | Air Contaminant Name (3) | Emission Rates | |
|------------------------|---------------------|--------------------------------|----------------|---------|
| | | | lbs/hour | TPY (4) |
| O_FCF01 | Pyrolysis Furnace C | CO | 165.16 | — |
| | | NO _x | 25.20 | — |
| | | PM | 4.32 | — |
| | | PM ₁₀ | 4.32 | — |
| | | PM _{2.5} | 4.32 | — |
| | | VOC | 3.12 | — |
| | | SO ₂ | 0.34 | — |
| | | H ₂ SO ₄ | 0.03 | — |
| | | NH ₃ | 2.51 | — |
| O_FDF01 | Pyrolysis Furnace D | CO | 165.16 | — |
| | | NO _x | 25.20 | — |
| | | PM | 4.32 | — |
| | | PM ₁₀ | 4.32 | — |
| | | PM _{2.5} | 4.32 | — |
| | | VOC | 3.12 | — |
| | | SO ₂ | 0.34 | — |
| | | H ₂ SO ₄ | 0.03 | — |
| | | NH ₃ | 2.51 | — |
| O_FEF01 | Pyrolysis Furnace E | CO | 165.16 | — |
| | | NO _x | 25.20 | — |
| | | PM | 4.32 | — |
| | | PM ₁₀ | 4.32 | — |
| | | PM _{2.5} | 4.32 | — |
| | | VOC | 3.12 | — |
| | | SO ₂ | 0.34 | — |
| | | H ₂ SO ₄ | 0.03 | — |
| | | NH ₃ | 2.51 | — |

Emission Sources - Maximum Allowable Emission Rates

| Emission Point No. (1) | Source Name (2) | Air Contaminant Name (3) | Emission Rates | |
|------------------------|---------------------|--------------------------------|----------------|---------|
| | | | lbs/hour | TPY (4) |
| O_FFF01 | Pyrolysis Furnace F | CO | 165.16 | — |
| | | NO _x | 25.20 | — |
| | | PM | 4.32 | — |
| | | PM ₁₀ | 4.32 | — |
| | | PM _{2.5} | 4.32 | — |
| | | VOC | 3.12 | — |
| | | SO ₂ | 0.34 | — |
| | | H ₂ SO ₄ | 0.03 | — |
| | | NH ₃ | 2.51 | — |
| O_FGF01 | Pyrolysis Furnace G | CO | 165.16 | — |
| | | NO _x | 25.20 | — |
| | | PM | 4.32 | — |
| | | PM ₁₀ | 4.32 | — |
| | | PM _{2.5} | 4.32 | — |
| | | VOC | 3.12 | — |
| | | SO ₂ | 0.34 | — |
| | | H ₂ SO ₄ | 0.03 | — |
| | | NH ₃ | 2.51 | — |
| O_FHF01 | Pyrolysis Furnace H | CO | 165.16 | — |
| | | NO _x | 25.20 | — |
| | | PM | 4.32 | — |
| | | PM ₁₀ | 4.32 | — |
| | | PM _{2.5} | 4.32 | — |
| | | VOC | 3.12 | — |
| | | SO ₂ | 0.34 | — |
| | | H ₂ SO ₄ | 0.03 | — |
| | | NH ₃ | 2.51 | — |

Emission Sources - Maximum Allowable Emission Rates

| Emission Point No. (1) | Source Name (2) | Air Contaminant Name (3) | Emission Rates | |
|------------------------|---|--------------------------------|----------------|---------|
| | | | lbs/hour | TPY (4) |
| O_F_CAP | Pyrolysis Furnaces Cap | CO | 651.06 | 637.87 |
| | | NO _x | 53.70 | 196.22 |
| | | NO _x Shakedown | 53.70 | 184.22 |
| | | PM | — | 92.85 |
| | | PM ₁₀ | — | 92.85 |
| | | PM _{2.5} | — | 92.85 |
| | | VOC | — | 67.20 |
| | | SO ₂ | — | 7.33 |
| | | H ₂ SO ₄ | — | 0.67 |
| | | NH ₃ | — | 77.46 |
| UFFLARE01 | Multi-Point Ground Flare (Routine) | CO | 167.48 | — |
| | | NO _x | 109.51 | — |
| | | VOC | 500.00 | — |
| | | SO ₂ | 22.00 | — |
| UFFLARE01 | Multi-Point Ground Flare (Planned MSS, alternate operating mode and Shakedown Period) (8) | CO | 4218.81 | — |
| | | NO _x | 2758.17 | — |
| | | VOC | 5944.74 | — |
| | | SO ₂ | 395.28 | — |
| UFFLARE02 | Shared Elevated Flare (Routine) | CO | 165.32 | — |
| | | NO _x | 32.44 | — |
| | | VOC | 300.00 | — |
| | | SO ₂ | 98.00 | — |
| UFFLARE02 | Shared Elevated Flare (Planned MSS, alternate operating mode and Shakedown Period) (8) | CO | 349.86 | — |
| | | NO _x | 68.66 | — |
| | | VOC | 916.17 | — |
| | | SO ₂ | 98.00 | — |

Emission Sources - Maximum Allowable Emission Rates

| Emission Point No. (1) | Source Name (2) | Air Contaminant Name (3) | Emission Rates | |
|------------------------|---|--------------------------------|----------------|---------|
| | | | lbs/hour | TPY (4) |
| CAPUFFLR | Shared Elevated and Ground Flare Cap | CO | — | 300.72 |
| | | NO _x | — | 149.36 |
| | | VOC | — | 320.06 |
| | | SO ₂ | — | 23.57 |
| CAPUFFLR | Shared Elevated and Ground Flare Cap (Shakedown period) | NO _x | — | 194.38 |
| | | CO | — | 380.41 |
| | | VOC | — | 422.30 |
| | | SO ₂ | — | 23.57 |
| O_FUG | Olefins Unit Fugitives (5) | VOC | 12.74 | 55.81 |
| | | NH ₃ | 2.00 | 8.76 |
| | | CO | 0.04 | 0.16 |
| | | H ₂ SO ₄ | < 0.01 | 0.02 |
| | | H ₂ S | < 0.01 | 0.01 |
| | | NaOH | < 0.01 | < 0.01 |
| O-REGEN | Olefins Regeneration Vent | VOC | 0.18 | 0.06 |
| | | CO | 10.61 | 1.91 |
| GFFLARE01 | MEG Elevated Flare (Routine) | CO | 41.89 | — |
| | | NO _x | 8.22 | — |
| | | VOC | 17.30 | — |
| | | SO ₂ | 22.74 | — |
| | | Total Halide | 0.92 | — |
| GFFLARE01 | MEG Elevated Flare (Planned MSS and Shakedown Period) | CO | 310.95 | — |
| | | NO _x | 61.02 | — |
| | | VOC | 214.98 | — |
| | | SO ₂ | 22.74 | — |
| | | Total Halide | 0.92 | — |

