

FEDERAL OPERATING PERMIT

A FEDERAL OPERATING PERMIT IS HEREBY ISSUED TO
Freeport LNG Development, L.P.

AUTHORIZING THE OPERATION OF
Freeport LNG Pretreatment Facility
NATURAL GAS EXTRACTION

LOCATED AT
Brazoria County, Texas
Latitude 28° 58' 45" Longitude 95° 18' 25"
Regulated Entity Number: RN106481500

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: O3958 Issuance Date: May 25, 2023

For the Commission

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General Terms and Conditions

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

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

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

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

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

Special Terms and Conditions:

Emission Limitations and Standards, Monitoring and Testing, and Recordkeeping and Reporting

1. Permit holder shall comply with the following requirements:
 - A. Emission units (including groups and processes) in the Applicable Requirements Summary attachment shall meet the limitations, standards, equipment specifications, monitoring, recordkeeping, reporting, testing, and other requirements listed in the Applicable Requirements Summary attachment to assure compliance with the permit.
 - B. The textual description in the column titled "Textual Description" in the Applicable Requirements Summary attachment is not enforceable and is not deemed as a substitute for the actual regulatory language. The Textual Description is provided for information purposes only.
 - C. A citation listed on the Applicable Requirements Summary attachment, which has a notation [G] listed before it, shall include the referenced section and subsection for all commission rules, or paragraphs for all federal and state regulations and all subordinate paragraphs, subparagraphs and clauses, subclauses, and items contained within the referenced citation as applicable requirements.
 - D. When a grouped citation, notated with a [G] in the Applicable Requirements Summary, contains multiple compliance options, the permit holder must keep records of when each compliance option was used.

- E. Emission units subject to 40 CFR Part 63, Subpart ZZZZ as identified in the attached Applicable Requirements Summary table are subject to 30 TAC Chapter 113, Subchapter C, § 113.1090 which incorporates the 40 CFR Part 63 Subpart by reference.
- F. For the purpose of generating emission reduction credits through 30 TAC Chapter 101, Subchapter H, Division 1 (Emission Credit Banking and Trading), the permit holder shall comply with the following requirements:
 - (i) Title 30 TAC § 101.302 (relating to General Provisions)
 - (ii) Title 30 TAC § 101.303 (relating to Emission Reduction Credit Generation Certification)
 - (iii) Title 30 TAC § 101.304 (relating to Mobile Emission Reduction Credit Generation and Certification)
 - (iv) Title 30 TAC § 101.309 (relating to Emission Credit Banking and Trading)
 - (v) The terms and conditions by which the emission limits are established to generate the reduction credit are applicable requirements of this permit
- G. The permit holder shall comply with the following 30 TAC Chapter 101, Subchapter H, Division 3 (Mass Emission Cap and Trade Program) Requirements:
 - (i) Title 30 TAC § 101.352 (relating to General Provisions)
 - (ii) Title 30 TAC § 101.353 (relating to Allocation of Allowances)
 - (iii) Title 30 TAC § 101.354 (relating to Allowance Deductions)
 - (iv) Title 30 TAC § 101.356 (relating to Allowance Banking and Trading)
 - (v) Title 30 TAC § 101.359 (relating to Reporting)
 - (vi) Title 30 TAC § 101.360 (relating to Level of Activity Certification)
 - (vii) The terms and conditions by which the emission limits are established to meet or exceed the cap are applicable requirements of this permit
- H. For the purpose of generating discrete emission reduction credits through 30 TAC Chapter 101, Subchapter H, Division 4 (Discrete Emission Credit Banking and Trading), the permit holder shall comply with the following requirements:
 - (i) Title 30 TAC § 101.372 (relating to General Provisions)
 - (ii) Title 30 TAC § 101.373 (relating to Discrete Emission Reduction Credit Generation and Certification)
 - (iii) Title 30 TAC § 101.374 (relating to Mobile Discrete Emission Reduction Credit Generation and Certification)
 - (iv) Title 30 TAC § 101.378 (relating to Discrete Emission Credit Banking and Trading)

- (v) The terms and conditions by which the emission limits are established to generate the discrete reduction credit are applicable requirements of this permit
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. Certification of opacity readers determining opacities under Method 9 (as outlined in 40 CFR Part 60, Appendix A) to comply with opacity monitoring requirements shall be accomplished by completing the Visible Emissions Evaluators Course, or approved agency equivalent, no more than 180 days before the opacity reading.
- C. For emission units with contributions from uncombined water, the permit holder shall comply with the requirements of 30 TAC § 111.111(b).
- D. 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)
- 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(e)(1).
- 5. 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)
6. 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.

Additional Monitoring Requirements

7. Unless otherwise specified, the permit holder shall comply with the compliance assurance monitoring requirements as specified in the attached "CAM Summary" upon issuance of the permit. In addition, the permit holder shall comply with the following:
- A. The permit holder shall comply with the terms and conditions contained in 30 TAC § 122.147 (General Terms and Conditions for Compliance Assurance Monitoring).
 - B. The permit holder shall report, consistent with the averaging time identified in the "CAM Summary," deviations as defined by the deviation limit in the "CAM Summary." Any monitoring data below a minimum limit or above a maximum limit, that is collected in accordance with the requirements specified in 40 CFR § 64.7(c), shall be reported as a deviation. Deviations shall be reported according to 30 TAC § 122.145 (Reporting Terms and Conditions).
 - C. 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 "CAM 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 in order to avoid reporting deviations. All monitoring data shall be collected in accordance with the requirements specified in 40 CFR § 64.7(c).
 - D. The permit holder shall operate the monitoring, identified in the attached "CAM Summary," in accordance with the provisions of 40 CFR § 64.7.
 - E. The permit holder shall comply with the requirements of 40 CFR § 70.6(a)(3)(ii)(A) and 30 TAC § 122.144(1)(A)-(F) for documentation of all required inspections.
8. 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

9. 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 (including the terms, conditions, monitoring, recordkeeping, and reporting identified in registered PBRs and permits by rule identified in the PBR Supplemental Tables dated September 2, 2022 in the application for project 34130), 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
10. 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.
11. 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

12. 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.
13. Permit holder shall comply with the following 30 TAC Chapter 117 requirements:
 - A. The permit holder shall comply with the compliance schedules and submit written notification to the TCEQ Executive Director as required in 30 TAC Chapter 117, Subchapter H, Division 1:
 - (i) For sources in the Houston-Galveston-Brazoria Nonattainment area, 30 TAC § 117.9020:
 - (1) Title 30 TAC § 117.9020(2)(A), (C), and (D)

- (ii) For electric generating facilities in the Houston-Galveston-Brazoria Nonattainment area, 30 TAC § 117.9020(2)(B)
 - B. The permit holder shall comply with the requirements of 30 TAC § 117.354 for Final Control Plan Procedures for Attainment Demonstration Emission Specifications and 30 TAC § 117.356 for Revision of Final Control Plan.
- 14. Use of Emission Credits to comply with applicable requirements:
 - A. Unless otherwise prohibited, the permit holder may use emission credits to comply with the following applicable requirements listed elsewhere in this permit:
 - (i) Title 30 TAC Chapter 115
 - (ii) Title 30 TAC Chapter 117
 - (iii) Offsets for Title 30 TAC Chapter 116
 - B. The permit holder shall comply with the following requirements in order to use the emission credits to comply with the applicable requirements:
 - (i) The permit holder must notify the TCEQ according to 30 TAC § 101.306(c)-(d)
 - (ii) The emission credits to be used must meet all the geographic, timeliness, applicable pollutant type, and availability requirements listed in 30 TAC Chapter 101, Subchapter H, Division 1
 - (iii) The executive director has approved the use of the credit according to 30 TAC § 101.306(c)-(d)
 - (iv) The permit holder keeps records of the use of credits towards compliance with the applicable requirements in accordance with 30 TAC § 101.302(g) and 30 TAC Chapter 122
 - (v) Title 30 TAC § 101.305 (relating to Emission Reductions Achieved Outside the United States)
- 15. 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

16. 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.

Alternative Requirements

17. The permit holder shall comply with the approved alternative means of control (AMOC); alternative monitoring, recordkeeping, or reporting requirements; or requirements determined to be equivalent to an otherwise applicable requirement contained in the Alternative Requirements attachment of this permit. Units complying with an approved alternative requirement have reference to the approval in the Applicable Requirements summary listing for the unit. The permit holder shall maintain the original documentation, from the TCEQ Executive Director, demonstrating the method or limitation utilized. Documentation shall be maintained and made available in accordance with 30 TAC § 122.144.

Permit Location

18. 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)

19. 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

Alternative Requirement

Applicable Requirements Summary

Unit Summary 12

Applicable Requirements Summary 18

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
67T-90	LOADING/UNLOADING OPERATIONS	N/A	R5211-AMNTK	30 TAC Chapter 115, Loading and Unloading of VOC	No changing attributes.
67T-90	STORAGE TANKS/VESSELS	N/A	R5112-AMNTK	30 TAC Chapter 115, Storage of VOCs	No changing attributes.
69T-90	LOADING/UNLOADING OPERATIONS	N/A	R5112-AMNTK	30 TAC Chapter 115, Loading and Unloading of VOC	No changing attributes.
69T-90	STORAGE TANKS/VESSELS	N/A	R5112-AMNTK	30 TAC Chapter 115, Storage of VOCs	No changing attributes.
CT	STATIONARY TURBINES	N/A	R7201-DEDTURB	30 TAC Chapter 117, Subchapter B	EGF System Cap Unit = The engine is not used as an electric generating facility to generate electricity for sale to the electric grid.
CT	STATIONARY TURBINES	N/A	R7201-TURB	30 TAC Chapter 117, Subchapter B	EGF System Cap Unit = The engine is used as an electric generating facility to generate electricity for sale to the electric grid.
CT	STATIONARY TURBINES	N/A	60KKKK-TURB	40 CFR Part 60, Subpart KKKK	No changing attributes.
GRP-AU1234	EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS	AU1, AU2, AU3, AU4	R5122-AU	30 TAC Chapter 115, Vent Gas Controls	No changing attributes.
GRP-DIESLD	LOADING/UNLOADING OPERATIONS	PTFEACT-1, PTFEACT-2, PTFEGT-1, PTFEGT-2, PTFEGT-3, PTFEGT-4, PTFEGT-5, PTFEGT-6,	R5211-LVPTK	30 TAC Chapter 115, Loading and Unloading of VOC	No changing attributes.

Unit Summary

Unit/Group/ Process ID No.	Unit Type	Group/Inclusive Units	SOP Index No.	Regulation	Requirement Driver
		PTFFWPT-1, PTFFWPT-2			
GRP-FWP	SRIC ENGINES	PTFFWP, PTFFWP2	R7310-ENGINE	30 TAC Chapter 117, Subchapter B	No changing attributes.
GRP-FWP	SRIC ENGINES	PTFFWP, PTFFWP2	60IIII-PTFFWP	40 CFR Part 60, Subpart IIII	No changing attributes.
GRP-FWP	SRIC ENGINES	PTFFWP, PTFFWP2	63ZZZZ-PTFFWP	40 CFR Part 63, Subpart ZZZZ	No changing attributes.
GRP-HMLD	LOADING/UNLOADING OPERATIONS	PTFHMT, PTFHMT- T4	R5211-LVPTK	30 TAC Chapter 115, Loading and Unloading of VOC	No changing attributes.
GRP-HMTK	STORAGE TANKS/VESSELS	PTFHMT, PTFHMT- T4	R5112-HMTK	30 TAC Chapter 115, Storage of VOCs	No changing attributes.
GRP-HTR	PROCESS HEATERS/FURNACES	65B-81A, 65B-81B, 65B-81C, 65B-81D, 65B-81E	R7201-HTR	30 TAC Chapter 117, Subchapter B	No changing attributes.
GRP-HTR	BOILERS/STEAM GENERATORS/STEAM GENERATING UNITS	65B-81A, 65B-81B, 65B-81C, 65B-81D, 65B-81E	60Db-HTR	40 CFR Part 60, Subpart Db	No changing attributes.
GRP-HTR4	PROCESS HEATERS/FURNACES	69B-81A, 69B-81B, 69B-81C	R7201-HTR4	30 TAC Chapter 117, Subchapter B	No changing attributes.
GRP-HTR4	BOILERS/STEAM GENERATORS/STEAM GENERATING UNITS	69B-81A, 69B-81B, 69B-81C	60Db-HTR4	40 CFR Part 60, Subpart Db	No changing attributes.
GRP-LEG	SRIC ENGINES	PTFEG-4, PTFEG-5	R7310-ENGINE	30 TAC Chapter 117, Subchapter B	No changing attributes.
GRP-LEG	SRIC ENGINES	PTFEG-4, PTFEG-5	60IIII-PTFLEG	40 CFR Part 60, Subpart IIII	No changing attributes.
GRP-LEG	SRIC ENGINES	PTFEG-4, PTFEG-5	63ZZZZ-ENGINE	40 CFR Part 63, Subpart	No changing attributes.

Unit Summary

Unit/Group/ Process ID No.	Unit Type	Group/Inclusive Units	SOP Index No.	Regulation	Requirement Driver
				ZZZZ	
GRP-LGDTK	STORAGE TANKS/VESSELS	PTFEGT-4, PTFEGT-5	R5112- LDIESELTK	30 TAC Chapter 115, Storage of VOCs	No changing attributes.
GRP-LUBVENT	EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS	60K-11A, 60K- 11ATK, 60K-11B, 60K-11BTK, 60K- 11C, 60K-11CTK, 60K-40A, 60K- 40ATK, 60K-40B, 60K-40BTK, 60K- 40C, 60K-40CTK, 61K-30, 61K-43A, 61K-43B, 62K-30, 62K-43A, 62K-43B, 63K-30, 63K-43A, 63K-43B, 64K-30, 64K-40, 64K-43A, 64K-43B, 69K-11A, 69K-11A-Z1, 69K- 11A-Z1-V3, 69K- 11ATK, 69K-40A, 69K-40A-Z1, 69K- 40A-Z1-V3, 69K- 40ATK, LUBVENT	R5113-UCVENT	30 TAC Chapter 115, Vent Gas Controls	No changing attributes.
GRP-MEG	SRIC ENGINES	PTFEG-1, PTFEG-2, PTFEG-3	R7310-ENGINE	30 TAC Chapter 117, Subchapter B	No changing attributes.
GRP-MEG	SRIC ENGINES	PTFEG-1, PTFEG-2, PTFEG-3	60IIII-PTFMEG	40 CFR Part 60, Subpart IIII	No changing attributes.
GRP-MEG	SRIC ENGINES	PTFEG-1, PTFEG-2, PTFEG-3	63ZZZZ-ENGINE	40 CFR Part 63, Subpart ZZZZ	No changing attributes.
GRP-OILLD	LOADING/UNLOADING OPERATIONS	PTFOWT, PTFOWT-T4,	R5211-OILTK	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
		PTFSOT, PTFSOT-T4		VOC	
GRP-PTFFLR	EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS	PTF4FLRPSV, PTFFLAREMSS, PTFFLRPSV	R5113-CVENT	30 TAC Chapter 115, Vent Gas Controls	No changing attributes.
PTFEAC-1	SRIC ENGINES	N/A	R7310-ENGINE	30 TAC Chapter 117, Subchapter B	No changing attributes.
PTFEAC-1	SRIC ENGINES	N/A	60IIII-PTFEAC	40 CFR Part 60, Subpart IIII	No changing attributes.
PTFEAC-1	SRIC ENGINES	N/A	63ZZZZ-ENGINE	40 CFR Part 63, Subpart ZZZZ	No changing attributes.
PTFEAC-2	SRIC ENGINES	N/A	R7310-ENGINE	30 TAC Chapter 117, Subchapter B	No changing attributes.
PTFEAC-2	SRIC ENGINES	N/A	60IIII-PTFEAC	40 CFR Part 60, Subpart IIII	No changing attributes.
PTFEAC-2	SRIC ENGINES	N/A	63ZZZZ-ENGINE	40 CFR Part 63, Subpart ZZZZ	No changing attributes.
PTFEG-6	SRIC ENGINES	N/A	R7310-ENGINE	30 TAC Chapter 117, Subchapter B	No changing attributes.
PTFEG-6	SRIC ENGINES	N/A	60IIII-PTFMEG	40 CFR Part 60, Subpart IIII	No changing attributes.
PTFEG-6	SRIC ENGINES	N/A	63ZZZZ-ENGINE	40 CFR Part 63, Subpart ZZZZ	No changing attributes.
PTFFLARE	FLARES	N/A	R1111-FLARE	30 TAC Chapter 111, Visible Emissions	No changing attributes.
PTFFLARE	EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS	N/A	115B-PTFFLR	30 TAC Chapter 115, Vent Gas Controls	No changing attributes.
PTFOWT	STORAGE TANKS/VESSELS	N/A	R5112-OILWTRTK1	30 TAC Chapter 115, Storage of VOCs	True Vapor Pressure = True vapor pressure is greater than or equal to 1.5 psia, Tank Description = Tank