Emission Sources - Maximum Allowable Emission Rates

| Emission Point No. (1) | Source Name (2) | Air Contaminant Name (3) | Emission Rates | |
|------------------------|---------------------------------------|--------------------------|----------------|---------|
| | | | lbs/hour | TPY (4) |
| GFFLARE01 | MEG Elevated Flare | CO | — | 90.91 |
| | | NO _x | — | 17.84 |
| | | VOC | — | 17.66 |
| | | SO ₂ | — | 0.43 |
| | | Total Halide | — | 0.40 |
| GFFLARE01 | MEG Elevated Flare (Shakedown Period) | CO | — | 106.65 |
| | | NO _x | — | 20.93 |
| | | VOC | — | 21.69 |
| | | SO ₂ | — | 0.43 |
| | | Total Halide | — | 0.40 |
| GBX02 | MEG Thermal Oxidizer | NO _x | 8.00 | 25.79 |
| | | CO | 11.06 | 35.65 |
| | | VOC | 21.10 | 41.43 |
| | | SO ₂ | 1.75 | 0.38 |
| | | PM | 1.00 | 3.23 |
| | | PM ₁₀ | 1.00 | 3.23 |
| | | PM _{2.5} | 1.00 | 3.23 |
| | | Total Halide | 0.92 | 4.04 |
| | | NH ₃ | 0.04 | < 0.01 |
| GDVAC | Glycol Vacuum Vent | VOC | 3.43 | 0.34 |
| GAD09A-D | Glycol Moderator CAS | VOC | < 0.01 | < 0.01 |
| G_FUG | Glycol Unit Fugitives (5) | VOC | 2.22 | 9.73 |
| | | CO | < 0.01 | 0.03 |

Emission Sources - Maximum Allowable Emission Rates

| Emission Point No. (1) | Source Name (2) | Air Contaminant Name (3) | Emission Rates | |
|------------------------|-------------------------|--------------------------------|----------------|---------|
| | | | lbs/hour | TPY (4) |
| UCCT01 | Utilities Cooling Tower | VOC | 115.29 | 91.13 |
| | | PM | 8.07 | 31.56 |
| | | PM ₁₀ | 5.65 | 22.09 |
| | | PM _{2.5} | 3.39 | 13.26 |
| | | NaOH | 0.03 | 0.01 |
| USSG01A | Utilities Boiler A | NO _x | 35.25 | — |
| | | CO | 186.00 | — |
| | | PM | 7.82 | — |
| | | PM ₁₀ | 7.82 | — |
| | | PM _{2.5} | 7.82 | — |
| | | VOC | 5.66 | — |
| | | SO ₂ | 5.22 | — |
| | | H ₂ SO ₄ | 0.07 | — |
| | | NH ₃ | 4.02 | — |
| USSG01B | Utilities Boiler B | NO _x | 35.25 | — |
| | | CO | 186.00 | — |
| | | PM | 7.82 | — |
| | | PM ₁₀ | 7.82 | — |
| | | PM _{2.5} | 7.82 | — |
| | | VOC | 5.66 | — |
| | | SO ₂ | 5.22 | — |
| | | H ₂ SO ₄ | 0.07 | — |
| | | NH ₃ | 4.02 | — |

Emission Sources - Maximum Allowable Emission Rates

| Emission Point No. (1) | Source Name (2) | Air Contaminant Name (3) | Emission Rates | |
|------------------------|---------------------------|--------------------------------|----------------|---------|
| | | | lbs/hour | TPY (4) |
| USSG01C | Utilities Boiler C | NO _x | 35.25 | — |
| | | CO | 186.00 | — |
| | | PM | 7.82 | — |
| | | PM ₁₀ | 7.82 | — |
| | | PM _{2.5} | 7.82 | — |
| | | VOC | 5.66 | — |
| | | SO ₂ | 5.22 | — |
| | | H ₂ SO ₄ | 0.07 | — |
| | | NH ₃ | 4.02 | — |
| USSG01CAP | Utilities Boiler Cap | NO _x | 39.66 | 69.02 |
| | | CO | 198.85 | 239.40 |
| | | PM | — | 47.57 |
| | | PM ₁₀ | — | 47.57 |
| | | PM _{2.5} | — | 47.57 |
| | | VOC | — | 34.43 |
| | | SO ₂ | 8.03 | 5.18 |
| | | H ₂ SO ₄ | — | 0.48 |
| | | NH ₃ | — | 29.07 |
| UFF01A | Shared Thermal Oxidizer A | NO _x | — | — |
| | | CO | — | — |
| | | PM | — | — |
| | | PM ₁₀ | — | — |
| | | PM _{2.5} | — | — |
| | | VOC | — | — |
| | | SO ₂ | — | — |

Emission Sources - Maximum Allowable Emission Rates

| Emission Point No. (1) | Source Name (2) | Air Contaminant Name (3) | Emission Rates | |
|------------------------|---|--------------------------------|----------------|---------|
| | | | lbs/hour | TPY (4) |
| UFF01B | Shared Thermal Oxidizer B | NO _x | — | — |
| | | CO | — | — |
| | | PM | — | — |
| | | PM ₁₀ | — | — |
| | | PM _{2.5} | — | — |
| | | VOC | — | — |
| | | SO ₂ | — | — |
| UFF01 | Total emissions from EPNs UFF01A, UFF01B | NO _x | 18.80 | 29.11 |
| | | CO | 25.81 | 39.95 |
| | | PM | 2.34 | 3.61 |
| | | PM ₁₀ | 2.34 | 3.61 |
| | | PM _{2.5} | 2.34 | 3.61 |
| | | VOC | 114.96 | 63.33 |
| | | SO ₂ | 1.13 | 1.49 |
| U_FUG | Utilities Fugitives (5) | VOC | 0.95 | 4.18 |
| | | NH ₃ | 0.22 | 0.96 |
| | | CO | < 0.01 | 0.02 |
| | | H ₂ SO ₄ | < 0.01 | < 0.01 |
| EMGGEN01 | Olefins Emergency Generator No. 1 | NO _x | — | — |
| | | CO | — | — |
| | | PM | — | — |
| | | PM ₁₀ | — | — |
| | | PM _{2.5} | — | — |
| | | VOC | — | — |
| | | SO ₂ | — | — |

Emission Sources - Maximum Allowable Emission Rates

| Emission Point No. (1) | Source Name (2) | Air Contaminant Name (3) | Emission Rates | |
|------------------------|-------------------------------------|--------------------------|----------------|---------|
| | | | lbs/hour | TPY (4) |
| EMGGEN02 | Utilities Emergency Generator No. 2 | NO _x | — | — |
| | | CO | — | — |
| | | PM | — | — |
| | | PM ₁₀ | — | — |
| | | PM _{2.5} | — | — |
| | | VOC | — | — |
| | | SO ₂ | — | — |
| ADMINGEN | Admin Emergency Generator No. 1 | NO _x | — | — |
| | | CO | — | — |
| | | PM | — | — |
| | | PM ₁₀ | — | — |
| | | PM _{2.5} | — | — |
| | | VOC | — | — |
| | | SO ₂ | — | — |
| U_GEN4 | Emergency Generator 4 | NO _x | — | — |
| | | CO | — | — |
| | | PM | — | — |
| | | PM ₁₀ | — | — |
| | | PM _{2.5} | — | — |
| | | VOC | — | — |
| | | SO ₂ | — | — |

Emission Sources - Maximum Allowable Emission Rates

| Emission Point No. (1) | Source Name (2) | Air Contaminant Name (3) | Emission Rates | |
|------------------------|-----------------------|--------------------------|----------------|---------|
| | | | lbs/hour | TPY (4) |
| U_GEN5 | Emergency Generator 5 | NO _x | — | — |
| | | CO | — | — |
| | | PM | — | — |
| | | PM ₁₀ | — | — |
| | | PM _{2.5} | — | — |
| | | VOC | — | — |
| | | SO ₂ | — | — |
| FWP1 | Firewater Pump No. 1 | NO _x | | |
| | | CO | | |
| | | PM | | |
| | | PM ₁₀ | | |
| | | PM _{2.5} | | |
| | | VOC | | |
| | | SO ₂ | | |
| FWP2 | Firewater Pump No. 2 | NO _x | — | — |
| | | CO | — | — |
| | | PM | — | — |
| | | PM ₁₀ | — | — |
| | | PM _{2.5} | — | — |
| | | VOC | — | — |
| | | SO ₂ | — | — |

Emission Sources - Maximum Allowable Emission Rates

| Emission Point No. (1) | Source Name (2) | Air Contaminant Name (3) | Emission Rates | |
|------------------------|---|--------------------------|----------------|---------|
| | | | lbs/hour | TPY (4) |
| FWPCAP | Total Emissions from EPNs FWP1, FWP2 | NO _x | 16.85 | 0.84 |
| | | CO | 9.21 | 0.46 |
| | | PM | 0.53 | 0.03 |
| | | PM ₁₀ | 0.53 | 0.03 |
| | | PM _{2.5} | 0.53 | 0.03 |
| | | VOC | 16.85 | 0.84 |
| | | SO ₂ | 0.02 | < 0.01 |
| GLYGEN01 | Glycol Emergency Generator No. 1 | NO _x | — | — |
| | | CO | — | — |
| | | PM | — | — |
| | | PM ₁₀ | — | — |
| | | PM _{2.5} | — | — |
| | | VOC | — | — |
| | | SO ₂ | — | — |
| EGENGCAP | Total emissions from EPNs EMGGEN01, EMGGEN02, ADMINGEN, U_GEN4, U_GEN5, GLYGEN01 | NO _x | 5.42 | 0.27 |
| | | CO | 20.04 | 1.00 |
| | | PM | 0.26 | 0.01 |
| | | PM ₁₀ | 0.26 | 0.01 |
| | | PM _{2.5} | 0.26 | 0.01 |
| | | SO ₂ | 0.03 | < 0.01 |
| | | VOC | 1.09 | 0.05 |
| LIQLOAD | Truck/Railcar Liquid Loading (Uncaptured Emissions) | VOC | 4.19 | 2.35 |
| | | NaOH | 1.31 | 0.06 |
| WWTP | Wastewater Plant (Uncontrolled emissions) | VOC | 1.05 | 4.58 |
| | | NH ₃ | < 0.01 | < 0.01 |
| | | Acetone | < 0.01 | < 0.01 |
| | | H ₂ S | < 0.01 | 0.01 |

Emission Sources - Maximum Allowable Emission Rates

| Emission Point No. (1) | Source Name (2) | Air Contaminant Name (3) | Emission Rates | |
|------------------------|--|--------------------------|----------------|---------|
| | | | lbs/hour | TPY (4) |
| ZWSRCO1A/B | Equalization Tanks Catalytic Oxidizer | VOC | 0.04 | 0.18 |
| | | NH ₃ | < 0.01 | < 0.01 |
| | | Acetone | < 0.01 | < 0.01 |
| | | H ₂ S | < 0.01 | < 0.01 |
| | | NO _x | 0.06 | 0.26 |
| | | CO | 0.02 | 0.10 |
| | | PM | < 0.01 | 0.03 |
| | | PM ₁₀ | < 0.01 | 0.03 |
| | | PM _{2.5} | < 0.01 | 0.03 |
| | | SO ₂ | 0.01 | 0.06 |
| | | HCl | < 0.01 | 0.01 |
| MSSATM | Maintenance, Startup and Shutdown (Uncontrolled emissions) | VOC | 445.47 | 4.44 |
| | | PM | 12.98 | 0.08 |
| | | PM ₁₀ | 12.98 | 0.08 |
| | | PM _{2.5} | 12.98 | 0.08 |
| MSSILE | Inherently Low Emitting Activities | VOC | 11.49 | 1.05 |
| | | PM | 0.02 | 0.01 |
| MSSVAC | MSS Vacuum Trucks | VOC | 72.16 | 1.82 |
| MSSFRAC | MSS Frac Tanks | VOC | 0.03 | 0.03 |
| TMPCTRL | MSS Temporary Control Devices identified in Special Condition 57 | NO _x | 3.06 | 0.20 |
| | | CO | 8.80 | 0.66 |
| | | PM | 0.30 | 0.02 |
| | | PM ₁₀ | 0.30 | 0.02 |
| | | PM _{2.5} | 0.30 | 0.02 |
| | | VOC | 24.26 | 0.68 |
| | | SO ₂ | 0.56 | 0.04 |
| MSSTANK | Tank Maintenance Activities (Uncontrolled) | VOC | 20.11 | 3.53 |

Emission Sources - Maximum Allowable Emission Rates

| Emission Point No. (1) | Source Name (2) | Air Contaminant Name (3) | Emission Rates | |
|---|---|--------------------------|----------------|---------|
| | | | lbs/hour | TPY (4) |
| REFUSTN | Vehicle Refueling Station | VOC | 2.03 | 0.17 |
| ELDC01, E_LLFB_001 | EPE feed bin dust collectors | VOC | — | — |
| | | PM | — | — |
| | | PM ₁₀ | — | — |
| | | PM _{2.5} | — | — |
| EDFAN01 | EPE granules hopper vent dust collector | VOC | — | — |
| | | PM | — | — |
| | | PM ₁₀ | — | — |
| | | PM _{2.5} | — | — |
| E_DLSB_001, EDDC04 | EPE seed bed dust collectors | VOC | — | — |
| | | PM | — | — |
| | | PM ₁₀ | — | — |
| | | PM _{2.5} | — | — |
| ELDC03, E_MPPX_001 | EPE extruder dust collectors | VOC | — | — |
| | | PM | — | — |
| | | PM ₁₀ | — | — |
| | | PM _{2.5} | — | — |
| EPFAN01, E_PLDS_007, E_PLDS_008, E_PLDS_009, E_PLDS_010 | EPE pellet silo vents | VOC | — | — |
| | | PM | — | — |
| | | PM ₁₀ | — | — |
| | | PM _{2.5} | — | — |
| EMDC01, EMFAN01, EMFAN02 | EPE pellet surge bin dust collector, and pellet dryer vents | VOC | — | — |
| | | PM | — | — |
| | | PM ₁₀ | — | — |
| | | PM _{2.5} | — | — |

Emission Sources - Maximum Allowable Emission Rates

| Emission Point No. (1) | Source Name (2) | Air Contaminant Name (3) | Emission Rates | |
|--|---|--------------------------|----------------|---------|
| | | | lbs/hour | TPY (4) |
| ELFAN04, ELDC06, ELB01, ELB03, ELB05, ELFAN01 | EPE dry additive weigh feed hopper extraction vent, additive drying hopper dust collector, and four vacuum blower vents for additive transfer | VOC | — | — |
| | | PM | — | — |
| | | PM ₁₀ | — | — |
| | | PM _{2.5} | — | — |
| EBFIL01, E_BCTS_002, E_BCTS_003, ECFIL04, ECFIL05, ECFIL06 | EPE catalyst vents | VOC | — | — |
| | | PM | — | — |
| | | PM ₁₀ | — | — |
| | | PM _{2.5} | — | — |
| E_LFBF_001 | EPE finishing building vent | VOC | — | — |
| | | PM | — | — |
| | | PM ₁₀ | — | — |
| | | PM _{2.5} | — | — |
| E_VENTCAP | EPE Vents Cap (6) | VOC | 35.68 | 37.08 |
| | | PM | 1.26 | 2.77 |
| | | PM ₁₀ | 1.26 | 2.77 |
| | | PM _{2.5} | 1.26 | 2.77 |
| CLDC01, C_LLFB_001 | CPE granules feed bin dust collectors | VOC | — | — |
| | | PM | — | — |
| | | PM ₁₀ | — | — |
| | | PM _{2.5} | — | — |
| CDFAN01 | CPE granules hopper vent dust collector | VOC | — | — |
| | | PM | — | — |
| | | PM ₁₀ | — | — |
| | | PM _{2.5} | — | — |