Unit Summary

Unit/Group/ Process ID No.	Unit Type	Group/Inclusive Units	SOP Index No.	Regulation	Requirement Driver
					using a submerged fill pipe
PTFOWT	STORAGE TANKS/VESSELS	N/A	R5112- OILWTRTK2	30 TAC Chapter 115, Storage of VOCs	True Vapor Pressure = True vapor pressure is greater than or equal to 1.0 psia but less than 1.5 psia, Tank Description = Tank does not require emission controls
PTFOWT-T4	STORAGE TANKS/VESSELS	N/A	R5112- OILWTRTK1	30 TAC Chapter 115, Storage of VOCs	True Vapor Pressure = True vapor pressure is greater than or equal to 1.5 psia, Tank Description = Tank using a submerged fill pipe
PTFOWT-T4	STORAGE TANKS/VESSELS	N/A	R5112- OILWTRTK2	30 TAC Chapter 115, Storage of VOCs	True Vapor Pressure = True vapor pressure is greater than or equal to 1.0 psia but less than 1.5 psia, Tank Description = Tank does not require emission controls
PTFSOT	STORAGE TANKS/VESSELS	N/A	R5112- OILCNDTK1	30 TAC Chapter 115, Storage of VOCs	True Vapor Pressure = True vapor pressure is greater than or equal to 1.5 psia, Tank Description = Tank using a submerged fill pipe
PTFSOT	STORAGE TANKS/VESSELS	N/A	R5112- OILCNDTK2	30 TAC Chapter 115, Storage of VOCs	True Vapor Pressure = True vapor pressure is greater than or equal to 1.0 psia but less than 1.5 psia, Tank Description = Tank does not require emission controls
PTFSOT-T4	STORAGE TANKS/VESSELS	N/A	R5112- OILCNDTK1	30 TAC Chapter 115, Storage of VOCs	True Vapor Pressure = True vapor pressure is greater than or equal to 1.5 psia, Tank Description = Tank using a submerged fill pipe
PTFSOT-T4	STORAGE TANKS/VESSELS	N/A	R5112- OILCNDTK2	30 TAC Chapter 115, Storage of VOCs	True Vapor Pressure = True vapor pressure is greater than or equal to 1.0 psia but less than 1.5 psia, Tank

Unit Summary

Unit/Group/ Process ID No.	Unit Type	Group/Inclusive Units	SOP Index No.	Regulation	Requirement Driver
					Description = Tank does not require emission controls

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)
67T-90	EU	R5211-AMNTK	VOC	30 TAC Chapter 115, Loading and Unloading of VOC	§ 115.217(a)(1) § 115.212(a)(2) § 115.214(a)(1)(B) § 115.214(a)(1)(D) § 115.214(a)(1)(D)(i)	Vapor pressure (at land-based operations). All land-based loading and unloading of VOC with a true vapor pressure less than 0.5 psia is exempt from the requirements of this division, except as specified.	§ 115.214(a)(1)(A) § 115.214(a)(1)(A)(i) § 115.215 § 115.215(4)	§ 115.216 § 115.216(2) § 115.216(3)(B)	None
67T-90	EU	R5112-AMNTK	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.111(a)(1)	Except as provided in § 115.118, a storage tank storing VOC with a true vapor pressure less than 1.5 psia is exempt from the requirements of this division.	[G]§ 115.117	§ 115.118(a)(1) § 115.118(a)(5) § 115.118(a)(6)(A) § 115.118(a)(7)	None
69T-90	EU	R5112-AMNTK	VOC	30 TAC Chapter 115, Loading and Unloading of VOC	§ 115.217(a)(1) § 115.212(a)(2) § 115.214(a)(1)(B) § 115.214(a)(1)(D) § 115.214(a)(1)(D)(i)	Vapor pressure (at land-based operations). All land-based loading and unloading of VOC with a true vapor pressure less than 0.5 psia is exempt from the requirements of this division, except as specified.	§ 115.214(a)(1)(A) § 115.214(a)(1)(A)(i) § 115.215 § 115.215(4)	§ 115.216 § 115.216(2) § 115.216(3)(B)	None
69T-90	EU	R5112-AMNTK	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.111(a)(1)	Except as provided in § 115.118, a storage tank storing VOC with a true vapor pressure less than 1.5 psia is exempt from the requirements of this division.	[G]§ 115.117	§ 115.118(a)(1) § 115.118(a)(5) § 115.118(a)(6)(A) § 115.118(a)(7)	None
CT	EU	R7201-DEDTURB	CO	30 TAC Chapter 117, Subchapter B	§ 117.310(c)(1) § 117.310(c)(1)(A) § 117.340(f)(1)	CO emissions must not exceed 400 ppmv at 3.0% O ₂ , dry basis.	[G]§ 117.335(a)(1) § 117.335(a)(4) § 117.335(b) § 117.335(c) § 117.335(d)	§ 117.345(a) § 117.345(f) § 117.345(f)(1) [G]§ 117.345(f)(2) § 117.345(f)(7)	§ 117.335(b) § 117.335(g) [G]§ 117.345(b) [G]§ 117.345(c) § 117.345(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)
							§ 117.335(f) § 117.335(f)(3) § 117.335(g) § 117.340(a) § 117.340(e) [G]§ 117.340(f)(2) § 117.8100(a) § 117.8100(a)(1) § 117.8100(a)(1)(A) § 117.8100(a)(1)(B) § 117.8100(a)(1)(B)(ii)) § 117.8100(a)(1)(B)(iii)) § 117.8100(a)(1)(C) § 117.8100(a)(2) [G]§ 117.8100(a)(3) § 117.8100(a)(4) § 117.8100(a)(5) § 117.8100(a)(5)(A) § 117.8100(a)(5)(B) [G]§ 117.8100(a)(5)(D) [G]§ 117.8100(a)(5)(E) § 117.8100(a)(6) § 117.8120 § 117.8120(1) § 117.8120(1)(A)	§ 117.345(f)(8) § 117.345(f)(9) § 117.8100(a)(5)(C)	§ 117.345(d)(2) § 117.345(d)(3) § 117.345(d)(4) § 117.345(d)(5) § 117.8010 [G]§ 117.8010(1) § 117.8010(2) § 117.8010(2)(A) § 117.8010(2)(B) [G]§ 117.8010(3) § 117.8010(4) [G]§ 117.8010(5) § 117.8010(6) [G]§ 117.8010(7) [G]§ 117.8010(8) § 117.8100(c)
CT	EU	R7201-DEDTURB	NH ₃	30 TAC Chapter 117, Subchapter B	§ 117.310(c)(2) § 117.310(c)(2)(B) § 117.340(f)(1)	For stationary gas turbines that inject urea or ammonia into the exhaust stream for NO _x control, ammonia emissions must not exceed 10 ppmv at 15% O ₂ , dry.	§ 117.335(a)(2) § 117.335(a)(4) § 117.335(b) § 117.335(c) § 117.335(d) § 117.335(g) § 117.340(d) [G]§ 117.340(f)(2)	§ 117.345(a) § 117.345(f) § 117.345(f)(11) [G]§ 117.345(f)(2) § 117.345(f)(8) § 117.345(f)(9) § 117.8100(a)(5)(C)	§ 117.335(b) § 117.335(g) [G]§ 117.345(b) [G]§ 117.345(c) § 117.345(d) § 117.345(d)(2) § 117.345(d)(3) § 117.345(d)(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)
							§ 117.8100(a) § 117.8100(a)(1) § 117.8100(a)(1)(A) § 117.8100(a)(1)(B) § 117.8100(a)(1)(B)(ii) § 117.8100(a)(1)(C) § 117.8100(a)(2) [G]§ 117.8100(a)(3) § 117.8100(a)(4) § 117.8100(a)(5) § 117.8100(a)(5)(A) § 117.8100(a)(5)(B) [G]§ 117.8100(a)(5)(D) [G]§ 117.8100(a)(5)(E) § 117.8100(a)(6) § 117.8130 § 117.8130(4)		§ 117.345(d)(5) § 117.8010 [G]§ 117.8010(1) § 117.8010(2) § 117.8010(2)(A) § 117.8010(2)(B) [G]§ 117.8010(3) § 117.8010(4) [G]§ 117.8010(5) § 117.8010(6) [G]§ 117.8010(7) [G]§ 117.8010(8) § 117.8100(c)
CT	EU	R7201-DEDTURB	NO _x	30 TAC Chapter 117, Subchapter B	§ 117.310(d)(3) § 117.310(a) § 117.310(a)(10)(A) § 117.310(b) [G]§ 117.310(e)(1) § 117.310(e)(2) [G]§ 117.310(e)(3) § 117.310(e)(4) § 117.340(f)(1) § 117.340(l)(2) § 117.340(p)(1) § 117.340(p)(3)	An owner or operator may not use the alternative methods specified in §§ 117.315, 117.323 and 117.9800 to comply with the NO _x emission specifications but shall use the mass emissions cap and trade program in Chapter 101, Subchapter H, Division 3, except that electric generating facilities must also comply with the daily and 30-day system cap emission limitations of § 117.320. An owner or operator may use the alternative methods	[G]§ 117.335(a)(1) § 117.335(a)(4) § 117.335(b) § 117.335(c) § 117.335(d) § 117.335(g) § 117.340(a) § 117.340(c)(1) [G]§ 117.340(c)(3) [G]§ 117.340(f)(2) § 117.340(l)(2) § 117.340(o)(1) § 117.340(p)(1) § 117.8100(a) § 117.8100(a)(1) § 117.8100(a)(1)(A) § 117.8100(a)(1)(B) §	§ 117.345(a) § 117.345(f) § 117.345(f)(1) [G]§ 117.345(f)(2) § 117.345(f)(8) § 117.345(f)(9) § 117.8100(a)(5)(C)	§ 117.335(b) § 117.335(g) [G]§ 117.345(b) [G]§ 117.345(c) § 117.345(d) § 117.345(d)(3) § 117.8010 [G]§ 117.8010(1) § 117.8010(2) § 117.8010(2)(A) § 117.8010(2)(B) § 117.8010(2)(C) § 117.8010(2)(D) [G]§ 117.8010(3) § 117.8010(4) [G]§ 117.8010(5) § 117.8010(6) [G]§ 117.8010(7)