Emission Sources - Maximum Allowable Emission Rates

| Emission Point No. (1) | Source Name (2) | Air Contaminant Name (3) | Emission Rates | |
|--|---|--------------------------|----------------|---------|
| | | | lbs/hour | TPY (4) |
| C_DLSB_001, CDDC04 | CPE seed bed dust collectors | VOC | — | — |
| | | PM | — | — |
| | | PM ₁₀ | — | — |
| | | PM _{2.5} | — | — |
| CLDC03, C_MPPX_001 | CPE extruder vents | VOC | — | — |
| | | PM | — | — |
| | | PM ₁₀ | — | — |
| | | PM _{2.5} | — | — |
| CPFAN01, C_PLDS_007, C_PLDS_008, C_PLDS_009, C_PLDS_010 | CPE pellet silo vents | VOC | — | — |
| | | PM | — | — |
| | | PM ₁₀ | — | — |
| | | PM _{2.5} | — | — |
| CMD01, CMFAN01, CMFAN02 | CPE pellet surge bin dust collector, and CPE pellet dryer vents | VOC | — | — |
| | | PM | — | — |
| | | PM ₁₀ | — | — |
| | | PM _{2.5} | — | — |
| CLFAN04, CLDC06, ELB02, ELB04, CLB03, C_LADD_007 | CPE dry additive vents | VOC | — | — |
| | | PM | — | — |
| | | PM ₁₀ | — | — |
| | | PM _{2.5} | — | — |
| CBFIL01, C_BCTS_002, C_BCTS_003, CCFIL04, CCFIL05, CCFIL06 | CPE catalyst vents | VOC | — | — |
| | | PM | — | — |
| | | PM ₁₀ | — | — |
| | | PM _{2.5} | — | — |

Emission Sources - Maximum Allowable Emission Rates

| Emission Point No. (1) | Source Name (2) | Air Contaminant Name (3) | Emission Rates | |
|------------------------|--|--------------------------|----------------|---------|
| | | | lbs/hour | TPY (4) |
| C_LFBF_001 | CPE finishing building vent | VOC | — | — |
| | | PM | — | — |
| | | PM ₁₀ | — | — |
| | | PM _{2.5} | — | — |
| C_VENTCAP | CPE Vents Cap (7) | VOC | 35.68 | 37.08 |
| | | PM | 1.26 | 2.79 |
| | | PM ₁₀ | 1.26 | 2.79 |
| | | PM _{2.5} | 1.26 | 2.79 |
| PE-REGEN | PE Regeneration Vent | VOC | < 0.01 | < 0.01 |
| E_FUG, C_FUG | EPE and CPE Fugitives (5) | VOC | 4.38 | 19.17 |
| | | CO | 0.07 | 0.32 |
| UTTK101T | PyGas Day Tank 1 | VOC | — | — |
| UTTK102T | PyGas Day Tank 2 | VOC | — | — |
| CAPTPYG | Total emissions from EPNs UTTK101T and UTTK102T | VOC | 2.26 | 2.43 |
| UTTK103T | Sulfidic Caustic Day Tank 1 | VOC | — | — |
| | | NaOH | — | — |
| | | H ₂ S | — | — |
| UTTK104T | Sulfidic Caustic Day Tank 2 | VOC | — | — |
| | | NaOH | — | — |
| | | H ₂ S | — | — |
| CAPTSC | Total Emissions from EPNs UTTK103T and UTTK104T | VOC | < 0.01 | < 0.01 |
| | | NaOH | 0.78 | 0.17 |
| | | H ₂ S | < 0.01 | < 0.01 |
| UTTK100T | Diesel Day Tank 1 | VOC | 0.33 | 0.04 |
| ELD01 | EPE Primary Run Tank | VOC | — | — |
| ELD02 | EPE Secondary Run Tank | VOC | — | — |
| EM_ETANK_3 | EPE Additive Tank 3 | VOC | — | — |

Emission Sources - Maximum Allowable Emission Rates

| Emission Point No. (1) | Source Name (2) | Air Contaminant Name (3) | Emission Rates | |
|------------------------|--|--------------------------|----------------|---------|
| | | | lbs/hour | TPY (4) |
| EM_ETANK_4 | EPE Additive Tank 4 | VOC | — | — |
| CAPTADD | Total Emissions from EPNs ELD01, ELD02, EM_ETANK_3, EM_ETANK_4 | VOC | 0.93 | < 0.01 |
| CPETANK_1 | CPE Seal Oil Tank 1 | VOC | — | — |
| CPETANK_2 | CPE Seal Oil Tank 2 | VOC | — | — |
| CPETANK_3 | CPE Seal Oil Tank 3 | VOC | — | — |
| CAPTMO | Total Emissions from EPNs CPETANK_1, CPETANK_2, CPETANK_3 | VOC | < 0.01 | < 0.01 |
| CPETANK_4 | CPE Additive Tank 1 | VOC | — | — |
| CCD81 | CPE Seal Pot | VOC | — | — |
| CPETANK_6 | CPE Additive Tank 3 | VOC | — | — |
| CAPTMO | Total Emissions from EPNs CPETANK_4, CCD81, CPETANK_6 | VOC | < 0.01 | < 0.01 |
| GETK02A | MEG Rundown Tank 2A | VOC | — | — |
| GETK02B | MEG Rundown Tank 2B | VOC | — | — |
| GTK_502C | Glycol Rail and Truck Tank | VOC | — | — |
| CAPMEG | Total Emissions from EPNs GETK02A, GETK02B, GTK- 502C | VOC | 2.73 | 0.29 |
| GDTK01 | Glycol Catalyst Storage Tank | VOC | 0.43 | 0.01 |
| GDD08 | Glycol Catalyst Charge Vessel | VOC | 0.32 | 0.01 |
| GDD09 | Glycol Catalyst Drips Vessel | VOC | 0.04 | < 0.01 |
| GETK01 | Glycol Slops Tank | VOC | 0.91 | 0.03 |
| SCTOTE-GLY | Spent Glycol Catalyst Tote | VOC | 0.05 | < 0.01 |
| ZTTK02 | Heavy Glycol Storage Tank | VOC | — | — |
| ZTTK08T | Heavy Glycol Tank 2 | VOC | — | — |
| CAPTHE | Total Emissions from EPNs ZTTK02, ZTTK08T | VOC | 1.82 | 0.01 |
| ZTTK03 | Glycol Bleed Storage Tank | VOC | — | — |
| GED04 | Glycol Drain Collection Vessel | VOC | — | — |

Emission Sources - Maximum Allowable Emission Rates

| Emission Point No. (1) | Source Name (2) | Air Contaminant Name (3) | Emission Rates | |
|------------------------|---|--------------------------|----------------|---------|
| | | | lbs/hour | TPY (4) |
| CAPTGB | Total Emissions from EPNs ZTTK03, GED04 | VOC | 0.64 | 0.01 |
| ZTTK05 | Hexene Storage Tank | VOC | — | — |
| ZTTK04 | EPE Hexene | VOC | — | — |
| CAPTHEX | Total Emissions from EPNs ZTTK05, ZTTK04 | VOC | 1.34 | 3.31 |
| ZTTK06A | Heavy Fuel Oil Storage Tank 6A | VOC | — | — |
| ZTTK06B | Heavy Fuel Oil Storage Tank 6B | VOC | — | — |
| CAPTHFO | Total Emissions from EPNs ZTTK06A, ZTTK06B | VOC | 3.12 | 0.71 |
| ZTTK04 | Slop Oil Tank 1 | VOC | — | — |
| ZWTK17T | Slop Oil Tank 2 | VOC | — | — |
| CAPTSLO | Total Emissions from EPNs ZTTK04, ZWTK17T | VOC | 1.33 | 3.07 |
| ZWTK19 | WWTP Loading Spill Sump | VOC | — | — |
| ZWTK20 | WWTP Centrifuge Sump | VOC | — | — |
| ZTTK10 | OSBL Tankage Sump | VOC | — | — |
| ZFTK05 | Heat Exchanger Cleaning Sump | VOC | — | — |
| EM_ETANK_S | EPE Sump | VOC | — | — |
| CPETANK_S | CPE Sump | VOC | — | — |
| FZTK01 | Olefins Decoke Condensate Sump | VOC | — | — |
| OTANK_S2 | Olefins Sump 2 | VOC | — | — |
| OTANK_S3 | Olefins Sump 3 | VOC | — | — |
| OTANK_S4 | Olefins Sump 4 | VOC | — | — |
| OTANK_S5 | Olefins Sump 5 | VOC | — | — |
| GFTK01 | Glycol Flare Seal Sump | VOC | — | — |
| UTANK_S | Utilities Sump | VOC | — | — |
| CAPTSUM | Total Emissions from EPNs ZWTK19, ZWTK20, ZTTK10, ZFTK05, EM_ETANK_S, | VOC | 5.69 | 0.10 |

Emission Sources - Maximum Allowable Emission Rates

| Emission Point No. (1) | Source Name (2) | Air Contaminant Name (3) | Emission Rates | |
|------------------------|--|--------------------------------|----------------|---------|
| | | | lbs/hour | TPY (4) |
| | CPETANK_S, FZTK01, OTANK_S2, OTANK_S3, OTANK_S4, OTANK_S5, GFTK01, UTANK_S | | | |
| ZWTK07 | Wastewater Slop Tank 1 | VOC | — | — |
| ZWTK06 | Wastewater Slop Tank 2 | VOC | — | — |
| CAPTWWSL | Total Emissions from EPNs ZWTK07, ZWTK06 | VOC | 0.48 | 0.15 |
| ZFTK02B | Firewater Pump Diesel Tank 2B | VOC | — | — |
| ZMTK02 | Infrastructure Diesel Tank | VOC | — | — |
| CAPTDSL | Total Emissions from EPNs ZFTK02B, ZMTK02 | VOC | 0.04 | < 0.01 |
| UKDGEN01TK | Olefins Emergency Generator No. 1 Diesel Tank | VOC | — | — |
| UKDGEN02TK | Utilities Emergency Generator No. 2 Diesel Tank | VOC | — | — |
| ADMINGENTK | Admin Emergency Generator No 1 Diesel Tank | VOC | — | — |
| TKUGEN4 | Generator 4 Diesel Tank | VOC | — | — |
| TKUGEN5 | Generator 5 Diesel Tank | VOC | — | — |
| ZFTK02C | Firewater Pump Diesel Tank 2C | VOC | — | — |
| GUDGEN01TK | Glycol Generator Diesel Tank | VOC | — | — |
| CAPEDSL | Total Emissions from EPNs UKDGEN01TK, UKDGEN02TK, ADMINGENTK, TKUGEN4, TKUGEN5, ZFTK02C, GUDGEN01TK | VOC | 0.08 | < 0.01 |
| ZMTK01 | Infrastructure Gasoline Tank | VOC | — | — |
| ZFTK04 | Fire Training Gasoline Tank | VOC | — | — |
| CAPTGAS | Total Emissions from EPNs ZMTK01, ZFTK04 | VOC | 11.57 | 1.78 |
| TOTES | Site Totes | VOC | 0.86 | < 0.01 |
| INORG | Inorganic Chemicals Storage | H ₂ SO ₄ | < 0.01 | < 0.01 |
| | | NaOCl | 0.29 | < 0.01 |

Emission Sources - Maximum Allowable Emission Rates

| Emission Point No. (1) | Source Name (2) | Air Contaminant Name (3) | Emission Rates | |
|------------------------|--------------------------------------|--------------------------|----------------|---------|
| | | | lbs/hour | TPY (4) |
| U_NH3SMP | Ammonia Diffusion Chamber | NH ₃ | 0.14 | 0.01 |
| U_NH3WW | Ammonia Wastewater Collection Vessel | NH ₃ | 0.39 | 0.04 |
| U_LAB | Laboratory | VOC | 9.43 | 1.72 |

- (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_x - total oxides of nitrogen
SO₂ - sulfur dioxide
PM - total particulate matter, suspended in the atmosphere, including PM₁₀ and PM_{2.5}, as represented
PM₁₀ - total particulate matter equal to or less than 10 microns in diameter, including PM_{2.5}, as represented
PM_{2.5} - particulate matter equal to or less than 2.5 microns in diameter
CO - carbon monoxide
NaOH - sodium hydroxide
NH₃ - ammonia
HCl - hydrogen chloride
HI - hydrogen iodide
H₂SO₄ - sulfuric acid mist
H₂S - hydrogen sulfide
Total Halide - combined emissions of hydrogen chloride and hydrogen iodide.
(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.
(6) Includes total emissions for the following sources of emissions (designated by EPN): ELDCO1, E_LLFB_001, EDFAN01, E_DLSB_001, EDDC04, ELDC03, E_MPPX_001, EPFAN01, E_PLDS_007, E_PLDS_008, E_PLDS_009, E_PLDS_010, EMDC01, EMFAN01, EMFAN02, ELFAN04, ELDC06, ELB01, ELB03, ELB05, ELFAN01, EBFIL01, E_BCTS_002, E_BCTS_003, ECFIL04, ECFIL05, ECFIL06, E_LFBF_001
(7) Includes total emissions for the following sources of emissions (designated by EPN): CLDC01, C_LLFB_001, CDFAN01, C_DLSB_001, CDDC04, CLDC03, C_MPPX_001, CPFAN01, C_PLDS_007, C_PLDS_008, C_PLDS_009, C_PLDS_010, CMDC01, CMFAN01, CMFAN02, CLFAN04, CLDC06, ELB02, ELB04, CLB03, C_LADD_007, CBFIL01, C_BCTS_002, C_BCTS_003, CCFIL04, CCFIL05, CCFIL06, C_LFBF_001
(8) Alternate operating mode as defined in Special Condition 48.

Date: November 27, 2019



Texas Commission on Environmental Quality Air Quality Permit

A Permit Is Hereby Issued To
Gulf Coast Growth Ventures LLC
Authorizing the Construction and Operation of
Gulf Coast Growth Ventures Project
Located at **Gregory, San Patricio County, Texas**
Latitude 27° 55' 47" Longitude -97° 19' 19"

Permit: GHGPSDTX170

Revision Date: November 27, 2019



For the Commission

1. **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 (TAC) Section 116.116 (30 TAC § 116.116)]¹
2. **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]
3. **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)]
4. **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)]
5. **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 in a timely manner; comply with any additional recordkeeping requirements specified in special conditions in 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)] ¹
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 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 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 "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. ¹

¹ Please be advised that the requirements of this provision of the general conditions may not be applicable to greenhouse gas emissions.