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 § 117.9800 to comply with § 117.320.	117.8100(a)(1)(B)(i) § 117.8100(a)(1)(B)(ii)) § 117.8100(a)(1)(C) § 117.8100(a)(2) [G]§ 117.8100(a)(3) § 117.8100(a)(4) § 117.8100(a)(5) § 117.8100(a)(5)(A) § 117.8100(a)(5)(B) [G]§ 117.8100(a)(5)(D) [G]§ 117.8100(a)(5)(E) § 117.8100(a)(6)		[G]§ 117.8010(8) § 117.8100(c)
CT	EU	R7201-TURB	CO	30 TAC Chapter 117, Subchapter B	§ 117.310(c)(1) § 117.310(c)(1)(A) § 117.340(f)(1)	CO emissions must not exceed 400 ppmv at 3.0% O ₂ , dry basis.	[G]§ 117.335(a)(1) § 117.335(a)(4) § 117.335(b) § 117.335(c) § 117.335(d) § 117.335(f) § 117.335(f)(3) § 117.335(g) § 117.340(a) § 117.340(e) [G]§ 117.340(f)(2) § 117.8100(a) § 117.8100(a)(1) § 117.8100(a)(1)(A) § 117.8100(a)(1)(B) § 117.8100(a)(1)(B)(ii)) § 117.8100(a)(1)(B)(iii)) § 117.8100(a)(1)(C) § 117.8100(a)(2)	§ 117.345(a) § 117.345(f) § 117.345(f)(1) [G]§ 117.345(f)(2) § 117.345(f)(7) § 117.345(f)(8) § 117.345(f)(9) § 117.8100(a)(5)(C)	§ 117.335(b) § 117.335(g) [G]§ 117.345(b) [G]§ 117.345(c) § 117.345(d) § 117.345(d)(2) § 117.345(d)(3) § 117.345(d)(4) § 117.345(d)(5) § 117.8010 [G]§ 117.8010(1) § 117.8010(2) § 117.8010(2)(A) § 117.8010(2)(B) [G]§ 117.8010(3) § 117.8010(4) [G]§ 117.8010(5) § 117.8010(6) [G]§ 117.8010(7) [G]§ 117.8010(8) § 117.8100(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]§ 117.8100(a)(3) § 117.8100(a)(4) § 117.8100(a)(5) § 117.8100(a)(5)(A) § 117.8100(a)(5)(B) [G]§ 117.8100(a)(5)(D) [G]§ 117.8100(a)(5)(E) § 117.8100(a)(6) § 117.8120 § 117.8120(1) § 117.8120(1)(A)		
CT	EU	R7201-TURB	NH ₃	30 TAC Chapter 117, Subchapter B	§ 117.310(c)(2) § 117.310(c)(2)(B) § 117.340(f)(1)	For stationary gas turbines that inject urea or ammonia into the exhaust stream for NO _x control, ammonia emissions must not exceed 10 ppmv at 15% O ₂ , dry.	§ 117.335(a)(2) § 117.335(a)(4) § 117.335(b) § 117.335(c) § 117.335(d) § 117.335(g) § 117.340(d) [G]§ 117.340(f)(2) § 117.8100(a) § 117.8100(a)(1) § 117.8100(a)(1)(A) § 117.8100(a)(1)(B) § 117.8100(a)(1)(B)(ii) § 117.8100(a)(1)(C) § 117.8100(a)(2) [G]§ 117.8100(a)(3) § 117.8100(a)(4) § 117.8100(a)(5) § 117.8100(a)(5)(A) § 117.8100(a)(5)(B) [G]§ 117.8100(a)(5)(D) [G]§ 117.8100(a)(5)(E)	§ 117.345(a) § 117.345(f) § 117.345(f)(11) [G]§ 117.345(f)(2) § 117.345(f)(8) § 117.345(f)(9) § 117.8100(a)(5)(C)	§ 117.335(b) § 117.335(g) [G]§ 117.345(b) [G]§ 117.345(c) § 117.345(d) § 117.345(d)(2) § 117.345(d)(3) § 117.345(d)(4) § 117.345(d)(5) § 117.8010 [G]§ 117.8010(1) § 117.8010(2) § 117.8010(2)(A) § 117.8010(2)(B) [G]§ 117.8010(3) § 117.8010(4) [G]§ 117.8010(5) § 117.8010(6) [G]§ 117.8010(7) [G]§ 117.8010(8) § 117.8100(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)
							§ 117.8100(a)(6) § 117.8130 § 117.8130(4)		
CT	EU	R7201-TURB	NO _x	30 TAC Chapter 117, Subchapter B	§ 117.310(d)(3) § 117.310(a) § 117.310(a)(10)(A) § 117.310(b) [G]§ 117.310(e)(1) § 117.310(e)(2) [G]§ 117.310(e)(3) § 117.310(e)(4) § 117.320(a) § 117.320(b) [G]§ 117.320(c) § 117.320(i) § 117.320(j) § 117.320(k) § 117.340(f)(1) § 117.340(l)(2) § 117.340(p)(1) § 117.340(p)(3)	An owner or operator may not use the alternative methods specified in §§ 117.315, 117.323 and 117.9800 to comply with the NO _x emission specifications but shall use the mass emissions cap and trade program in Chapter 101, Subchapter H, Division 3, except that electric generating facilities must also comply with the daily and 30-day system cap emission limitations of § 117.320. An owner or operator may use the alternative methods specified in § 117.9800 to comply with § 117.320.	§ 117.320(d) [G]§ 117.320(e) § 117.320(h) § 117.320(k) [G]§ 117.335(a)(1) § 117.335(a)(4) § 117.335(b) § 117.335(c) § 117.335(d) § 117.335(g) § 117.340(a) § 117.340(c)(1) [G]§ 117.340(c)(3) [G]§ 117.340(f)(2) § 117.340(l)(2) § 117.340(o)(1) § 117.340(p)(1) § 117.8100(a) § 117.8100(a)(1) § 117.8100(a)(1)(A) § 117.8100(a)(1)(B) § 117.8100(a)(1)(B)(i) § 117.8100(a)(1)(B)(ii) § 117.8100(a)(1)(C) § 117.8100(a)(2) [G]§ 117.8100(a)(3) § 117.8100(a)(4) § 117.8100(a)(5) § 117.8100(a)(5)(A) § 117.8100(a)(5)(B) [G]§ 117.8100(a)(5)(D) [G]§	§ 117.320(f) § 117.345(a) § 117.345(f) § 117.345(f)(1) [G]§ 117.345(f)(2) § 117.345(f)(8) § 117.345(f)(9) § 117.8100(a)(5)(C)	§ 117.320(g) § 117.335(b) § 117.335(g) [G]§ 117.345(b) [G]§ 117.345(c) § 117.345(d) § 117.345(d)(3) § 117.8010 [G]§ 117.8010(1) § 117.8010(2) § 117.8010(2)(A) § 117.8010(2)(B) § 117.8010(2)(C) § 117.8010(2)(D) [G]§ 117.8010(3) § 117.8010(4) [G]§ 117.8010(5) § 117.8010(6) [G]§ 117.8010(7) [G]§ 117.8010(8) § 117.8100(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)
							117.8100(a)(5)(E) § 117.8100(a)(6)		
CT	EU	60KKKK-TURB	NO _x	40 CFR Part 60, Subpart KKKK	§ 60.4320(a)-Table 1 § 60.4320(a) § 60.4333(a) § 60.4335(b)(1) § 60.4335(b)(2) § 60.4335(b)(3) § 60.4335(b)(4) [G]§ 60.4345	New, modified, or reconstructed turbine firing natural gas with a heat input at peak load > 850 MMBtu/h must meet the nitrogen oxides emission standard of 54 ng/J of useful output (0.43 lb/MWh).	§ 60.4335(b)(1) § 60.4335(b)(2) § 60.4335(b)(3) § 60.4335(b)(4) [G]§ 60.4345 § 60.4350(a) § 60.4350(b) § 60.4350(c) § 60.4350(d) § 60.4350(e) § 60.4350(f) § 60.4350(f)(2) § 60.4350(h) [G]§ 60.4400(a) § 60.4400(b) § 60.4400(b)(4) § 60.4400(b)(5) § 60.4400(b)(6) [G]§ 60.4405	[G]§ 60.4345 § 60.4350(b)	[G]§ 60.4345 § 60.4350(d) § 60.4375(a) § 60.4380 [G]§ 60.4380(b) § 60.4395
CT	EU	60KKKK-TURB	SO ₂	40 CFR Part 60, Subpart KKKK	§ 60.4330(a)(2) § 60.4333(a)	You must not burn in the subject stationary combustion turbine any fuel which contains total potential sulfur emissions in excess of 26 ng SO ₂ /J (0.060 lb SO ₂ /MMBtu) heat input. If your turbine simultaneously fires multiple fuels, each fuel must meet this requirement.	§ 60.4365 § 60.4365(b) § 60.4415(a) § 60.4415(a)(2) § 60.4415(a)(2)(ii)	§ 60.4365(b)	§ 60.4375(a)
GRP-AU1234	EP	R5122-AU	VOC	30 TAC Chapter 115, Vent Gas Controls	§ 115.122(a)(1) § 115.121(a)(1) § 115.122(a)(1)(A)	Vent gas streams affected by §115.121(a)(1) must be controlled properly with a control efficiency of at least 90% or to a volatile organic compound (VOC)	[G]§ 115.125 § 115.126(1) § 115.126(1)(A) § 115.126(1)(A)(i) § 115.126(2) ** See CAM	§ 115.126 § 115.126(1) § 115.126(1)(A) § 115.126(1)(A)(i) § 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)
						concentration of no more than 20 parts per million (ppmv) (on a dry basis corrected to 3.0% oxygen for combustion devices).	Summary		
GRP-DIESLD	EU	R5211-LVPTK	VOC	30 TAC Chapter 115, Loading and Unloading of VOC	§ 115.217(a)(1) § 115.212(a)(2) § 115.214(a)(1)(B) § 115.214(a)(1)(D) § 115.214(a)(1)(D)(i)	Vapor pressure (at land-based operations). All land-based loading and unloading of VOC with a true vapor pressure less than 0.5 psia is exempt from the requirements of this division, except as specified.	§ 115.214(a)(1)(A) § 115.214(a)(1)(A)(i) § 115.215 § 115.215(4)	§ 115.216 § 115.216(2) § 115.216(3)(B)	None
GRP-FWP	EU	R7310-ENGINE	Exempt	30 TAC Chapter 117, Subchapter B	[G]§ 117.303(a)(11) [G]§ 117.310(f)	Units exempted from the provisions of this division except as specified in §§117.310(f), 117.340(j), 117.345(f)(6) and (10), 117.350(c)(1) and 117.354(a)(5) include new, modified, reconstructed, or relocated stationary diesel engine placed into service on or after October 1, 2001, that operates less than 100 hours per year, based on a rolling 12-month average, in other than emergency situations; and meets the requirements for non-road engines as specified. §117.303(a)(11)(A)-(B)	None	§ 117.340(j) § 117.345(f) [G]§ 117.345(f)(10) [G]§ 117.345(f)(6)	None
GRP-FWP	EU	60III-PTFFWP	NMHC and NO _x	40 CFR Part 60, Subpart IIII	§ 60.4205(c)-Table 4 § 60.4206 § 60.4207(b) [G]§ 60.4211(a)	Owners and operators of emergency stationary fire pump CI ICE with a maximum engine power greater than or equal to 130	§ 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	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+NOx emission limit of 4.0 g/KW-hr, as listed in Table 4 to this subpart.			
GRP-FWP	EU	60III-PTFFWP	PM	40 CFR Part 60, Subpart III	§ 60.4205(c)-Table 4 § 60.4206 § 60.4207(b) [G]§ 60.4211(a) § 60.4211(c) [G]§ 60.4211(f) § 60.4218	Owners and operators of emergency stationary fire pump CI ICE with a maximum engine power greater than or equal to 130 KW and less than or equal to 560 KW and a displacement of less than 30 liters per cylinder and is a 2009 model year and later must comply with a PM emission limit of 0.20 g/KW-hr, as listed in Table 4 to this subpart.	§ 60.4209(a)	§ 60.4214(b)	[G]§ 60.4214(d)
GRP-FWP	EU	63ZZZZ-PTFFWP	112(B) HAPS	40 CFR Part 63, Subpart ZZZZ	§ 63.6590(c)	Stationary RICE subject to Regulations under 40 CFR Part 60. An affected source that meets any of the criteria in paragraphs (c)(1) through (7) of this section must meet the requirements of this part by meeting the requirements of 40 CFR part 60 subpart III, for compression ignition engines or 40 CFR part 60 subpart JJJJ, for spark ignition engines as applicable. No further	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)
						requirements apply for such engines under this part.			
GRP-HMLD	EU	R5211-LVPTK	VOC	30 TAC Chapter 115, Loading and Unloading of VOC	§ 115.217(a)(1) § 115.212(a)(2) § 115.214(a)(1)(B) § 115.214(a)(1)(D) § 115.214(a)(1)(D)(i)	Vapor pressure (at land-based operations). All land-based loading and unloading of VOC with a true vapor pressure less than 0.5 psia is exempt from the requirements of this division, except as specified.	§ 115.214(a)(1)(A) § 115.214(a)(1)(A)(i) § 115.215 § 115.215(4)	§ 115.216 § 115.216(2) § 115.216(3)(B)	None
GRP-HMTK	EU	R5112-HMTK	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.111(a)(1)	Except as provided in § 115.118, a storage tank storing VOC with a true vapor pressure less than 1.5 psia is exempt from the requirements of this division.	[G]§ 115.117	§ 115.118(a)(1) § 115.118(a)(5) § 115.118(a)(6)(A) § 115.118(a)(7)	None
GRP-HTR	EU	R7201-HTR	CO	30 TAC Chapter 117, Subchapter B	§ 117.310(c)(1) § 117.310(c)(1)(B) § 117.310(c)(3)	CO emissions must not exceed 400 ppmv at 3.0% O ₂ , dry basis.	[G]§ 117.335(a)(1) § 117.335(a)(4) § 117.335(b) § 117.335(d) § 117.335(e) § 117.335(g) § 117.340(a) § 117.340(b)(1) § 117.340(b)(3) § 117.340(e) § 117.8000(b) § 117.8000(c) § 117.8000(c)(2) § 117.8000(c)(3) § 117.8000(c)(5) § 117.8000(c)(6) [G]§ 117.8000(d) § 117.8120 § 117.8120(2) [G]§ 117.8120(2)(A)	§ 117.345(a) § 117.345(f) § 117.345(f)(1) § 117.345(f)(7) § 117.345(f)(9)	§ 117.335(b) § 117.335(g) [G]§ 117.345(b) [G]§ 117.345(c) § 117.8010 [G]§ 117.8010(1) § 117.8010(2) § 117.8010(2)(A) § 117.8010(2)(B) [G]§ 117.8010(3) § 117.8010(4) [G]§ 117.8010(5) § 117.8010(6) [G]§ 117.8010(7)

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)
							§ 117.8120(2)(B) ** See Periodic Monitoring Summary		
GRP-HTR	EU	R7201-HTR	NO _x	30 TAC Chapter 117, Subchapter B	§ 117.310(d)(3) § 117.310(a) § 117.310(a)(8)(A)(i) § 117.310(b) [G]§ 117.310(e)(1) § 117.310(e)(2) [G]§ 117.310(e)(3) § 117.310(e)(4) § 117.340(f)(1) § 117.340(l)(2) § 117.340(p)(1) § 117.340(p)(3)	An owner or operator may not use the alternative methods specified in §§ 117.315, 117.323 and 117.9800 to comply with the NO _x emission specifications but shall use the mass emissions cap and trade program in Chapter 101, Subchapter H, Division 3, except that electric generating facilities must also comply with the daily and 30-day system cap emission limitations of § 117.320. An owner or operator may use the alternative methods specified in § 117.9800 to comply with § 117.320.	[G]§ 117.335(a)(1) § 117.335(a)(4) § 117.335(b) § 117.335(c) § 117.335(d) § 117.335(f) § 117.335(f)(1) § 117.335(g) § 117.340(a) § 117.340(b)(1) § 117.340(b)(3) § 117.340(c)(1) [G]§ 117.340(c)(3) [G]§ 117.340(f)(2) § 117.340(l)(2) § 117.340(o)(1) § 117.340(p)(1) § 117.8100(a) § 117.8100(a)(1) § 117.8100(a)(1)(A) § 117.8100(a)(1)(B) § 117.8100(a)(1)(B)(i) § 117.8100(a)(1)(B)(ii)) § 117.8100(a)(1)(C) § 117.8100(a)(2) [G]§ 117.8100(a)(3) § 117.8100(a)(4) § 117.8100(a)(5) § 117.8100(a)(5)(A) § 117.8100(a)(5)(B) [G]§ 117.8100(a)(5)(D)	§ 117.345(a) § 117.345(f) § 117.345(f)(1) [G]§ 117.345(f)(2) § 117.345(f)(8) § 117.345(f)(9) § 117.8100(a)(5)(C)	§ 117.335(b) § 117.335(g) [G]§ 117.345(b) [G]§ 117.345(c) § 117.345(d) § 117.345(d)(3) § 117.8010 [G]§ 117.8010(1) § 117.8010(2) § 117.8010(2)(A) § 117.8010(2)(B) § 117.8010(2)(C) § 117.8010(2)(D) [G]§ 117.8010(3) § 117.8010(4) [G]§ 117.8010(5) § 117.8010(6) [G]§ 117.8010(7) [G]§ 117.8010(8) § 117.8100(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]§ 117.8100(a)(5)(E) § 117.8100(a)(6)		
GRP-HTR	EU	60Db-HTR	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)(4) [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) § 60.48b(g)(1)	[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(h)(4) § 60.49b(i) § 60.49b(v) § 60.49b(w)
GRP-HTR	EU	60Db-HTR	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)
GRP-HTR	EU	60Db-HTR	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)
GRP-HTR	EU	60Db-HTR	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	§ 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)

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)
						exempt from the SO2 emissions limit in §60.42b(k)(1).			
GRP-HTR4	EU	R7201-HTR4	CO	30 TAC Chapter 117, Subchapter B	§ 117.310(c)(1) § 117.310(c)(1)(B) § 117.310(c)(3)	CO emissions must not exceed 400 ppmv at 3.0% O ₂ , dry basis.	[G]§ 117.335(a)(1) § 117.335(a)(4) § 117.335(b) § 117.335(d) § 117.335(e) § 117.335(g) § 117.340(a) § 117.340(b)(1) § 117.340(b)(3) § 117.340(e) § 117.8000(b) § 117.8000(c) § 117.8000(c)(2) § 117.8000(c)(3) § 117.8000(c)(5) § 117.8000(c)(6) [G]§ 117.8000(d) § 117.8120 § 117.8120(2) [G]§ 117.8120(2)(A) § 117.8120(2)(B) ** See Periodic Monitoring Summary	§ 117.345(a) § 117.345(f) § 117.345(f)(1) § 117.345(f)(7) § 117.345(f)(9)	§ 117.335(b) § 117.335(g) [G]§ 117.345(b) [G]§ 117.345(c) § 117.8010 [G]§ 117.8010(1) § 117.8010(2) § 117.8010(2)(A) § 117.8010(2)(B) [G]§ 117.8010(3) § 117.8010(4) [G]§ 117.8010(5) § 117.8010(6) [G]§ 117.8010(7)
GRP-HTR4	EU	R7201-HTR4	NH ₃	30 TAC Chapter 117, Subchapter B	§ 117.310(c)(2) § 117.310(c)(2)(A)	For process heaters that inject urea or ammonia into the exhaust stream for NO _x control, ammonia emissions must not exceed 10 ppmv at 3.0% O ₂ , dry.	§ 117.335(a)(2) § 117.335(a)(4) § 117.335(b) § 117.335(d) § 117.335(e) § 117.335(g) § 117.340(b)(1) § 117.340(b)(3) § 117.340(d) § 117.8000(b) § 117.8000(c)	§ 117.345(a) § 117.345(f) § 117.345(f)(11) § 117.345(f)(9)	§ 117.335(b) § 117.335(g) [G]§ 117.345(b) [G]§ 117.345(c) § 117.8010 [G]§ 117.8010(1) § 117.8010(2) § 117.8010(2)(A) § 117.8010(2)(B) [G]§ 117.8010(3) § 117.8010(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)
							§ 117.8000(c)(3) § 117.8000(c)(4) § 117.8000(c)(5) § 117.8000(c)(6) [G]§ 117.8000(d) § 117.8130 § 117.8130(2) ** See Periodic Monitoring Summary		[G]§ 117.8010(5) § 117.8010(6) [G]§ 117.8010(7)
GRP-HTR4	EU	R7201-HTR4	NO _x	30 TAC Chapter 117, Subchapter B	§ 117.310(d)(3) § 117.310(a) § 117.310(a)(8)(A)(i) § 117.310(b) [G]§ 117.310(e)(1) § 117.310(e)(2) [G]§ 117.310(e)(3) § 117.310(e)(4) § 117.340(f)(1) § 117.340(l)(2) § 117.340(p)(1) § 117.340(p)(3)	An owner or operator may not use the alternative methods specified in §§ 117.315, 117.323 and 117.9800 to comply with the NO _x emission specifications but shall use the mass emissions cap and trade program in Chapter 101, Subchapter H, Division 3, except that electric generating facilities must also comply with the daily and 30-day system cap emission limitations of § 117.320. An owner or operator may use the alternative methods specified in § 117.9800 to comply with § 117.320.	[G]§ 117.335(a)(1) § 117.335(a)(4) § 117.335(b) § 117.335(c) § 117.335(d) § 117.335(f) § 117.335(f)(1) § 117.335(g) § 117.340(a) § 117.340(b)(1) § 117.340(b)(3) § 117.340(c)(1) [G]§ 117.340(c)(3) [G]§ 117.340(f)(2) § 117.340(l)(2) § 117.340(o)(1) § 117.340(p)(1) § 117.8100(a) § 117.8100(a)(1) § 117.8100(a)(1)(A) § 117.8100(a)(1)(B) § 117.8100(a)(1)(B)(i) § 117.8100(a)(1)(B)(ii)) § 117.8100(a)(1)(C) § 117.8100(a)(2) [G]§ 117.8100(a)(3)	§ 117.345(a) § 117.345(f) § 117.345(f)(1) [G]§ 117.345(f)(2) § 117.345(f)(8) § 117.345(f)(9) § 117.8100(a)(5)(C)	§ 117.335(b) § 117.335(g) [G]§ 117.345(b) [G]§ 117.345(c) § 117.345(d) § 117.345(d)(3) § 117.8010 [G]§ 117.8010(1) § 117.8010(2) § 117.8010(2)(A) § 117.8010(2)(B) § 117.8010(2)(C) § 117.8010(2)(D) [G]§ 117.8010(3) § 117.8010(4) [G]§ 117.8010(5) § 117.8010(6) [G]§ 117.8010(7) [G]§ 117.8010(8) § 117.8100(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)
							§ 117.8100(a)(4) § 117.8100(a)(5) § 117.8100(a)(5)(A) § 117.8100(a)(5)(B) [G]§ 117.8100(a)(5)(D) [G]§ 117.8100(a)(5)(E) § 117.8100(a)(6)		
GRP-HTR4	EU	60Db-HTR4	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)(4) [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) § 60.48b(g)(1)	[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(h)(4) § 60.49b(i) § 60.49b(v) § 60.49b(w)
GRP-HTR4	EU	60Db-HTR4	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)
GRP-HTR4	EU	60Db-HTR4	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)