Common Acronyms in Air Permits

| | |
|--|---|
| °C = Temperature in degrees Celsius | GLC _{max} = maximum (predicted) ground-level concentration |
| °F = Temperature in degrees Fahrenheit | gpm = gallon per minute |
| °K = Temperature in degrees Kelvin | gr/1000scf = grain per 1000 standard cubic feet |
| µg = microgram | gr/dscf = grain per dry standard cubic feet |
| µg/m ³ = microgram per cubic meter | H ₂ CO = formaldehyde |
| acfm = actual cubic feet per minute | H ₂ S = hydrogen sulfide |
| AMOC = alternate means of control | H ₂ SO ₄ = sulfuric acid |
| AOS = alternative operating scenario | HAP = hazardous air pollutant as listed in § 112(b) of the Federal Clean Air Act or Title 40 Code of Federal Regulations Part 63, Subpart C |
| AP-42 = Air Pollutant Emission Factors, 5th edition | HC = hydrocarbons |
| APD = Air Permits Division | HCl = hydrochloric acid, hydrogen chloride |
| API = American Petroleum Institute | Hg = mercury |
| APWL = air pollutant watch list | HGB = Houston/Galveston/Brazoria |
| BPA = Beaumont/ Port Arthur | hp = horsepower |
| BACT = best available control technology | hr = hour |
| BAE = baseline actual emissions | IFR = internal floating roof tank |
| bbl = barrel | in H ₂ O = inches of water |
| bbl/day = barrel per day | in Hg = inches of mercury |
| bhp = brake horsepower | IR = infrared |
| BMP = best management practices | ISC3 = Industrial Source Complex, a dispersion model |
| Btu = British thermal unit | ISCST3 = Industrial Source Complex Short-Term, a dispersion model |
| Btu/scf = British thermal unit per standard cubic foot or feet | K = Kelvin; extension of the degree Celsius scaled-down to absolute zero |
| CAA = Clean Air Act | LACT = lease automatic custody transfer |
| CAM = compliance-assurance monitoring | LAER = lowest achievable emission rate |
| CEMS = continuous emissions monitoring systems | lb = pound |
| cfm = cubic feet (per) minute | hp = horsepower |
| CFR = Code of Federal Regulations | hr = hour lb/day = pound per day |
| CN = customer ID number | lb/hr = pound per hour |
| CNG = compressed natural gas | lb/MMBtu = pound per million British thermal units |
| CO = carbon monoxide | LDAR = Leak Detection and Repair (Requirements) |
| COMS = continuous opacity monitoring system | LNG = liquefied natural gas |
| CPMS = continuous parametric monitoring system | LPG = liquefied petroleum gas |
| DFW = Dallas/ Fort Worth (Metroplex) | LT/D = long ton per day |
| DE = destruction efficiency | m = meter |
| DRE = destruction and removal efficiency | m ³ = cubic meter |
| dscf = dry standard cubic foot or feet | m/sec = meters per second |
| dscfm = dry standard cubic foot or feet per minute | MACT = maximum achievable control technology |
| ED = (TCEQ) Executive Director | MAERT = Maximum Allowable Emission Rate Table |
| EF = emissions factor | MERA = Modeling and Effects Review Applicability |
| EFR = external floating roof tank | mg = milligram |
| EGU = electric generating unit | mg/g = milligram per gram |
| EI = Emissions Inventory | mL = milliliter |
| ELP = El Paso | MMBtu = million British thermal units |
| EPA = (United States) Environmental Protection Agency | MMBtu/hr = million British thermal units per hour |
| EPN = emission point number | MSDS = material safety data sheet |
| ESL = effects screening level | MSS = maintenance, startup, and shutdown |
| ESP = electrostatic precipitator | MW = megawatt |
| FCAA = Federal Clean Air Act | NAAQS = National Ambient Air Quality Standards |
| FCCU = fluid catalytic cracking unit | NESHAP = National Emission Standards for Hazardous Air Pollutants |
| FID = flame ionization detector | NGL = natural gas liquids |
| FIN = facility identification number | NNSR = nonattainment new source review |
| ft = foot or feet | NO _x = total oxides of nitrogen |
| ft/sec = foot or feet per second | |
| g = gram | |
| gal/wk = gallon per week | |
| gal/yr = gallon per year | |
| GLC = ground level concentration | |

NSPS = New Source Performance Standards
PAL = plant-wide applicability limit
PBR = Permit(s) by Rule
PCP = pollution control project
PEMS = predictive emission monitoring system
PID = photo ionization detector
PM = periodic monitoring
PM = total particulate matter, suspended in the atmosphere, including PM₁₀ and PM_{2.5}, as represented
PM_{2.5} = particulate matter equal to or less than 2.5 microns in diameter
PM₁₀ = total particulate matter equal to or less than 10 microns in diameter, including PM_{2.5}, as represented
POC = products of combustion
ppb = parts per billion
ppm = parts per million
ppmv = parts per million (by) volume
psia = pounds (per) square inch, absolute
psig = pounds (per) square inch, gage
PTE = potential to emit
RA = relative accuracy
RATA = relative accuracy test audit
RM = reference method
RVP = Reid vapor pressure
scf = standard cubic foot or feet
scfm = standard cubic foot or feet (per) minute
SCR = selective catalytic reduction
SIL = significant impact levels
SNCR = selective non-catalytic reduction
SO₂ = sulfur dioxide
SOCMI = synthetic organic chemical manufacturing industry
SRU = sulfur recovery unit
TAC = Texas Administrative Code
TCAA = Texas Clean Air Act
TCEQ = Texas Commission on Environmental Quality
TD = Toxicology Division
TLV = threshold limit value
TMDL = total maximum daily load
tpd = tons per day
tpy = tons per year
TVP = true vapor pressure
VOC = volatile organic compounds as defined in Title 30 Texas Administrative Code § 101.1
VRU = vapor recovery unit or system

Special Conditions

Permit Number GHGPSDTX170

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

This permit authorizes GHG emissions from maintenance, startup, and shutdown (MSS) activities, provided that GHG emissions are limited as required by this Special Condition, and MSS activities are conducted pursuant to the requirements of Special Condition 7.

2. Any calculation for carbon dioxide equivalent (CO₂e) emission rates required by this permit shall employ Global Warming Potential (GWP) contained in Greenhouse Gas Regulations, 40 CFR Part 98, Subpart A, Table A-1, as amended on December 11, 2014 (79 FR 73779).
3. Where a methodology of 40 CFR Part 98 is referenced in this permit, such reference method shall be modified as follows:
 - A. References to annual measurements shall be construed as rolling 12-month totals if the relevant parameter is measured on a monthly or more frequent basis.
 - B. References to annual measurements that are not measured at a frequency greater than one month (e.g. quarterly or semiannual) shall be construed as the average of the most recent measurements based on a rolling 12-month period (e.g. average of 4 quarterly or 2 semiannual measurements).
4. Terms and definitions specified in Special Condition 2 of permit 146425 shall apply to this permit.
5. Pyrolysis furnaces and boilers (EPNs O_FAF01, O_FBF01, O_FCF01, O_FDF01, O_FEF01, O_FFF01, O_FGF01, O_FHF01, USSG01A, USSG01B, USSG01C) are subject to the following requirements.
 - A. Rolling 12-month CO₂e emissions shall be calculated each month using the methods provided at 40 CFR § 98.243(a).
 - B. The higher heating value (HHV) of the fuel shall be determined and recorded on a semiannual basis following procedures provided at 40 CFR § 98.34(a)(6).

The carbon content of the fuel shall be determined and recorded on a semiannual basis following the procedures provided at 40 CFR § 98.34(b)(3).
 - C. The permit holder shall install, operate, and maintain an automated air/fuel controller in each combustion device.
 - D. The permit holder shall continuously monitor and record the exhaust temperature and the oxygen content of the flue gas for each combustion device. Monitoring device shall reduce temperature and oxygen readings to six-minute average or less and record readings at that frequency.

The temperature monitor shall be installed, calibrated or have a calibration check performed at least annually, and maintained according to the manufacturer's specifications. The device shall have an accuracy of the greater of

±2 percent of the temperature being measured expressed in degrees Celsius or ±2.5°C.

Oxygen analyzers shall be quality-assured at least quarterly using cylinder gas audits (CGAs) in accordance with 40 CFR Part 60, Appendix F, Procedure1, §5.1.2. A relative accuracy test audit (RATA) is required once every fourth quarter in accordance with 40 CFR Part 60, Appendix F, Procedure 1, §5.1.1.

Quality assured (or valid) data must be generated when the combustion device 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 combustion devices operated over the previous rolling 12 month period. The measurements missed shall be estimated using engineering judgment and the methods used recorded.

- E. The permit holder shall install, calibrate, maintain, and operate a continuous fuel flow monitor and record the average hourly fuel gas consumption of each combustion device. Fuel flow meters shall be calibrated as provided for at 40 CFR § 98.34(b)(1).
6. Each boiler (EPNs USSG01A, USSG01B, USSG01C) shall be operated with a thermal efficiency of no less than 77 percent on a 12-month rolling average. This shall be ensured by using the following good combustion practices: operating each device at an optimum air-fuel ratio, limiting the device's operating temperature to the extent practicable, and reducing heat loss through the use of insulating materials where feasible.

Thermal efficiency shall be calculated and recorded at least monthly using the following equation, monitoring data collected as required under this permit and permit 146425, other quality-assured data, and engineering judgment.

$$\eta = \frac{(\text{steam flow rate} \times \text{steam enthalpy}) - (\text{feedwater flowrate} \times \text{feedwater enthalpy})}{\text{Fuel firing rate} \times \text{Higher Heating Value (HHV)}}$$

7. The stack exhaust temperature for each pyrolysis furnace (EPNs O_FAF01, O_FBF01, O_FCF01, O_FDF01, O_FEF01, O_FFF01, O_FGF01, O_FHF01) shall not exceed 340° F on a 365-day rolling average, not including periods of startup, shutdown, hot steam standby, and decoking. This shall be ensured by using the following good combustion practices: operating each device at an optimum air-fuel ratio, limiting the device's operating temperature to the extent practicable, and reducing heat loss through the use of insulating materials where feasible.
8. Total rolling 12-month CO₂e emissions from the following control devices shall be calculated on a monthly basis as provided for at 40 CFR §§ 98.243(a) or 98.33(a)(1)(i), as applicable.

| EPN | Source Name |
|------------|---------------------------------------|
| UFFLARE01 | Multi-point Ground Flare |
| UFFLARE02 | Shared Elevated Flare |
| UFF01A | Shared Thermal Oxidizer A |
| UFF01B | Shared Thermal Oxidizer B |
| ZWSRCO1A/B | Equalization Tanks Catalytic Oxidizer |

9. Total rolling 12-month CO₂e emissions from the Glycol Plant shall be calculated on a monthly basis using the procedures specified at 40 CFR § 98.243(a).

10. Emissions from leaking piping components (EPNs: O_FUG, PE_FUG, G_FUG, U_FUG) shall be minimized as follows.
 - A. The permit holder shall implement equipment leak fugitive programs as specified in Special Condition Nos. 33–34 of Permit 146425.
 - B. Total rolling 12-month CO₂e emissions shall be calculated as provided at 40 CFR 98.253(l), except that mass emission rates shall be converted and recorded in units of short tons per year.
11. The permit holder shall comply with all applicable control monitoring and recordkeeping requirements of permits 146425 applying to planned MSS activities.

Date: November 27, 2019

Emission Sources - Maximum Allowable Emission Rates

Permit Number GHGPSDTX170

This table lists the maximum allowable emission rates of greenhouse gas (GHG) emissions, as defined in Title 30 Texas Administrative Code § 101.1, for all sources of GHG air contaminants on the applicant's property that are authorized 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 authorized by this permit.

Air Contaminants Data

| Emission Point No. (1) | Source Name (2) | Air Contaminant Name (3) | Emission Rates |
|------------------------|---------------------|--------------------------|----------------|
| | | | TPY (4) |
| O_FAF01 | Pyrolysis Furnace A | CO ₂ (5) | — |
| | | CH ₄ (5) | — |
| | | N ₂ O (5) | — |
| | | CO ₂ e | — |
| O_FBF01 | Pyrolysis Furnace B | CO ₂ (5) | — |
| | | CH ₄ (5) | — |
| | | N ₂ O (5) | — |
| | | CO ₂ e | — |
| O_FCF01 | Pyrolysis Furnace C | CO ₂ (5) | — |
| | | CH ₄ (5) | — |
| | | N ₂ O (5) | — |
| | | CO ₂ e | — |
| O_FDF01 | Pyrolysis Furnace D | CO ₂ (5) | — |
| | | CH ₄ (5) | — |
| | | N ₂ O (5) | — |
| | | CO ₂ e | — |
| O_FEF01 | Pyrolysis Furnace E | CO ₂ (5) | — |
| | | CH ₄ (5) | — |
| | | N ₂ O (5) | — |
| | | CO ₂ e | — |
| O_FFF01 | Pyrolysis Furnace F | CO ₂ (5) | — |
| | | CH ₄ (5) | — |
| | | N ₂ O (5) | — |
| | | CO ₂ e | — |

Emission Sources - Maximum Allowable Emission Rates

| Emission Point No. (1) | Source Name (2) | Air Contaminant Name (3) | Emission Rates |
|------------------------|---|--------------------------|----------------|
| | | | TPY (4) |
| O_FGF01 | Pyrolysis Furnace G | CO ₂ (5) | — |
| | | CH ₄ (5) | — |
| | | N ₂ O (5) | — |
| | | CO ₂ e | — |
| O_FHF01 | Pyrolysis Furnace H | CO ₂ (5) | — |
| | | CH ₄ (5) | — |
| | | N ₂ O (5) | — |
| | | CO ₂ e | — |
| O_F_CAP | Total Emissions from EPNs O_FAF01, O_FBF01, O_FCF01, O_FDF01, O_FEF01, O_FFF01, O_FGF01, O_FHF01 | CO ₂ (5) | 1555774 |
| | | CH ₄ (5) | 129.8 |
| | | N ₂ O (5) | 25.96 |
| | | CO ₂ e | 1566756 |
| UFFLARE01 | Multi-point Ground Flare | CO ₂ (5) | — |
| | | CH ₄ (5) | — |
| | | N ₂ O (5) | — |
| | | CO ₂ e | — |
| UFFLARE02 | Shared Elevated Flare | CO ₂ (5) | — |
| | | CH ₄ (5) | — |
| | | N ₂ O (5) | — |
| | | CO ₂ e | — |
| CAPUFFLR | Total Emissions from EPNs UFFLARE 01, UFFLARE02 | CO ₂ (5) | 137888 |
| | | CH ₄ (5) | 86.3 |
| | | N ₂ O (5) | 1.38 |
| | | CO ₂ e | 140456 |
| CAPUFFLR | Total Emissions from EPNs UFFLARE 01, UFFLARE02 (Shakedown Period) | CO ₂ (5) | 176085 |
| | | CH ₄ (5) | 106.8 |
| | | N ₂ O (5) | 1.76 |
| | | CO ₂ e | 179256 |
| O-REGEN | Olefins Regeneration Vent | CO ₂ (5) | 17 |
| | | CO ₂ e | 17 |