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
GRP-HTR4	EU	60Db-HTR4	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)
GRP-LEG	EU	R7310-ENGINE	Exempt	30 TAC Chapter 117, Subchapter B	[G]§ 117.303(a)(11) [G]§ 117.310(f)	Units exempted from the provisions of this division except as specified in §§117.310(f), 117.340(j), 117.345(f)(6) and (10), 117.350(c)(1) and 117.354(a)(5) include new, modified, reconstructed, or relocated stationary diesel engine placed into service on or after October 1, 2001, that operates less than 100 hours per year, based on a rolling 12-month average, in other than emergency situations; and meets the requirements for non-road engines as specified. §117.303(a)(11)(A)-(B)	None	§ 117.340(j) § 117.345(f) [G]§ 117.345(f)(10) [G]§ 117.345(f)(6)	None
GRP-LEG	EU	60III-PTFLEG	NO _x	40 CFR Part 60, Subpart III	[G]§ 60.4205(d)(2) § 60.4206 § 60.4207(d) § 60.4211(d) [G]§ 60.4211(f) § 60.4218	Owners and operators of emergency stationary CI ICE with a displacement of greater than or equal to 30 liters per cylinder and was installed on or after 01/01/2012 must comply with the following NO _x emission limits: 14.4 g/KW-hr when maximum engine	§ 60.4211(d)(1) § 60.4213(a) § 60.4213(b) § 60.4213(c) § 60.4213(e)	[G]§ 60.4211(d)(2)	[G]§ 60.4211(d)(2) [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)
						speed is less than 130 rpm, 44.0 x N-0.23 when maximum engine speed is at least 130 but less than 2000 rpm, and 7.7 g/KW-hr when maximum engine speed is 2000 rpm or more.			
GRP-LEG	EU	60III-PTFLEG	PM	40 CFR Part 60, Subpart IIII	§ 60.4205(d)(3) § 60.4206 § 60.4207(d) § 60.4211(d) [G]§ 60.4211(f) § 60.4218	Owners and operators of emergency stationary CI ICE with a displacement of greater than or equal to 30 liters per cylinder must comply with a PM emission limit of 0.40 g/KW-hr.	§ 60.4211(d)(1) § 60.4213(a) § 60.4213(b) § 60.4213(c) § 60.4213(f)	[G]§ 60.4211(d)(2)	[G]§ 60.4211(d)(2) [G]§ 60.4214(d)
GRP-LEG	EU	63ZZZZ-ENGINE	112(B) HAPS	40 CFR Part 63, Subpart ZZZZ	§ 63.6590(c)	Stationary RICE subject to Regulations under 40 CFR Part 60. An affected source that meets any of the criteria in paragraphs (c)(1) through (7) of this section must meet the requirements of this part by meeting the requirements of 40 CFR part 60 subpart IIII, for compression ignition engines or 40 CFR part 60 subpart JJJJ, for spark ignition engines as applicable. No further requirements apply for such engines under this part.	None	None	None
GRP-LGDTK	EU	R5112-LDIESELTK	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.111(a)(1)	Except as provided in § 115.118, a storage tank storing VOC with a true vapor pressure less than 1.5 psia is exempt from the requirements of this division.	[G]§ 115.117	§ 115.118(a)(1) § 115.118(a)(5) § 115.118(a)(7)	None

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
GRP-LUBVENT	EP	R5113-UCVENT	VOC	30 TAC Chapter 115, Vent Gas Controls	§ 115.127(a)(2)(A) [G]§ 115.122(a)(4) § 115.127(a)(2)	A vent gas stream having a combined weight of volatile organic compounds (VOC) equal to or less than 100 pounds in any continuous 24-hour period is exempt from §115.121(a)(1) of this title.	[G]§ 115.125 § 115.126(2)	§ 115.126 § 115.126(2) § 115.126(4)	None
GRP-LUBVENT	EP	R5113-UCVENT	VOC	30 TAC Chapter 115, Vent Gas Controls	§ 115.127(a)(2)(B) [G]§ 115.122(a)(4) § 115.127(a)(2)	A vent gas stream specified in §115.121(a)(1) of this title with a concentration of VOC less than 612 parts per million by volume (ppmv) is exempt from §115.121(a)(1) of this title.	[G]§ 115.125 § 115.126(2)	§ 115.126 § 115.126(2) § 115.126(4)	None
GRP-MEG	EU	R7310-ENGINE	Exempt	30 TAC Chapter 117, Subchapter B	[G]§ 117.303(a)(11) [G]§ 117.310(f)	Units exempted from the provisions of this division except as specified in §§117.310(f), 117.340(j), 117.345(f)(6) and (10), 117.350(c)(1) and 117.354(a)(5) include new, modified, reconstructed, or relocated stationary diesel engine placed into service on or after October 1, 2001, that operates less than 100 hours per year, based on a rolling 12-month average, in other than emergency situations; and meets the requirements for non-road engines as specified. §117.303(a)(11)(A)-(B)	None	§ 117.340(j) § 117.345(f) [G]§ 117.345(f)(10) [G]§ 117.345(f)(6)	None
GRP-MEG	EU	60III-PTFMEG	CO	40 CFR Part 60, Subpart IIII	§ 60.4205(b) § 1042.101 § 60.4202(f)(1) § 60.4206	Owners and operators of emergency stationary CI ICE, that are not fire pump engines, with a	None	None	[G]§ 60.4214(d)

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
					§ 60.4207(b) [G]§ 60.4211(a) § 60.4211(c) [G]§ 60.4211(f) § 60.4218	displacement of greater than or equal to 10 liters per cylinder and less than 30 liters per cylinder and is a 2007 model year and later must comply with a CO emission limit of 5.0 g/KW-hr, as stated in 40 CFR 60.4202(e)-(f), 40 CFR 1042.101, and 40 CFR 1042-Appendix I.			
GRP-MEG	EU	60III-PTFMEG	HC and NO _x	40 CFR Part 60, Subpart IIII	§ 60.4205(b) § 1042.101 § 60.4202(f)(1) § 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 less than 600 KW and a displacement of greater than or equal to 10 liters per cylinder and less than 15 liters per cylinder and is a 2013 model year and later must comply with an HC+NO _x emission limit of 6.2 g/KW-hr, as stated in 40 CFR 60.4202(f)(1) and 40 CFR 1042.101.	None	None	[G]§ 60.4214(d)
GRP-MEG	EU	60III-PTFMEG	HC and NO _x	40 CFR Part 60, Subpart IIII	§ 60.4205(b) § 1042.101 § 60.4202(f)(1) § 60.4204(f) § 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 less than 600 KW and a displacement of greater than or equal to 10 liters per cylinder and less than 15 liters per cylinder and is a 2013 model year and later must comply with an HC+NO _x emission limit	None	None	[G]§ 60.4214(d) § 60.4214(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)
						of 6.2 g/KW-hr, as stated in 40 CFR 60.4202(f)(1) and 40 CFR 1042.101.			
GRP-MEG	EU	60IIII-PTFMEG	PM	40 CFR Part 60, Subpart IIII	§ 60.4205(b) § 1042.101 § 60.4202(f)(1) § 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 less than 600 KW and a displacement of greater than or equal to 10 liters per cylinder and less than 15 liters per cylinder and is a 2013 model year and later must comply with a PM emission limit of 0.14 g/KW-hr, as stated in 40 CFR 60.4202(f)(1) and 40 CFR 1042.101.	None	None	[G]§ 60.4214(d)
GRP-MEG	EU	63ZZZZ-ENGINE	112(B) HAPS	40 CFR Part 63, Subpart ZZZZ	§ 63.6590(c)	Stationary RICE subject to Regulations under 40 CFR Part 60. An affected source that meets any of the criteria in paragraphs (c)(1) through (7) of this section must meet the requirements of this part by meeting the requirements of 40 CFR part 60 subpart IIII, for compression ignition engines or 40 CFR part 60 subpart JJJJ, for spark ignition engines as applicable. No further requirements apply for such engines under this part.	None	None	None
GRP-OILLD	EU	R5211-OILTK	VOC	30 TAC Chapter 115, Loading and Unloading of VOC	§ 115.217(a)(2)(A) [G]§ 115.212(a)(7) § 115.214(a)(1)(B)	Any plant, excluding gasoline bulk plants, which loads less than 20,000 gpd	§ 115.214(a)(1)(A) § 115.214(a)(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(a)(1)(D) § 115.214(a)(1)(D)(i)	of VOC with a true vapor pressure of 0.5 psia or greater is exempt from the requirements of this division, except for the specified requirements.	§ 115.215 § 115.215(4)	§ 115.216(3)(D)	
GRP-PTFFLR	EP	R5113-CVENT	VOC	30 TAC Chapter 115, Vent Gas Controls	§ 115.123(a)(1) § 115.910	Alternate methods of demonstrating and documenting continuous compliance with the applicable control requirements or exemption criteria in this division may be approved by the Executive Director in accordance with §115.910 of this title if emission reduction are demonstrated to be substantially equivalent.	[G]§ 115.125 § 115.126(2) ** See CAM Summary ** See Alternative Requirement	§ 115.126 § 115.126(2)	None
PTFEAC-1	EU	R7310-ENGINE	Exempt	30 TAC Chapter 117, Subchapter B	[G]§ 117.303(a)(11) [G]§ 117.310(f)	Units exempted from the provisions of this division except as specified in §§117.310(f), 117.340(j), 117.345(f)(6) and (10), 117.350(c)(1) and 117.354(a)(5) include new, modified, reconstructed, or relocated stationary diesel engine placed into service on or after October 1, 2001, that operates less than 100 hours per year, based on a rolling 12-month average, in other than emergency situations; and meets the requirements for non-road engines as specified.	None	§ 117.340(j) § 117.345(f) [G]§ 117.345(f)(10) [G]§ 117.345(f)(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)
						§117.303(a)(11)(A)-(B)			
PTFEAC-1	EU	60III-PTFEAC	CO	40 CFR Part 60, Subpart IIII	§ 60.4205(b) § 1042.101 § 60.4202(f)(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 displacement of greater than or equal to 10 liters per cylinder and less than 30 liters per cylinder and is a 2007 model year and later must comply with a CO emission limit of 5.0 g/KW-hr, as stated in 40 CFR 60.4202(e)-(f), 40 CFR 1042.101, and 40 CFR 1042-Appendix I.	None	None	[G]§ 60.4214(d)
PTFEAC-1	EU	60III-PTFEAC	HC and NO _x	40 CFR Part 60, Subpart IIII	§ 60.4205(b) § 1042.101 § 60.4202(f)(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 less than 600 KW and a displacement of greater than or equal to 15 liters per cylinder and less than 20 liters per cylinder and is a 2014 model year and later must comply with an HC+NO _x emission limit of 6.2 g/KW-hr, as stated in 40 CFR 60.4202(f)(2) and 40 CFR 1042.101.	None	None	[G]§ 60.4214(d)
PTFEAC-1	EU	60III-PTFEAC	HC and NO _x	40 CFR Part 60, Subpart IIII	§ 60.4205(b) § 1042.101 § 60.4202(f)(2) § 60.4204(f) § 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 less than 600 KW and a displacement of greater than or equal to 15	None	None	[G]§ 60.4214(d) § 60.4214(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)
					§ 60.4211(c) [G]§ 60.4211(f) § 60.4218	liters per cylinder and less than 20 liters per cylinder and is a 2014 model year and later must comply with an HC+NOx emission limit of 6.2 g/KW-hr, as stated in 40 CFR 60.4202(f)(2) and 40 CFR 1042.101.			
PTFEAC-1	EU	60III-PTFEAC	PM	40 CFR Part 60, Subpart IIII	§ 60.4205(b) § 1042.101 § 60.4202(f)(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 less than 600 KW and a displacement of greater than or equal to 15 liters per cylinder and less than 20 liters per cylinder and is a 2014 model year and later must comply with a PM emission limit of 0.14 g/KW-hr, as stated in 40 CFR 60.4202(f)(2) and 40 CFR 1042.101.	None	None	[G]§ 60.4214(d)
PTFEAC-1	EU	63ZZZZ-ENGINE	112(B) HAPS	40 CFR Part 63, Subpart ZZZZ	§ 63.6590(c)	Stationary RICE subject to Regulations under 40 CFR Part 60. An affected source that meets any of the criteria in paragraphs (c)(1) through (7) of this section must meet the requirements of this part by meeting the requirements of 40 CFR part 60 subpart IIII, for compression ignition engines or 40 CFR part 60 subpart JJJJ, for spark ignition engines as applicable. No further	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)
						requirements apply for such engines under this part.			
PTFEAC-2	EU	R7310-ENGINE	Exempt	30 TAC Chapter 117, Subchapter B	[G]§ 117.303(a)(11) [G]§ 117.310(f)	Units exempted from the provisions of this division except as specified in §§117.310(f), 117.340(j), 117.345(f)(6) and (10), 117.350(c)(1) and 117.354(a)(5) include new, modified, reconstructed, or relocated stationary diesel engine placed into service on or after October 1, 2001, that operates less than 100 hours per year, based on a rolling 12-month average, in other than emergency situations; and meets the requirements for non-road engines as specified. §117.303(a)(11)(A)-(B)	None	§ 117.340(j) § 117.345(f) [G]§ 117.345(f)(10) [G]§ 117.345(f)(6)	None
PTFEAC-2	EU	60III-PTFEAC	CO	40 CFR Part 60, Subpart IIII	§ 60.4205(b) § 1042.101 § 60.4202(f)(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 displacement of greater than or equal to 10 liters per cylinder and less than 30 liters per cylinder and is a 2007 model year and later must comply with a CO emission limit of 5.0 g/KW-hr, as stated in 40 CFR 60.4202(e)-(f), 40 CFR 1042.101, and 40 CFR 1042-Appendix I.	None	None	[G]§ 60.4214(d)
PTFEAC-2	EU	60III-PTFEAC	HC and NO _x	40 CFR Part 60, Subpart IIII	§ 60.4205(b) § 1042.101	Owners and operators of emergency stationary CI	None	None	[G]§ 60.4214(d)

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
					§ 60.4202(f)(2) § 60.4206 § 60.4207(b) [G]§ 60.4211(a) § 60.4211(c) [G]§ 60.4211(f) § 60.4218	ICE, that are not fire pump engines, with a maximum engine power less than 600 KW and a displacement of greater than or equal to 15 liters per cylinder and less than 20 liters per cylinder and is a 2014 model year and later must comply with an HC+NOx emission limit of 6.2 g/KW-hr, as stated in 40 CFR 60.4202(f)(2) and 40 CFR 1042.101.			
PTFEAC-2	EU	60III-PTFEAC	HC and NO _x	40 CFR Part 60, Subpart III	§ 60.4205(b) § 1042.101 § 60.4202(f)(2) § 60.4204(f) § 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 less than 600 KW and a displacement of greater than or equal to 15 liters per cylinder and less than 20 liters per cylinder and is a 2014 model year and later must comply with an HC+NOx emission limit of 6.2 g/KW-hr, as stated in 40 CFR 60.4202(f)(2) and 40 CFR 1042.101.	None	None	[G]§ 60.4214(d) § 60.4214(e)
PTFEAC-2	EU	60III-PTFEAC	PM	40 CFR Part 60, Subpart III	§ 60.4205(b) § 1042.101 § 60.4202(f)(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 less than 600 KW and a displacement of greater than or equal to 15 liters per cylinder and less than 20 liters per cylinder and is a 2014 model year	None	None	[G]§ 60.4214(d)