Emission Sources - Maximum Allowable Emission Rates

| Emission Point No. (1) | Source Name (2) | Air Contaminant Name (3) | Emission Rates |
|------------------------|---|--------------------------|----------------|
| | | | TPY (4) |
| GFFLARE01 | MEG Elevated Flare | CO ₂ (5) | — |
| | | CH ₄ (5) | — |
| | | N ₂ O (5) | — |
| | | CO ₂ e | — |
| GBX02 | MEG Thermal Oxidizer | CO ₂ (5) | — |
| | | CH ₄ (5) | — |
| | | N ₂ O (5) | — |
| | | CO ₂ e | — |
| GLYCAP | Total Emissions from EPNs GFFLARE01, GBX02 | CO ₂ (5) | 425835 |
| | | CH ₄ (5) | 193.2 |
| | | N ₂ O (5) | 0.91 |
| | | CO ₂ e | 430938 |
| GLYCAP | Total Emissions from EPNs GFFLARE01, GBX02 (Shakedown Period) | CO ₂ (5) | 431785 |
| | | CH ₄ (5) | 197.0 |
| | | N ₂ O (5) | 0.97 |
| | | CO ₂ e | 436999 |
| USSG01A | Utilities Boiler A | CO ₂ (5) | — |
| | | CH ₄ (5) | — |
| | | N ₂ O (5) | — |
| | | CO ₂ e | — |
| USSG01B | Utilities Boiler B | CO ₂ (5) | — |
| | | CH ₄ (5) | — |
| | | N ₂ O (5) | — |
| | | CO ₂ e | — |
| USSG01C | Utilities Boiler C | CO ₂ (5) | — |
| | | CH ₄ (5) | — |
| | | N ₂ O (5) | — |
| | | CO ₂ e | — |

Emission Sources - Maximum Allowable Emission Rates

| Emission Point No. (1) | Source Name (2) | Air Contaminant Name (3) | Emission Rates |
|------------------------|--|--------------------------|----------------|
| | | | TPY (4) |
| USSG01CAP | Total Emissions from EPNs USSG01A, USSG01B, USSG01C | CO ₂ (5) | 676557 |
| | | CH ₄ (5) | 45.6 |
| | | N ₂ O (5) | 9.13 |
| | | CO ₂ e | 680418 |
| UFF01A | Shared Thermal Oxidizer A | CO ₂ (5) | — |
| | | CH ₄ (5) | — |
| | | N ₂ O (5) | — |
| | | CO ₂ e | — |
| UFF01B | Shared Thermal Oxidizer B | CO ₂ (5) | — |
| | | CH ₄ (5) | — |
| | | N ₂ O (5) | — |
| | | CO ₂ e | — |
| UFF01 | Total Emissions from EPNs UFF01A, UFF01B | CO ₂ (5) | 63537 |
| | | CH ₄ (5) | 191.8 |
| | | N ₂ O (5) | 0.64 |
| | | CO ₂ e | 68522 |
| EMGGEN01 | Olefins Emergency Generator No. 1 | CO ₂ (5) | — |
| | | CH ₄ (5) | — |
| | | N ₂ O (5) | — |
| | | CO ₂ e | — |
| EMGGEN02 | Utilities Emergency Generator No. 2 | CO ₂ (5) | — |
| | | CH ₄ (5) | — |
| | | N ₂ O (5) | — |
| | | CO ₂ e | — |
| ADMINGEN | Admin Emergency Generator No. 1 | CO ₂ (5) | — |
| | | CH ₄ (5) | — |
| | | N ₂ O (5) | — |
| | | CO ₂ e | — |

Emission Sources - Maximum Allowable Emission Rates

| Emission Point No. (1) | Source Name (2) | Air Contaminant Name (3) | Emission Rates |
|------------------------|--|--------------------------|----------------|
| | | | TPY (4) |
| U_GEN4 | Emergency Generator 4 | CO ₂ (5) | — |
| | | CH ₄ (5) | — |
| | | N ₂ O (5) | — |
| | | CO ₂ e | — |
| U_GEN5 | Emergency Generator 5 | CO ₂ (5) | — |
| | | CH ₄ (5) | — |
| | | N ₂ O (5) | — |
| | | CO ₂ e | — |
| FWP | Firewater Pump No.1 | CO ₂ (5) | — |
| | | CH ₄ (5) | — |
| | | N ₂ O (5) | — |
| | | CO ₂ e | — |
| EMGGEN3 | Glycol Emergency Generator No. 3 | CO ₂ (5) | — |
| | | CH ₄ (5) | — |
| | | N ₂ O (5) | — |
| | | CO ₂ e | — |
| ENGINECAP | Total Emissions from EPNs EMGGEN01, EMGGEN02, ADMINGEN, U_GEN4, U_GEN5, FWP, GLYGEN01 | CO ₂ (5) | 72 |
| | | CH ₄ (5) | < 0.1 |
| | | N ₂ O (5) | < 0.01 |
| | | CO ₂ e | 72 |
| MSS_CAP | Maintenance, Startup and Shutdown Cap | CO ₂ (5) | 79 |
| | | CH ₄ (5) | 0.2 |
| | | N ₂ O (5) | < 0.01 |
| | | CO ₂ e | 85 |
| MSS_TANK | Tank Maintenance, Startup and Shutdown Cap | CO ₂ (5) | 314 |
| | | CH ₄ (5) | 1.0 |
| | | N ₂ O (5) | < 0.01 |
| | | CO ₂ e | 339 |
| O_FUG | Olefins Unit Fugitives | CH ₄ (5) | 10.5 |
| | | CO ₂ e | 262 |

Emission Sources - Maximum Allowable Emission Rates

| Emission Point No. (1) | Source Name (2) | Air Contaminant Name (3) | Emission Rates |
|------------------------|---|--------------------------|----------------|
| | | | TPY (4) |
| E_FUG | EM PE Unit Fugitives | CH ₄ (5) | — |
| | | CO _{2e} | — |
| C_FUG | CPE Unit Fugitives | CH ₄ (5) | — |
| | | CO _{2e} | — |
| PE_FUG | Total Emissions from EPNs E_FUG, C_FUG | CH ₄ (5) | 0.1 |
| | | CO _{2e} | 2 |
| GFUG | Glycol Unit Fugitives | CH ₄ (5) | 0.8 |
| | | CO _{2e} | 2 |
| U_FUG | Utilities Fugitives | CH ₄ (5) | 6.3 |
| | | CO _{2e} | 157 |
| PE_REGEN | PE Treater Regeneration | CO ₂ (5) | 38 |
| | | CO _{2e} | 38 |
| ZWSRCO1A/B | Equalization Tanks Catalytic Oxidizer | CO ₂ (5) | 574 |
| | | CH ₄ (5) | 1.7 |
| | | N ₂ O (5) | < 0.01 |
| | | CO _{2e} | 619 |

- (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) CO₂ - carbon dioxide
N₂O - nitrous oxide
CH₄ - methane
CO_{2e} - carbon dioxide equivalents based on the following Global Warming Potentials (1/2015):
CO₂ (1), N₂O (298), CH₄(25), SF₆ (22,800), HFC (various), PFC (various)
(4) Compliance with annual emission limits (tons per year) is based on a 12-month rolling period. These rates include emissions from maintenance, startup, and shutdown.
(5) Emission rate is given for informational purposes only and does not constitute enforceable limit.

Date: November 27, 2019