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
						and later must comply with a PM emission limit of 0.14 g/KW-hr, as stated in 40 CFR 60.4202(f)(2) and 40 CFR 1042.101.			
PTFEAC-2	EU	63ZZZZ-ENGINE	112(B) HAPS	40 CFR Part 63, Subpart ZZZZ	§ 63.6590(c)	Stationary RICE subject to Regulations under 40 CFR Part 60. An affected source that meets any of the criteria in paragraphs (c)(1) through (7) of this section must meet the requirements of this part by meeting the requirements of 40 CFR part 60 subpart IIII, for compression ignition engines or 40 CFR part 60 subpart JJJJ, for spark ignition engines as applicable. No further requirements apply for such engines under this part.	None	None	None
PTFEG-6	EU	R7310-ENGINE	Exempt	30 TAC Chapter 117, Subchapter B	[G]§ 117.303(a)(11) [G]§ 117.310(f)	Units exempted from the provisions of this division except as specified in §§117.310(f), 117.340(j), 117.345(f)(6) and (10), 117.350(c)(1) and 117.354(a)(5) include new, modified, reconstructed, or relocated stationary diesel engine placed into service on or after October 1, 2001, that operates less than 100 hours per year, based on a rolling 12-month average, in other than emergency situations; and meets the	None	§ 117.340(j) § 117.345(f) [G]§ 117.345(f)(10) [G]§ 117.345(f)(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)
						requirements for non-road engines as specified. §117.303(a)(11)(A)-(B)			
PTFEG-6	EU	60III-PTFMEG	CO	40 CFR Part 60, Subpart IIII	§ 60.4205(b) § 1042.101 § 60.4202(f)(1) § 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 displacement of greater than or equal to 10 liters per cylinder and less than 30 liters per cylinder and is a 2007 model year and later must comply with a CO emission limit of 5.0 g/KW-hr, as stated in 40 CFR 60.4202(e)-(f), 40 CFR 1042.101, and 40 CFR 1042-Appendix I.	None	None	[G]§ 60.4214(d)
PTFEG-6	EU	60III-PTFMEG	HC and NO _x	40 CFR Part 60, Subpart IIII	§ 60.4205(b) § 1042.101 § 60.4202(f)(1) § 60.4204(f) § 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 less than 600 KW and a displacement of greater than or equal to 10 liters per cylinder and less than 15 liters per cylinder and is a 2013 model year and later must comply with an HC+NO _x emission limit of 6.2 g/KW-hr, as stated in 40 CFR 60.4202(f)(1) and 40 CFR 1042.101.	None	None	[G]§ 60.4214(d) § 60.4214(e)
PTFEG-6	EU	60III-PTFMEG	HC and NO _x	40 CFR Part 60, Subpart IIII	§ 60.4205(b) § 1042.101 § 60.4202(f)(1) § 60.4206 § 60.4207(b)	Owners and operators of emergency stationary CI ICE, that are not fire pump engines, with a maximum engine power less than 600	None	None	[G]§ 60.4214(d)

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
					[G]§ 60.4211(a) § 60.4211(c) [G]§ 60.4211(f) § 60.4218	KW and a displacement of greater than or equal to 10 liters per cylinder and less than 15 liters per cylinder and is a 2013 model year and later must comply with an HC+NOx emission limit of 6.2 g/KW-hr, as stated in 40 CFR 60.4202(f)(1) and 40 CFR 1042.101.			
PTFEG-6	EU	60III-PTFMEG	PM	40 CFR Part 60, Subpart IIII	§ 60.4205(b) § 1042.101 § 60.4202(f)(1) § 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 less than 600 KW and a displacement of greater than or equal to 10 liters per cylinder and less than 15 liters per cylinder and is a 2013 model year and later must comply with a PM emission limit of 0.14 g/KW-hr, as stated in 40 CFR 60.4202(f)(1) and 40 CFR 1042.101.	None	None	[G]§ 60.4214(d)
PTFEG-6	EU	63ZZZZ-ENGINE	112(B) HAPS	40 CFR Part 63, Subpart ZZZZ	§ 63.6590(c)	Stationary RICE subject to Regulations under 40 CFR Part 60. An affected source that meets any of the criteria in paragraphs (c)(1) through (7) of this section must meet the requirements of this part by meeting the requirements of 40 CFR part 60 subpart IIII, for compression ignition engines or 40 CFR part 60 subpart JJJJ, for spark	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)
						ignition engines as applicable. No further requirements apply for such engines under this part.			
PTFFLARE	CD	R1111-FLARE	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. Non-excessive upset events are subject to the provisions under §101.222(b).	§ 111.111(a)(4)(A)(i) § 111.111(a)(4)(A)(ii)	§ 111.111(a)(4)(A)(ii)	None
PTFFLARE	EP	115B-PTFFLR	VOC	30 TAC Chapter 115, Vent Gas Controls	§ 115.123(a)(1) § 115.910	Alternate methods of demonstrating and documenting continuous compliance with the applicable control requirements or exemption criteria in this division may be approved by the Executive Director in accordance with §115.910 of this title if emission reduction are demonstrated to be substantially equivalent.	[G]§ 115.125 § 115.126(2) ** See CAM Summary ** See Alternative Requirement	§ 115.126 § 115.126(2)	None
PTFOWT	EU	R5112-OILWTRT K1	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.112(e)(1)	No person shall place, store, or hold VOC in any storage tank unless the storage tank is capable of maintaining working pressure sufficient at all times to prevent any vapor or gas loss to the atmosphere or is in compliance with the control requirements specified in Table 1 of this paragraph for	[G]§ 115.117 ** See Periodic Monitoring Summary	§ 115.118(a)(5) § 115.118(a)(7)	None

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
						VOC other than crude oil and condensate or Table 2 of subsection (a)(1) of this paragraph for crude oil and condensate.			
PTFOWT	EU	R5112-OILWTRT K2	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.111(a)(1)	Except as provided in § 115.118, a storage tank storing VOC with a true vapor pressure less than 1.5 psia is exempt from the requirements of this division.	[G]§ 115.117	§ 115.118(a)(1) § 115.118(a)(5) § 115.118(a)(7)	None
PTFOWT-T4	EU	R5112-OILWTRT K1	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.112(e)(1)	No person shall place, store, or hold VOC in any storage tank unless the storage tank is capable of maintaining working pressure sufficient at all times to prevent any vapor or gas loss to the atmosphere or is in compliance with the control requirements specified in Table 1 of this paragraph for VOC other than crude oil and condensate or Table 2 of subsection (a)(1) of this paragraph for crude oil and condensate.	[G]§ 115.117 ** See Periodic Monitoring Summary	§ 115.118(a)(5) § 115.118(a)(7)	None
PTFOWT-T4	EU	R5112-OILWTRT K2	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.111(a)(1)	Except as provided in § 115.118, a storage tank storing VOC with a true vapor pressure less than 1.5 psia is exempt from the requirements of this division.	[G]§ 115.117	§ 115.118(a)(1) § 115.118(a)(5) § 115.118(a)(7)	None
PTFSOT	EU	R5112-	VOC	30 TAC Chapter	§ 115.112(e)(1)	No person shall place,	[G]§ 115.117	§ 115.118(a)(5)	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)
		OILCNDT K1		115, Storage of VOCs		store, or hold VOC in any storage tank unless the storage tank is capable of maintaining working pressure sufficient at all times to prevent any vapor or gas loss to the atmosphere or is in compliance with the control requirements specified in Table 1 of this paragraph for VOC other than crude oil and condensate or Table 2 of subsection (a)(1) of this paragraph for crude oil and condensate.	** See Periodic Monitoring Summary	§ 115.118(a)(7)	
PTFSOT	EU	R5112-OILCNDT K2	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.111(a)(1)	Except as provided in § 115.118, a storage tank storing VOC with a true vapor pressure less than 1.5 psia is exempt from the requirements of this division.	[G]§ 115.117	§ 115.118(a)(1) § 115.118(a)(5) § 115.118(a)(7)	None
PTFSOT-T4	EU	R5112-OILCNDT K1	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.112(e)(1)	No person shall place, store, or hold VOC in any storage tank unless the storage tank is capable of maintaining working pressure sufficient at all times to prevent any vapor or gas loss to the atmosphere or is in compliance with the control requirements specified in Table 1 of this paragraph for VOC other than crude oil and condensate or Table 2 of subsection (a)(1) of this	[G]§ 115.117 ** See Periodic Monitoring Summary	§ 115.118(a)(5) § 115.118(a)(7)	None

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
						paragraph for crude oil and condensate.			
PTFSOT-T4	EU	R5112-OILCNDT K2	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.111(a)(1)	Except as provided in § 115.118, a storage tank storing VOC with a true vapor pressure less than 1.5 psia is exempt from the requirements of this division.	[G]§ 115.117	§ 115.118(a)(1) § 115.118(a)(5) § 115.118(a)(7)	None

Additional Monitoring Requirements

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CAM Summary

Unit/Group/Process Information	
ID No.: GRP-AU1234	
Control Device ID No.: TO1	Control Device Type: Thermal incinerator (direct flame incinerator/regenerative thermal oxidizer)
Control Device ID No.: TO2	Control Device Type: Thermal incinerator (direct flame incinerator/regenerative thermal oxidizer)
Control Device ID No.: TO3	Control Device Type: Thermal incinerator (direct flame incinerator/regenerative thermal oxidizer)
Control Device ID No.: TO4	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.: R5122-AU
Pollutant: VOC	Main Standard: § 115.122(a)(1)
Monitoring Information	
Indicator: Combustion Temperature / Exhaust Gas Temperature	
Minimum Frequency: once per day	
Averaging Period: N/A	
Deviation Limit: Combustion temperature less than 1700 degrees Fahrenheit shall be considered and reported as a deviation.	
<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.: GRP-PTFFLR	
Control Device ID No.: PTFFLARE	Control Device Type: Flare
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 115, Vent Gas Controls	SOP Index No.: R5113-CVENT
Pollutant: VOC	Main Standard: § 115.123(a)(1)
Monitoring Information	
Indicator: Pilot Flame	
Minimum Frequency: Continuous	
Averaging Period: N/A	
Deviation Limit: As required under AMOC-71, pilot flames must be continuously monitored to detect the presence of a flame. When operating with dual, redundant pilot flames, loss of both the pilot flames shall be considered and reported as a deviation.	
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.	

CAM Summary

Unit/Group/Process Information	
ID No.: PTFFLARE	
Control Device ID No.: PTFFLARE	Control Device Type: Flare
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 115, Vent Gas Controls	SOP Index No.: 115B-PTFFLR
Pollutant: VOC	Main Standard: § 115.123(a)(1)
Monitoring Information	
Indicator: Pilot Flame	
Minimum Frequency: Continuous	
Averaging Period: N/A	
Deviation Limit: As required under AMOC-71, pilot flames must be continuously monitored to detect the presence of a flame. When operating with dual, redundant pilot flames, loss of both pilot flames shall be considered and reported as a deviation.	
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.	

Periodic Monitoring Summary

Unit/Group/Process Information	
ID No.: GRP-HTR	
Control Device ID No.: N/A	Control Device Type: N/A
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 117, Subchapter B	SOP Index No.: R7201-HTR
Pollutant: CO	Main Standard: § 117.310(c)(1)
Monitoring Information	
Indicator: CO	
Minimum Frequency: Annually	
Averaging Period: 1-hour average	
Deviation Limit: CO measurement in excess of 400 ppmvd corrected to 3 percent O ₂ , on a one-hour average shall be considered and reported as a deviation.	
<p>Periodic Monitoring Text: Perform source testing for carbon monoxide (CO) emissions from the exhaust stack during operation of the heaters on an annual basis. The source testing will be performed by a third-party testing firm using the procedures specified in 30 CFR 60, Appendix A, Method 10, "Determination of Carbon Monoxide Emissions from Stationary Sources". Method 10 is a procedure for measuring CO in stationary source emissions using a continuous instrumental analyzer. During the source test, a sample is extracted from the heater exhaust stack and routed to an analyzer that measures the concentration of CO. For this annual testing, three 1-hour runs will be performed and average of the three will be used to compare to the Deviation Limit listed above.</p>	

Periodic Monitoring Summary

Unit/Group/Process Information	
ID No.: GRP-HTR4	
Control Device ID No.: N/A	Control Device Type: N/A
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 117, Subchapter B	SOP Index No.: R7201-HTR4
Pollutant: CO	Main Standard: § 117.310(c)(1)
Monitoring Information	
Indicator: CO	
Minimum Frequency: Annually	
Averaging Period: 1-hour average	
Deviation Limit: CO measurement in excess of 400 ppmvd corrected to 3 percent O ₂ , on a one-hour average shall be considered and reported as a deviation.	
<p>Periodic Monitoring Text: Perform source testing for carbon monoxide (CO) emissions from the exhaust stack during operation of the heaters on an annual basis. The source testing will be performed by a third-party testing firm using the procedures specified in 30 CFR 60, Appendix A, Method 10, "Determination of Carbon Monoxide Emissions from Stationary Sources". Method 10 is a procedure for measuring CO in stationary source emissions using a continuous instrumental analyzer. During the source test, a sample is extracted from the heater exhaust stack and routed to an analyzer that measures the concentration of CO. For this annual testing, three 1-hour runs will be performed and average of the three will be used to compare to the Deviation Limit listed above.</p>	

Periodic Monitoring Summary

Unit/Group/Process Information	
ID No.: GRP-HTR4	
Control Device ID No.: N/A	Control Device Type: N/A
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 117, Subchapter B	SOP Index No.: R7201-HTR4
Pollutant: NH ₃	Main Standard: § 117.310(c)(2)
Monitoring Information	
Indicator: Ammonia	
Minimum Frequency: 4 times per hour	
Averaging Period: 1-hour average	
Deviation Limit: NH ₃ measurement in excess of 10 ppmvd corrected to 3 percent O ₂ , on a one-hour average shall be considered and reported as a deviation.	
<p>Periodic Monitoring Text: Install and operate a dual stream system of NO_x CEMS at the exit of the SCR to be used to control NO_x emissions from the heaters. One of the exhaust streams would be routed, in an unconverted state, to one NO_x CEMS and the other exhaust stream would be routed through a NH₃ converter to convert NH₃ to NO_x and then to a second NO_x CEMS. The NH₃ slip concentration shall be calculated from the delta between the two NO_x CEMS readings (converted and unconverted) to compare to the Deviation Limit listed above.</p>	

Periodic Monitoring Summary

Unit/Group/Process Information	
ID No.: PTFOWT	
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-OILWTRTK1
Pollutant: VOC	Main Standard: § 115.112(e)(1)
Monitoring Information	
Indicator: Record of Tank Construction Specifications	
Minimum Frequency: N/A	
Averaging Period: N/A	
Deviation Limit: Failure to keep a record of tank construction specifications that show fill pipe details when tank is loaded from top or from the side shall be considered and reported as a deviation.	
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.: PTFOWT	
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-OILWTRTK1
Pollutant: VOC	Main Standard: § 115.112(e)(1)
Monitoring Information	
Indicator: Structural Integrity of the Pipe	
Minimum Frequency: Emptied and degassed	
Averaging Period: N/A	
Deviation Limit: It shall be considered and reported as a deviation if repairs to maintain the structural integrity of the fill pipe are not completed prior to refilling the storage vessel.	
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.	

Periodic Monitoring Summary

Unit/Group/Process Information	
ID No.: PTFOWT-T4	
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-OILWTRTK1
Pollutant: VOC	Main Standard: § 115.112(e)(1)
Monitoring Information	
Indicator: Record of Tank Construction Specifications	
Minimum Frequency: N/A	
Averaging Period: N/A	
Deviation Limit: Failure to keep a record of tank construction specifications that show fill pipe details when tank is loaded from top or from the side shall be considered and reported as a deviation.	
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.: PTFOWT-T4	
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-OILWTRTK1
Pollutant: VOC	Main Standard: § 115.112(e)(1)
Monitoring Information	
Indicator: Structural Integrity of the Pipe	
Minimum Frequency: Emptied and degassed	
Averaging Period: N/A	
Deviation Limit: It shall be considered and reported as a deviation if repairs to maintain the structural integrity of the fill pipe are not completed prior to refilling the storage vessel.	
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.	

Periodic Monitoring Summary

Unit/Group/Process Information	
ID No.: PTFSOT	
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-OILCNDTK1
Pollutant: VOC	Main Standard: § 115.112(e)(1)
Monitoring Information	
Indicator: Record of Tank Construction Specifications	
Minimum Frequency: N/A	
Averaging Period: N/A	
Deviation Limit: Failure to keep a record of tank construction specifications that show fill pipe details when tank is loaded from top or from the side shall be considered and reported as a deviation.	
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.: PTFSOT	
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-OILCNDTK1
Pollutant: VOC	Main Standard: § 115.112(e)(1)
Monitoring Information	
Indicator: Structural Integrity of the Pipe	
Minimum Frequency: Emptied and degassed	
Averaging Period: N/A	
Deviation Limit: It shall be considered and reported as a deviation if repairs to maintain the structural integrity of the fill pipe are not completed prior to refilling the storage vessel.	
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.	

Periodic Monitoring Summary

Unit/Group/Process Information	
ID No.: PTFSOT-T4	
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-OILCNDTK1
Pollutant: VOC	Main Standard: § 115.112(e)(1)
Monitoring Information	
Indicator: Record of Tank Construction Specifications	
Minimum Frequency: N/A	
Averaging Period: N/A	
Deviation Limit: Failure to keep a record of tank construction specifications that show fill pipe details when tank is loaded from top or from the side shall be considered and reported as a deviation.	
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.: PTFSOT-T4	
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-OILCNDTK1
Pollutant: VOC	Main Standard: § 115.112(e)(1)
Monitoring Information	
Indicator: Structural Integrity of the Pipe	
Minimum Frequency: Emptied and degassed	
Averaging Period: N/A	
Deviation Limit: It shall be considered and reported as a deviation if repairs to maintain the structural integrity of the fill pipe are not completed prior to refilling the storage vessel.	
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.	

Permit Shield

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Permit Shield

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

Unit / Group / Process ID No.	Group / Inclusive Units	Regulation	Basis of Determination
67T-90	N/A	40 CFR Part 60, Subpart Kb	The storage tank has a capacity greater than 151 cubic meters (39,890 gallons) but the maximum true vapor pressure of the stored liquids is less than 3.5 kPa (0.51 psia).
FUG-TREAT	N/A	30 TAC Chapter 115, HRVOC Fugitive Emissions	The processes at the site do not include HRVOCs, as defined by §115.10(21)(B), as raw materials, intermediates, final products, nor are they included in any waste streams.
FUG-TREAT	N/A	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	Site does not meet the definition of a “natural gas processing operation” as defined in §115.10 of this title.
FUG-TREAT	N/A	40 CFR Part 60, Subpart KKK	The construction of the fugitive components commenced after August 23, 2011.
FUG-TRN4	N/A	30 TAC Chapter 115, HRVOC Fugitive Emissions	The processes at the site do not include HRVOCs, as defined by §115.10(21)(B), as raw materials, intermediates, final products, nor are they included in any waste streams.
FUG-TRN4	N/A	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	Site does not meet the definition of a “natural gas processing operation” as defined in §115.10 of this title.
FUG-TRN4	N/A	40 CFR Part 60, Subpart KKK	The construction of the emission unit commenced after August 23, 2011.
GRP-AU1234	AU1, AU2, AU3, AU4	30 TAC Chapter 112, Sulfur Compounds	The amine unit is not an affected unit since it does not utilize sulfur recovery.
GRP-AU1234	AU1, AU2, AU3, AU4	40 CFR Part 60, Subpart LLL	The construction of the amine unit commenced after August 23, 2011.
GRP-CLSDDRUM	60V-89, 61V-89, 62V-89, 63V-89	30 TAC Chapter 115, Water Separation	The closed drain drum units are considered as

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 ID No.	Group / Inclusive Units	Regulation	Basis of Determination
			process units and not water separation units subject to Chapter 115B, Div 2 requirements.
GRP-CLSDDRUM	60V-89, 61V-89, 62V-89, 63V-89	40 CFR Part 63, Subpart VV	The closed drain drum units are considered process units and not water separation units. Therefore, they are not subject to another subpart of 40 CFR Parts 60, 61, or 63 that references the use of 40 CFR Part 63, Subpart VV.
GRP-HMTK	PTFHMT, PTFHMT-T4	40 CFR Part 60, Subpart Kb	The storage tanks have capacities greater than 151 cubic meters (39,890 gallons) but the maximum true vapor pressure of the stored liquids is less than 3.5 kPa (0.51 psia).
GRP-LGDTK	PTFEGT-4, PTFEGT-5	40 CFR Part 60, Subpart Kb	The storage tanks have capacities of less than 75 cubic meters (19,813 gallons).
GRP-SMDTK	PTFEACT-1, PTFEACT-2, PTFEGT-1, PTFEGT-2, PTFEGT-3, PTFEGT-6, PTFFWPT-1, PTFFWPT-2	30 TAC Chapter 115, Storage of VOCs	The storage tanks have capacities of less than 1,000 gallons.
GRP-SMDTK	PTFEACT-1, PTFEACT-2, PTFEGT-1, PTFEGT-2, PTFEGT-3, PTFEGT-6, PTFFWPT-1, PTFFWPT-2	40 CFR Part 60, Subpart Kb	The storage tanks have capacities of less than 75 cubic meters (19,813 gallons).
GRP-STRMCEP	65U-60, 65U-61, 65U-62, 65U-63, 65U-64, 65U-65, 65U-66, 65U-67, 65U-68, 65U-69	30 TAC Chapter 115, Water Separation	The water separators are designed solely to capture stormwater, spills, or exterior surface cleanup waters and are fully covered.
GRP-STRMCEP	65U-60, 65U-61, 65U-62, 65U-63, 65U-64, 65U-65, 65U-66, 65U-67, 65U-68, 65U-69	40 CFR Part 63, Subpart VV	The emissions from the water separators are not subject to another subpart of 40 CFR Parts 60, 61, or 63 that references the use of 40 CFR Part 63, Subpart VV.
PTFFLARE	N/A	40 CFR Part 60, Subpart A	The flare is not a control device used to comply

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 ID No.	Group / Inclusive Units	Regulation	Basis of Determination
			with applicable subparts of 40 CFR Parts 60 and 61.
PTFFLARE	N/A	40 CFR Part 63, Subpart A	The flare is not a control device used to comply with applicable subparts of 40 CFR Part 63.
PTFOWT	N/A	40 CFR Part 60, Subpart Kb	The storage tank has a capacity less than 75 cubic meters (19,813 gallons).
PTFOWT	N/A	40 CFR Part 60, Subpart OOOO	The storage tank does not use controls for VOC emissions and the tank has a potential to emit (PTE) less than 6 tpy of VOC emissions.
PTFOWT-T4	N/A	40 CFR Part 60, Subpart Kb	The storage tank has a capacity less than 75 cubic meters (19,813 gallons).
PTFOWT-T4	N/A	40 CFR Part 60, Subpart OOOOa	The storage tank does not use controls for VOC emissions and the tank has a potential to emit (PTE) less than 6 tpy of VOC emissions.
PTFSOT	N/A	40 CFR Part 60, Subpart Kb	The storage tank has a capacity less than 75 cubic meters (19,813 gallons).
PTFSOT	N/A	40 CFR Part 60, Subpart OOOO	The storage tank does not use controls for VOC emissions and the tank has a potential to emit (PTE) less than 6 tpy of VOC emissions.
PTFSOT-T4	N/A	40 CFR Part 60, Subpart Kb	The storage tank has a capacity less than 75 cubic meters (19,813 gallons).
PTFSOT-T4	N/A	40 CFR Part 60, Subpart OOOOa	The storage tank does not use controls for VOC emissions and the tank has a potential to emit (PTE) less than 6 tpy of VOC emissions.

New Source Review Authorization References

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New Source Review Authorization References by Emission Unit..... 71

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.

Nonattainment (NA) Permits	
NA Permit No.: N170M1	Issuance Date: 12/19/2025
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.: 104840	Issuance Date: 12/19/2025
Permits By Rule (30 TAC Chapter 106) for the Application Area	
Number: 106.122	Version No./Date: 09/04/2000
Number: 106.263	Version No./Date: 11/01/2001
Number: 106.265	Version No./Date: 09/04/2000
Number: 106.352	Version No./Date: 11/22/2012
Number: 106.355	Version No./Date: 11/01/2001
Number: 106.412	Version No./Date: 09/04/2000
Number: 106.452	Version No./Date: 09/04/2000
Number: 106.472	Version No./Date: 09/04/2000
Number: 106.532	Version No./Date: 09/04/2000

New Source Review Authorization References by Emissions Unit

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

Unit/Group/Process ID No.	Emission Unit Name/Description	New Source Review Authorization**
60K-11A	BOOSTER COMPRESSORS LUBE OIL VENT	104840, N170M1
60K-11ATK	LUBE OIL RUN DOWN TANK VENT	104840, N170M1
60K-11B	BOOSTER COMPRESSORS LUBE OIL VENT	104840, N170M1
60K-11BTK	LUBE OIL RUN DOWN TANK VENT	104840, N170M1
60K-11C	BOOSTER COMPRESSORS LUBE OIL VENT	104840, N170M1
60K-11CTK	LUBE OIL RUN DOWN TANK VENT	104840, N170M1
60K-40A	RESIDUE COMPRESSOR LUBE OIL VENT	104840, N170M1
60K-40ATK	LUBE OIL RUN DOWN TANK VENT	104840, N170M1
60K-40B	RESIDUE COMPRESSOR LUBE OIL VENT	104840, N170M1
60K-40BTK	LUBE OIL RUN DOWN TANK VENT	104840, N170M1
60K-40C	RESIDUE COMPRESSOR LUBE OIL VENT	104840, N170M1
60K-40CTK	LUBE OIL RUN DOWN TANK VENT	104840, N170M1
60V-89	CLOSED DRAIN DRUM	104840, N170M1
61K-30	REGEN GAS COMPRESSOR LUBE OIL VENT	104840, N170M1
61K-43A	DEBUTANIZER OVERHEAD COMPRESSOR LUBE OIL VENT	104840, N170M1
61K-43B	DEBUTANIZER OVERHEAD COMPRESSOR LUBE OIL VENT	104840, N170M1
61V-89	CLOSED DRAIN DRUM	104840, N170M1
62K-30	REGEN GAS COMPRESSOR LUBE OIL VENT	104840, N170M1
62K-43A	DEBUTANIZER OVERHEAD COMPRESSOR LUBE OIL VENT	104840, N170M1
62K-43B	DEBUTANIZER OVERHEAD COMPRESSOR LUBE OIL VENT	104840, N170M1
62V-89	CLOSED DRAIN DRUM	104840, N170M1

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**
63K-30	REGEN GAS COMPRESSOR LUBE OIL VENT	104840, N170M1
63K-43A	DEBUTANIZER OVERHEAD COMPRESSOR LUBE OIL VENT	104840, N170M1
63K-43B	DEBUTANIZER OVERHEAD COMPRESSOR LUBE OIL VENT	104840, N170M1
63V-89	CLOSED DRAIN DRUM	104840, N170M1
64K-30	REGEN GAS COMPRESSOR LUBE OIL VENT	104840, N170M1
64K-40	REGEN GAS COMPRESSOR LUBE OIL VENT	104840, N170M1
64K-43A	DEBUTANIZER OVERHEAD COMPRESSOR LUBE OIL VENT	104840, N170M1
64K-43B	DEBUTANIZER OVERHEAD COMPRESSOR LUBE OIL VENT	104840, N170M1
65B-81A	HEAT MEDIUM HEATER A	104840, N170M1
65B-81B	HEAT MEDIUM HEATER B	104840, N170M1
65B-81C	HEAT MEDIUM HEATER C	104840, N170M1
65B-81D	HEAT MEDIUM HEATER D	104840, N170M1
65B-81E	HEAT MEDIUM HEATER E	104840, N170M1
65U-60	OILY WATER STORMCEPTOR - UNIT 60	106.532/09/04/2000
65U-61	OILY WATER STORMCEPTOR - UNIT 61	106.532/09/04/2000
65U-62	OILY WATER STORMCEPTOR - UNIT 62	106.532/09/04/2000
65U-63	OILY WATER STORMCEPTOR - UNIT 63	106.532/09/04/2000
65U-64	OILY WATER STORMCEPTOR - UNIT 64	106.532/09/04/2000
65U-65	OILY WATER STORMCEPTOR - UNIT 65	106.532/09/04/2000
65U-66	OILY WATER STORMCEPTOR - UNIT 66	106.532/09/04/2000
65U-67	OILY WATER STORMCEPTOR - UNIT 67	106.532/09/04/2000

New Source Review Authorization References by Emissions Unit

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

Unit/Group/Process ID No.	Emission Unit Name/Description	New Source Review Authorization**
65U-68	OILY WATER STORMCEPTOR - UNIT 68	106.532/09/04/2000
65U-69	OILY WATER STORMCEPTOR - UNIT 69	106.532/09/04/2000
67T-90	AMINE TANK	104840, N170M1
67T-90	AMINE TANK UNLOADING	104840, N170M1
69B-81A	HEAT MEDIUM HEATER 69A	104840, N170M1
69B-81B	HEAT MEDIUM HEATER 69B	104840, N170M1
69B-81C	HEAT MEDIUM HEATER 69C	104840, N170M1
69K-11A	BOOSTER COMPRESSORS LUBE OIL VENT	104840, N170M1
69K-11A-Z1	BOOSTER COMPRESSOR LUBE OIL SKID	106.352/11/22/2012
69K-11A-Z1-V3	BOOSTER COMPRESSOR LUBE OIL RUNDOWN TANK	106.352/11/22/2012
69K-11ATK	LUBE OIL RUN DOWN TANK VENT	104840, N170M1
69K-40A	RESIDUE COMPRESSOR LUBE OIL VENT	104840, N170M1
69K-40A-Z1	RESIDUE GAS COMPRESSOR LUBE OIL SKID	106.352/11/22/2012
69K-40A-Z1-V3	RESIDUE GAS COMPRESSOR LUBE OIL RUNDOWN TANK	106.352/11/22/2012
69K-40ATK	LUBE OIL RUN DOWN TANK VENT	104840, N170M1
69T-90	AMINE STORAGE TANK TRAIN 4	106.472/09/04/2000
69T-90	AMINE STORAGE TANK TRAIN 4 UNLOADING	106.472/09/04/2000
AU1	AMINE UNIT 1	104840, N170M1
AU2	AMINE UNIT 2	104840, N170M1
AU3	AMINE UNIT 3	104840, N170M1
AU4	AMINE UNIT 4	104840, N170M1

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**
CT	COMBUSTION TURBINE	104840, N170M1
FUG-TREAT	FUGITIVE EMISSIONS - TRAINS 1, 2, 3	104840, N170M1
FUG-TRN4	FUGITIVE EMISSIONS - TRAIN 4	104840, N170M1
LUBVENT	LUBE OIL VENT	104840, N170M1
PTF4FLRPSV	PSV/COMPRESSOR & PUMP SEAL VENTS TO FLARE-TRAIN 4	104840, N170M1
PTFEAC-1	EMERGENCY AIR COMPRESSOR	104840, N170M1
PTFEAC-2	EMERGENCY AIR COMPRESSOR	104840, N170M1
PTFEACT-1	EMERGENCY AIR COMPRESSOR DIESEL TANK	104840, N170M1
PTFEACT-1	EMERGENCY AIR COMPRESSOR TANK UNLOADING	104840, N170M1
PTFEACT-2	EMERGENCY AIR COMPRESSOR DIESEL TANK	104840, N170M1
PTFEACT-2	EMERGENCY AIR COMPRESSOR TANK UNLOADING	104840, N170M1
PTFEG-1	EMERGENCY GENERATOR (DFEJ)	104840, N170M1
PTFEG-2	EMERGENCY GENERATOR (DFEJ)	104840, N170M1
PTFEG-3	EMERGENCY GENERATOR (DFEJ)	104840, N170M1
PTFEG-4	EMERGENCY GENERATOR (DQFAH)	104840, N170M1
PTFEG-5	EMERGENCY GENERATOR (DQFAH)	104840, N170M1
PTFEG-6	EMERGENCY GENERATOR (DFEJ)	104840, N170M1
PTFEGT-1	EMERGENCY GENERATOR (DFEJ) DIESEL TANK	104840, N170M1
PTFEGT-1	EMERGENCY GENERATOR (DFEJ) TANK UNLOADING	104840, N170M1
PTFEGT-2	EMERGENCY GENERATOR (DFEJ) DIESEL TANK	104840, N170M1
PTFEGT-2	EMERGENCY GENERATOR (DFEJ) TANK UNLOADING	104840, N170M1

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**
PTFEGT-3	EMERGENCY GENERATOR (DFEJ) DIESEL TANK	104840, N170M1
PTFEGT-3	EMERGENCY GENERATOR (DFEJ) TANK UNLOADING	104840, N170M1
PTFEGT-4	EMERGENCY GENERATOR (DQFAH) DIESEL TANK	104840, N170M1
PTFEGT-4	EMERGENCY GENERATOR (DQFAH) TANK UNLOADING	104840, N170M1
PTFEGT-5	EMERGENCY GENERATOR (DQFAH) DIESEL TANK	104840, N170M1
PTFEGT-5	EMERGENCY GENERATOR (DQFAH) TANK UNLOADING	104840, N170M1
PTFEGT-6	EMERGENCY GENERATOR (DFEJ) DIESEL TANK	104840, N170M1
PTFEGT-6	EMERGENCY GENERATOR (DFEJ) TANK UNLOADING	104840, N170M1
PTFFFLARE	PTF FLARE	104840, N170M1
PTFFFLAREMSS	MSS VENT TO FLARE	104840, N170M1
PTFFLRPSV	PSV/COMPRESSOR & PUMP SEAL VENTS FLARE-TRAIN 1,2,3	104840, N170M1
PTFFFWP	FIRE WATER PUMP	104840, N170M1
PTFFFWP2	FIRE WATER PUMP (TRAIN 4)	104840, N170M1
PTFFFWPT-1	FIRE WATER PUMP TANK 1	104840, N170M1
PTFFFWPT-1	FIRE WATER PUMP TANK UNLOADING	104840, N170M1
PTFFFWPT-2	FIRE WATER PUMP TANK 2	104840, N170M1
PTFFFWPT-2	FIRE WATER PUMP TANK 2 UNLOADING	104840, N170M1
PTFHMT	HEAT MEDIUM TANK - TRAINS 1, 2, 3	104840, N170M1
PTFHMT	HEAT MEDIUM TANK UNLOADING - TRAINS 1, 2, 3	104840, N170M1
PTFHMT-T4	HEAT MEDIUM TANK - TRAIN 4	104840, N170M1
PTFHMT-T4	HEAT MEDIUM TANK LOADING - TRAIN 4	104840, N170M1

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**
PTFOWT	OILY WATER TANK - TRAINS 1, 2, 3	104840, N170M1
PTFOWT	OILY WATER TANK LOADING - TRAINS 1, 2, 3	104840, N170M1
PTFOWT-T4	OILY WATER TANK - TRAIN 4	104840, N170M1
PTFOWT-T4	OILY WATER TANK LOADING - TRAIN 4	104840, N170M1
PTFSOT	SLOP OIL TANK - TRAINS 1, 2, 3	104840, N170M1
PTFSOT	SLOP OIL TANK LOADING - TRAINS 1, 2, 3	104840, N170M1
PTFSOT-T4	SLOP OIL TANK - TRAIN 4	104840, N170M1
PTFSOT-T4	SLOP OIL TANK LOADING - TRAIN 4	104840, N170M1

**This column may include Permit by Rule (PBR) numbers and version dates, PBR Registration numbers in brackets, Standard Permit Registration numbers, Minor NSR permit numbers, and Major NSR permit numbers.

Alternative Requirement

Alternative Requirement..... 78

Bryan W. Shaw, Ph.D., P.E., *Chairman*
Toby Baker, *Commissioner*
Jon Niermann, *Commissioner*
Richard A. Hyde, P.E., *Executive Director*



TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

March 26, 2018

RETURN RECEIPT REQUESTED #####

MR MARK W MALLET PE
VICE PRESIDENT OPERATIONS AND ENGINEERING
FREEPORT LNG DEVELOPMENT LP
333 CLAY ST STE 5050
HOUSTON TX 77002-4101

Re: Alternative Method of Control (AMOC) No.: 71
Freeport LNG Development, L.P.
Multi-Point Ground-level Flare (MPGF) Systems
Pretreatment Facility
Freeport, Brazoria County
Regulated Entity Numbers: RN106481500
Customer Reference Number: CN601720345
Affected Permits: 104840 and N170

Dear Mr. Mallett:

The Executive Director of the Texas Commission on Environmental Quality (TCEQ) has made a final decision to approve Freeport LNG Development, L.P.'s (Freeport LNG's) above-referenced Alternate Means of Control (AMOC) Plan for the construction and use of a multi-point ground flare (MPGF) system to control emissions from planned maintenance, startup, and shutdown events (MSS) as well emergency situations. This AMOC Plan will allow the natural gas Pretreatment Facility (PTF) to use the MPGF system with the specified provisions as an alternative to complying with 30 Texas Administrative Code (TAC) Chapter 115, Subchapter B; Division 2; Vent Gas Control, §115.122(a)(1).

During the required public comment period, no comments were received.

The TCEQ has been delegated authority to enforce the above cited standards and is authorized to approve this AMOC. You are reminded that approval of any AMOC shall not abrogate the Executive Director or Administrator's authority under the Act or in any way prohibit later canceling the AMOC.

Enclosed you will find the authorized AMOC Plan and Provisions.

You are reminded per §115.913(c) that all representations with regard to this AMOC application and Plan become conditions upon which the AMOC is approved and varying from these representations is not allowed if the change will cause a change in the method of control of emissions, the character of the emissions, result in an increase in the discharge of the various emissions, emission limits, control requirements, monitoring, testing, reporting, or recordkeeping requirements.

Please note you have an opportunity to appeal the Executive Director's determination on the AMOC Plan to the commission within 15 days from the date of receipt of this letter under § 115.914(7). Also, under § 115.914(8), the EPA has 45 days from the date of the TCEQ's final approval of the AMOC Plan to inform the Air Permits Division that it disapproves the AMOC Plan. Following § 115.914(9)-(11), the

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Page 2
Mr. Mark W. Mallett, P.E.

Re: Permit Number: 104840, N170, AMOC No. 71

AMOC plan will become effective with the latter of either EPA acceptance of, or the Commission's issuance of the AMOC plan. Once effective, the AMOC becomes part of the State Implementation Plan.

This AMOC approval supersedes certain requirements and representations in Permit Nos. 104840 and N170. To ensure effective and consistent enforceability, we request that Freeport LNG incorporate this AMOC into the permit through submittal of an alteration no later than 90 days after this approval.

This AMOC Plan and Provisions change applicable requirements for the site, including existing monitoring, reporting, recordkeeping, and testing requirements which has implications for the applicability of any Site Operating Permit (SOP) requirements. We request that Freeport LNG update the appropriate SOP application to incorporate this AMOC Plan and Provisions.

If you need further information or have any questions, please contact Ms. Anne Inman, P.E. at (512) 239-1276 or write to the Texas Commission on Environmental Quality, Office of Air, Air Permits Division, MC-163, P.O. Box 13087, Austin, Texas 78711-3087.

This action is taken under authority delegated by the Executive Director of the TCEQ.

Sincerely,



Michael Wilson, P.E., Director
Air Permits Division
Office of Air
Texas Commission on Environmental Quality

cc: Mr. Roberto Vara, P.E., Freeport LNG Development, L.P., RVara@FreeportLNG.com
Mr. Ruben Velasquez, P.E., Atkins North America, Ruben.Velasquez@atkinsglobal.com
Ms. Karen Carroll, Director, Environmental Health, Brazoria County Health Department
Air Program Manager, Region 12
Mr. Sam Short, Manager, Energy/Combustion Section, Air Permits Division, OA: MC-163
Air Permits Section Chief, New Source Review Section (6PD-R), U.S. Environmental Protection Agency, Region 6, Dallas
Ms. Brenda Shine, U.S. Environmental Protection Agency, Research Triangle Park
Shine.Brenda@epa.gov

Enclosure

Project Number: 271589

Appendix A

Acronym List 81

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
RO	Responsible Official
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 83

Major NSR Summary Table

Permit Numbers: 104840 and N170M1				Issuance Date: December 19, 2025			
Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates (4)		Monitoring and Testing Requirements	Recordkeeping Requirements	Reporting Requirements
			lbs/hour	TPY (5)	Special Condition/ Application Information	Special Condition/ Application Information	Special Condition/ Application Information
65B-81A	Heating Medium Heater A	NO _x	0.80	-	3, 11, 9, 18, 19, 20, 23, 24	3, 11, 9, 18, 19, 20, 23, 24, 36	3, 18, 19, 20
		CO	2.44	-			
		VOC	1.00	-			
		PM	0.92	-			
		PM ₁₀	0.92	-			
		PM _{2.5}	0.92	-			
		SO ₂	1.98	-			
		H ₂ SO ₄ (7)	0.15	-			
65B-81B	Heating Medium Heater B	NO _x	0.80	-	3, 11, 9, 18, 19, 20, 23, 24	3, 11, 9, 18, 19, 20, 23, 24, 36	3, 18, 19, 20
		CO	2.44	-			
		VOC	1.00	-			
		PM	0.92	-			
		PM ₁₀	0.92	-			
		PM _{2.5}	0.92	-			
		SO ₂	1.98	-			
		H ₂ SO ₄ (7)	0.15	-			
65B-81C	Heating Medium Heater C	NO _x	0.80	-	3, 11, 9, 18, 19, 20, 23, 24	3, 11, 9, 18, 19, 20, 23, 24, 36	3, 18, 19, 20
		CO	2.44	-			
		VOC	1.00	-			
		PM	0.92	-			
		PM ₁₀	0.92	-			
		PM _{2.5}	0.92	-			

Major NSR Summary Table

Permit Numbers: 104840 and N170M1					Issuance Date: December 19, 2025		
Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates (4)		Monitoring and Testing Requirements	Recordkeeping Requirements	Reporting Requirements
			lbs/hour	TPY (5)	Special Condition/ Application Information	Special Condition/ Application Information	Special Condition/ Application Information
		SO ₂	1.98	-			
		H ₂ SO ₄ (7)	0.15	-			
65B-81D	Heating Medium Heater D	NO _x	0.80	-	3, 11, 9, 18, 19, 20, 23, 24	3, 11, 9, 18, 19, 20, 23, 24, 36	3, 18, 19, 20
		CO	2.44	-			
		VOC	1.00	-			
		PM	0.92	-			
		PM ₁₀	0.92	-			
		PM _{2.5}	0.92	-			
		SO ₂	1.98	-			
		H ₂ SO ₄ (7)	0.15	-			
65B-81E	Heating Medium Heater E	NO _x	0.80	-	3, 11, 9, 18, 19, 20, 23, 24	3, 11, 9, 18, 19, 20, 23, 24, 36	3, 18, 19, 20
		CO	2.44	-			
		VOC	1.00	-			
		PM	0.92	-			
		PM ₁₀	0.92	-			
		PM _{2.5}	0.92	-			
		SO ₂	1.98	-			
		H ₂ SO ₄ (7)	0.15	-			
65B-81A through E	Heating Medium Heaters A through E Annual Emissions Cap	NO _x	-	4.58	3, 11, 9, 18, 19, 20, 23, 24	3, 11, 9, 18, 19, 20, 23, 24, 36	3, 18, 19, 20
		CO	-	13.94			
		VOC	-	5.70			
		PM	-	5.29			

Major NSR Summary Table

Permit Numbers: 104840 and N170M1					Issuance Date: December 19, 2025		
Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates (4)		Monitoring and Testing Requirements	Recordkeeping Requirements	Reporting Requirements
			lbs/hour	TPY (5)	Special Condition/ Application Information	Special Condition/ Application Information	Special Condition/ Application Information
		PM ₁₀	-	5.29			
		PM _{2.5}	-	5.29			
		SO ₂	-	11.33			
		H ₂ SO ₄ (7)	-	0.87			
69B-81A	Heating Medium Heater 69A	NO _x	0.32	-	3, 11, 9, 13, 18, 19, 20, 21, 23, 24	3, 11, 9, 13, 18, 19, 20, 21, 23, 24, 36	3, 18, 19, 20
		CO	0.49	-			
		VOC	0.25	-			
		PM	0.92	-			
		PM ₁₀	0.92	-			
		PM _{2.5}	0.92	-			
		SO ₂	1.98	-			
		H ₂ SO ₄ (7)	0.15	-			
		NH ₃	0.62	-			
69B-81B	Heating Medium Heater 69B	NO _x	0.32	-	3, 11, 9, 13, 18, 19, 20, 21, 23, 24	3, 11, 9, 13, 18, 19, 20, 21, 23, 24, 36	3, 18, 19, 20
		CO	0.49	-			
		VOC	0.25	-			
		PM	0.92	-			
		PM ₁₀	0.92	-			
		PM _{2.5}	0.92	-			
		SO ₂	1.98	-			
		H ₂ SO ₄ (7)	0.15	-			
		NH ₃	0.62	-			

Major NSR Summary Table

Permit Numbers: 104840 and N170M1					Issuance Date: December 19, 2025		
Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates (4)		Monitoring and Testing Requirements	Recordkeeping Requirements	Reporting Requirements
			lbs/hour	TPY (5)	Special Condition/ Application Information	Special Condition/ Application Information	Special Condition/ Application Information
69B-81C	Heating Medium Heater 69C	NO _x	0.32	-	3, 11, 9, 13, 18, 19, 20, 21, 23, 24	3, 11, 9, 13, 18, 19, 20, 21, 23, 24, 36	3, 18, 19, 20
		CO	0.49	-			
		VOC	0.25	-			
		PM	0.92	-			
		PM ₁₀	0.92	-			
		PM _{2.5}	0.92	-			
		SO ₂	1.98	-			
		H ₂ SO ₄ (7)	0.15	-			
		NH ₃	0.62	-			
69B-81A through 81C	Train 4 Heating Medium Heaters Annual Emissions Cap	NO _x	-	2.80	3, 11, 9, 13, 18, 19, 20, 21, 23, 24	3, 11, 9, 13, 18, 19, 20, 21, 23, 24, 36	3, 18, 19, 20
		CO	-	4.27			
		VOC	-	2.18			
		PM	-	8.09			
		PM ₁₀	-	8.09			
		PM _{2.5}	-	8.09			
		SO ₂	-	17.34			
		H ₂ SO ₄ (7)	-	1.33			
		NH ₃	-	5.43			
TO1	Amine Unit/ Thermal Oxidizer 61	NO _x	0.28	1.21	9, 18, 19, 25, 26, 27, 28, 29, 30, 31	9, 19, 25, 26, 27, 28, 29, 31, 36	18, 19
		CO	2.91	12.76			
		VOC	2.12	2.42			
		PM	1.29	5.65			

Major NSR Summary Table

Permit Numbers: 104840 and N170M1					Issuance Date: December 19, 2025		
Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates (4)		Monitoring and Testing Requirements	Recordkeeping Requirements	Reporting Requirements
			lbs/hour	TPY (5)	Special Condition/ Application Information	Special Condition/ Application Information	Special Condition/ Application Information
		PM ₁₀	1.29	5.65			
		PM _{2.5}	1.29	5.65			
		SO ₂	1.08	4.72			
		H ₂ SO ₄ (7)	0.08	0.36			
		H ₂ S	0.12	0.54			
TO2	Amine Unit/ Thermal Oxidizer 62	NO _x	0.28	1.21	9, 18, 19, 25, 26, 27, 28, 29, 30, 31	9, 19, 25, 26, 27, 28, 29, 31, 36	18, 19
		CO	2.91	12.76			
		VOC	2.12	2.42			
		PM	1.29	5.65			
		PM ₁₀	1.29	5.65			
		PM _{2.5}	1.29	5.65			
		SO ₂	1.08	4.72			
		H ₂ SO ₄ (7)	0.08	0.36			
		H ₂ S	0.12	0.54			
TO3	Amine Unit/ Thermal Oxidizer 63	NO _x	0.28	1.21	9, 18, 19, 25, 26, 27, 28, 29, 30, 31	9, 19, 25, 26, 27, 28, 29, 31, 36	18, 19
		CO	2.91	12.76			
		VOC	2.12	2.42			
		PM	1.29	5.65			
		PM ₁₀	1.29	5.65			
		PM _{2.5}	1.29	5.65			
		SO ₂	1.08	4.72			
		H ₂ SO ₄ (7)	0.08	0.36			

Major NSR Summary Table

Permit Numbers: 104840 and N170M1					Issuance Date: December 19, 2025		
Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates (4)		Monitoring and Testing Requirements	Recordkeeping Requirements	Reporting Requirements
			lbs/hour	TPY (5)	Special Condition/ Application Information	Special Condition/ Application Information	Special Condition/ Application Information
		H ₂ S	0.12	0.54			
TO4	Amine Unit/ Thermal Oxidizer 64	NO _x	0.28	1.21	9, 18, 19, 25, 26, 27, 28, 29, 30, 31	9, 19, 25, 26, 27, 28, 29, 31, 36	18, 19
		CO	2.91	12.76			
		VOC	2.12	2.42			
		PM	1.29	5.65			
		PM ₁₀	1.29	5.65			
		PM _{2.5}	1.29	5.65			
		SO ₂	1.08	4.72			
		H ₂ SO ₄ (7)	0.08	0.36			
		H ₂ S	0.12	0.54			
CT	Combustion Turbine Stack	NO _x	8.09	30.73	3, 9, 10, 13, 18, 19, 20, 21, 22	3, 9, 10, 13, 19, 20, 21, 22, 36	3, 18, 19, 20, 21
		NO _x (MSS)	87.00				
		CO	9.85	37.07			
		CO (MSS)	57.00				
		VOC	0.34	1.27			
		VOC (MSS)	1.27				
		PM	10.00	43.80			
		PM (MSS)	2.90				
		PM ₁₀	10.00	43.80			
		PM ₁₀ (MSS)	2.90				
		PM _{2.5}	10.00	43.80			
		PM _{2.5} (MSS)	2.90				

Major NSR Summary Table

Permit Numbers: 104840 and N170M1					Issuance Date: December 19, 2025		
Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates (4)		Monitoring and Testing Requirements	Recordkeeping Requirements	Reporting Requirements
			lbs/hour	TPY (5)	Special Condition/ Application Information	Special Condition/ Application Information	Special Condition/ Application Information
		SO ₂	4.08	11.98			
		H ₂ SO ₄ (7)	0.43	0.73			
		NH ₃	14.95	56.27			
LUBVENT	Lube Oil Vent	VOC	0.05	0.22			
		PM	0.05	0.22			
		PM ₁₀	0.05	0.22			
		PM _{2.5}	0.05	0.22			
PTFFLARE	PTF Flare (Before construction of flare gas recovery and Train 4)	NO _x	149.31	39.60	5, 6, 31, 33	5, 6, 31, 33, 36	5
		NO _x (MSS)	2010.41				
		CO	594.63	155.37			
		CO (MSS)	8006.66				
		VOC	39.15	1.36			
		VOC (MSS)	420.38				
		SO ₂	5.37	1.47			
		SO ₂ (MSS)	52.66				
		H ₂ S	0.01	<0.01			
		H ₂ S (MSS)	0.11				
PTFFLARE	PTF Flare (Before construction of Train 4 and after construction of flare gas recovery)	NO _x	0.27	4.99	5, 6, 31, 33	5, 6, 31, 33, 36	5
		NO _x (MSS)	1861.37				
		CO	1.06	19.88			
		CO (MSS)	7413.09				
		VOC	0.05	0.22			

Major NSR Summary Table

Permit Numbers: 104840 and N170M1					Issuance Date: December 19, 2025		
Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates (4)		Monitoring and Testing Requirements	Recordkeeping Requirements	Reporting Requirements
			lbs/hour	TPY (5)	Special Condition/ Application Information	Special Condition/ Application Information	Special Condition/ Application Information
		VOC (MSS)	381.28	0.23			
		SO ₂	0.01				
		SO ₂ (MSS)	47.30				
		H ₂ S	<0.01	<0.01			
		H ₂ S (MSS)	0.10				
PTFFLARE	PTF Flare (After construction of Train 4 and flare gas recovery)	NO _x	0.27	5.47	5, 6, 31, 33	5, 6, 31, 33, 36	5
		NO _x (MSS)	2037.28				
		CO	1.06	21.78			
		CO (MSS)	8113.70				
		VOC	0.05	0.49			
		VOC (MSS)	479.64				
		SO ₂	0.01	0.23			
		SO ₂ (MSS)	47.31				
		H ₂ S	<0.01	<0.01			
		H ₂ S (MSS)	0.10				
PTFFWP	Fire Water Pump	NO _x	2.56	0.13	3, 4, 7, 8	3, 4, 7, 8, 36	3, 4, 7
		CO	0.67	0.03			
		VOC	0.09	<0.01			
		PM	0.08	<0.01			
		PM ₁₀	0.08	<0.01			
		PM _{2.5}	0.08	<0.01			
		SO ₂	<0.01	<0.01			

Major NSR Summary Table

Permit Numbers: 104840 and N170M1				Issuance Date: December 19, 2025			
Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates (4)		Monitoring and Testing Requirements	Recordkeeping Requirements	Reporting Requirements
			lbs/hour	TPY (5)	Special Condition/ Application Information	Special Condition/ Application Information	Special Condition/ Application Information
		H ₂ SO ₄ (7)	<0.01	<0.01			
PTFFWP2	Fire Water Pump (Train 4)	NO _x	2.56	0.13	3, 4, 7, 8	3, 4, 7, 8, 36	3, 4, 7
		CO	0.67	0.03			
		VOC	0.09	<0.01			
		PM	0.08	<0.01			
		PM ₁₀	0.08	<0.01			
		PM _{2.5}	0.08	<0.01			
		SO ₂	<0.01	<0.01			
		H ₂ SO ₄ (7)	<0.01	<0.01			
PTFEG-1	Emergency Generator (DFEJ)	NO _x	8.57	0.21	3, 4, 7, 8	3, 4, 7, 8, 36	3, 4, 7
		CO	0.70	0.02			
		VOC	0.13	<0.01			
		PM	0.05	<0.01			
		PM ₁₀	0.05	<0.01			
		PM _{2.5}	0.05	<0.01			
		SO ₂	<0.01	<0.01			
		H ₂ SO ₄ (7)	<0.01	<0.01			
PTFEG-2	Emergency Generator (DFEJ)	NO _x	8.57	0.21	3, 4, 7, 8	3, 4, 7, 8, 36	3, 4, 7
		CO	0.70	0.02			
		VOC	0.13	<0.01			
		PM	0.05	<0.01			
		PM ₁₀	0.05	<0.01			

Major NSR Summary Table

Permit Numbers: 104840 and N170M1					Issuance Date: December 19, 2025						
Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates (4)		Monitoring and Testing Requirements	Recordkeeping Requirements	Reporting Requirements				
			lbs/hour	TPY (5)	Special Condition/ Application Information	Special Condition/ Application Information	Special Condition/ Application Information				
		PM _{2.5}	0.05	<0.01							
		SO ₂	<0.01	<0.01							
		H ₂ SO ₄ (7)	<0.01	<0.01							
PTFEG-3	Emergency Generator (DFEJ)	NO _x	8.57	0.21	3, 4, 7, 8	3, 4, 7, 8, 36	3, 4, 7				
		CO	0.70	0.02							
		VOC	0.13	<0.01							
		PM	0.05	<0.01							
		PM ₁₀	0.05	<0.01							
		PM _{2.5}	0.05	<0.01							
		SO ₂	<0.01	<0.01							
		H ₂ SO ₄	<0.01	<0.01							
PTFEG-4	Emergency Generator (DQFAH)	NO _x	1.38	0.03	3, 4, 7, 8, 13	3, 4, 7, 8, 13, 36	3, 4, 7				
		CO	2.00	0.05							
		VOC	0.13	<0.01							
		PM	0.07	<0.01							
		PM ₁₀	0.07	<0.01							
		PM _{2.5}	0.07	<0.01							
		SO ₂	0.02	<0.01							
				H ₂ SO ₄				<0.01	<0.01		
				NH ₃				0.51	0.01		
PTFEG-5	Emergency Generator (DQFAH)	NO _x	1.38	0.03	3, 4, 7, 8, 13	3, 4, 7, 8, 13, 36	3, 4, 7				
		CO	2.00	0.05							

Major NSR Summary Table

Permit Numbers: 104840 and N170M1					Issuance Date: December 19, 2025		
Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates (4)		Monitoring and Testing Requirements	Recordkeeping Requirements	Reporting Requirements
			lbs/hour	TPY (5)	Special Condition/ Application Information	Special Condition/ Application Information	Special Condition/ Application Information
		VOC	0.13	<0.01			
		PM	0.07	<0.01			
		PM ₁₀	0.07	<0.01			
		PM _{2.5}	0.07	<0.01			
		SO ₂	0.02	<0.01			
		H ₂ SO ₄	<0.01	<0.01			
		NH ₃	0.51	0.01			
PTFEG-6	Emergency Generator (DFEJ)	NO _x	8.57	0.21	3, 4, 7, 8	3, 4, 7, 8, 36	3, 4, 7
		CO	0.70	0.02			
		VOC	0.13	<0.01			
		PM	0.05	<0.01			
		PM ₁₀	0.05	<0.01			
		PM _{2.5}	0.05	<0.01			
		SO ₂	<0.01	<0.01			
		H ₂ SO ₄	<0.01	<0.01			
PTFEAC-1	Emergency Air Compressor	NO _x	1.87	0.05	3, 4, 7, 8, 13	3, 4, 7, 8, 13, 36	3, 4, 7
		CO	1.73	0.04			
		VOC	0.10	<0.01			
		PM	0.10	<0.01			
		PM ₁₀	0.10	<0.01			
		PM _{2.5}	0.10	<0.01			
		SO ₂	<0.01	<0.01			

Major NSR Summary Table

Permit Numbers: 104840 and N170M1					Issuance Date: December 19, 2025		
Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates (4)		Monitoring and Testing Requirements	Recordkeeping Requirements	Reporting Requirements
			lbs/hour	TPY (5)	Special Condition/ Application Information	Special Condition/ Application Information	Special Condition/ Application Information
		H ₂ SO ₄	<0.01	<0.01			
		NH ₃	0.14	<0.01			
PTFEAC-2	Emergency Air Compressor	NO _x	1.87	0.05	3, 4, 7, 8, 13	3, 4, 7, 8, 13, 36	3, 4, 7
		CO	1.73	0.04			
		VOC	0.10	<0.01			
		PM	0.10	<0.01			
		PM ₁₀	0.10	<0.01			
		PM _{2.5}	0.10	<0.01			
		SO ₂	<0.01	<0.01			
		H ₂ SO ₄	<0.01	<0.01			
		NH ₃	0.14	<0.01			
FUG-TREAT	Pretreatment 1-3 VOC Fugitives (6)	VOC	1.05	4.62	14, 15, 16, 17	14, 15, 16, 17, 36	14, 17
		VOC (8)	1.08	4.72			
		H ₂ S	<0.01	<0.01			
FUG-TRN4	Pretreatment Train 4 VOC Fugitives (6)	VOC	0.35	1.54	14, 15, 16, 17	14, 15, 16, 17, 36	14, 17
		VOC (8)	0.39	1.71			
		H ₂ S	<0.01	<0.01			
FUG-CT	Pretreatment Ammonia Fugitives (6)	NH ₃	0.12	0.51	13	13, 36	
FUG-HTR	Heater Ammonia Fugitives (6)	NH ₃	0.12	0.51	13	13, 36	
67Z-97-Z1	Ammonia Loading	NH ₃	<0.01	<0.01	13	13, 36	

Major NSR Summary Table

Permit Numbers: 104840 and N170M1					Issuance Date: December 19, 2025		
Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates (4)		Monitoring and Testing Requirements	Recordkeeping Requirements	Reporting Requirements
			lbs/hour	TPY (5)	Special Condition/ Application Information	Special Condition/ Application Information	Special Condition/ Application Information
PTFSOT	Slop Oil Tank	VOC	<0.01	<0.01			
PTFOWT	Oily Water Tank	VOC	<0.01	<0.01			
PTFHMT	Heating Medium Tank	VOC	3.57	0.01			
PTFSOT-T4	Slop Oil Tank	VOC	<0.01	<0.01			
PTFOWT-T4	Oily Water Tank	VOC	<0.01	<0.01			
PTFHMT-T4	Heating Medium Tank	VOC	3.57	0.01			
67T-90	Amine Storage Tank	VOC	<0.01	<0.01			
PTFFWPT-1	Diesel Firewater Pump Tank	VOC	0.01	<0.01			
PTFFWPT-2	Diesel Fire Water Pump Tank 2	VOC	0.01	<0.01			
PTFEGT-1	Diesel Emergency Generator (DFEJ) Tank	VOC	0.01	<0.01			
PTFEGT-2	Diesel Emergency Generator (DFEJ) Tank	VOC	0.01	<0.01			
PTFEGT-3	Diesel Emergency Generator (DFEJ) Tank	VOC	0.01	<0.01			
PTFEGT-4	Diesel Emergency Generator (DQFAH) Tank	VOC	0.01	<0.01			
PTFEGT-5	Diesel Emergency Generator (DQFAH) Tank	VOC	0.01	<0.01			
PTFEGT-6	Diesel Emergency Generator (DFEJ)	VOC	0.01	<0.01			

Major NSR Summary Table

Permit Numbers: 104840 and N170M1					Issuance Date: December 19, 2025		
Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates (4)		Monitoring and Testing Requirements	Recordkeeping Requirements	Reporting Requirements
			lbs/hour	TPY (5)	Special Condition/ Application Information	Special Condition/ Application Information	Special Condition/ Application Information
	Tank						
PTFEACT-1	Diesel Emergency Air Compressor Tank	VOC	0.01	<0.01			
PTFEACT-2	Diesel Emergency Air Compressor Tank	VOC	0.01	<0.01			
60K-11A	Booster Compressors Lube Oil Vent	VOC	<0.01	<0.01			
		PM	<0.01	<0.01			
		PM ₁₀	<0.01	<0.01			
		PM _{2.5}	<0.01	<0.01			
60K-11B	Booster Compressors Lube Oil Vent	VOC	<0.01	<0.01			
		PM	<0.01	<0.01			
		PM ₁₀	<0.01	<0.01			
		PM _{2.5}	<0.01	<0.01			
60K-11C	Booster Compressors Lube Oil Vent	VOC	<0.01	<0.01			
		PM	<0.01	<0.01			
		PM ₁₀	<0.01	<0.01			
		PM _{2.5}	<0.01	<0.01			
69K-11A	Booster Compressors Lube Oil Vent	VOC	<0.01	<0.01			
		PM	<0.01	<0.01			
		PM ₁₀	<0.01	<0.01			
		PM _{2.5}	<0.01	<0.01			
60K-11ATK	Lube Oil Run	VOC	<0.01	<0.01			

Major NSR Summary Table

Permit Numbers: 104840 and N170M1					Issuance Date: December 19, 2025		
Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates (4)		Monitoring and Testing Requirements	Recordkeeping Requirements	Reporting Requirements
			lbs/hour	TPY (5)	Special Condition/ Application Information	Special Condition/ Application Information	Special Condition/ Application Information
	Down Tank	PM	<0.01	<0.01			
		PM ₁₀	<0.01	<0.01			
		PM _{2.5}	<0.01	<0.01			
60K-11BTK	Lube Oil Run Down Tank	VOC	<0.01	<0.01			
		PM	<0.01	<0.01			
		PM ₁₀	<0.01	<0.01			
		PM _{2.5}	<0.01	<0.01			
60K-11CTK	Lube Oil Run Down Tank	VOC	<0.01	<0.01			
		PM	<0.01	<0.01			
		PM ₁₀	<0.01	<0.01			
		PM _{2.5}	<0.01	<0.01			
69K-11ATK	Lube Oil Run Down Tank	VOC	<0.01	<0.01			
		PM	<0.01	<0.01			
		PM ₁₀	<0.01	<0.01			
		PM _{2.5}	<0.01	<0.01			
60K-40A	Residue Compressor Lube Oil Vent	VOC	<0.01	<0.01			
		PM	<0.01	<0.01			
		PM ₁₀	<0.01	<0.01			
		PM _{2.5}	<0.01	<0.01			
60K-40B	Residue Compressor Lube Oil Vent	VOC	<0.01	<0.01			
		PM	<0.01	<0.01			
		PM ₁₀	<0.01	<0.01			

Major NSR Summary Table

Permit Numbers: 104840 and N170M1					Issuance Date: December 19, 2025		
Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates (4)		Monitoring and Testing Requirements	Recordkeeping Requirements	Reporting Requirements
			lbs/hour	TPY (5)	Special Condition/ Application Information	Special Condition/ Application Information	Special Condition/ Application Information
		PM _{2.5}	<0.01	<0.01			
60K-40C	Residue Compressor Lube Oil Vent	VOC	<0.01	<0.01			
		PM	<0.01	<0.01			
		PM ₁₀	<0.01	<0.01			
		PM _{2.5}	<0.01	<0.01			
69K-40A	Residue Compressor Lube Oil Vent	VOC	<0.01	<0.01			
		PM	<0.01	<0.01			
		PM ₁₀	<0.01	<0.01			
		PM _{2.5}	<0.01	<0.01			
60K40ATK	Lube Oil Run Down Tank Vent	VOC	<0.01	<0.01			
		PM	<0.01	<0.01			
		PM ₁₀	<0.01	<0.01			
		PM _{2.5}	<0.01	<0.01			
60K40BTK	Lube Oil Run Down Tank Vent	VOC	<0.01	<0.01			
		PM	<0.01	<0.01			
		PM ₁₀	<0.01	<0.01			
		PM _{2.5}	<0.01	<0.01			
60K40CTK	Lube Oil Run Down Tank Vent	VOC	<0.01	<0.01			
		PM	<0.01	<0.01			
		PM ₁₀	<0.01	<0.01			
		PM _{2.5}	<0.01	<0.01			
69K40CTK	Lube Oil Run	VOC	<0.01	<0.01			

Major NSR Summary Table

Permit Numbers: 104840 and N170M1					Issuance Date: December 19, 2025		
Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates (4)		Monitoring and Testing Requirements	Recordkeeping Requirements	Reporting Requirements
			lbs/hour	TPY (5)	Special Condition/ Application Information	Special Condition/ Application Information	Special Condition/ Application Information
	Down Tank Vent	PM	<0.01	<0.01			
		PM ₁₀	<0.01	<0.01			
		PM _{2.5}	<0.01	<0.01			
61K-43A	Debutanizer Overhead Compressor Lube Oil Vent	VOC	<0.01	<0.01			
		PM	<0.01	<0.01			
		PM ₁₀	<0.01	<0.01			
		PM _{2.5}	<0.01	<0.01			
61K-43B	Debutanizer Overhead Compressor Lube Oil Vent	VOC	<0.01	<0.01			
		PM	<0.01	<0.01			
		PM ₁₀	<0.01	<0.01			
		PM _{2.5}	<0.01	<0.01			
62K-43A	Debutanizer Overhead Compressor Lube Oil Vent	VOC	<0.01	<0.01			
		PM	<0.01	<0.01			
		PM ₁₀	<0.01	<0.01			
		PM _{2.5}	<0.01	<0.01			
62K-43B	Debutanizer Overhead Compressor Lube Oil Vent	VOC	<0.01	<0.01			
		PM	<0.01	<0.01			
		PM ₁₀	<0.01	<0.01			
		PM _{2.5}	<0.01	<0.01			
63K-43A	Debutanizer Overhead Compressor Lube Oil Vent	VOC	<0.01	<0.01			
		PM	<0.01	<0.01			
		PM ₁₀	<0.01	<0.01			

Major NSR Summary Table

Permit Numbers: 104840 and N170M1					Issuance Date: December 19, 2025		
Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates (4)		Monitoring and Testing Requirements	Recordkeeping Requirements	Reporting Requirements
			lbs/hour	TPY (5)	Special Condition/ Application Information	Special Condition/ Application Information	Special Condition/ Application Information
		PM _{2.5}	<0.01	<0.01			
63K-43B	Debutanizer Overhead Compressor Lube Oil Vent	VOC	<0.01	<0.01			
		PM	<0.01	<0.01			
		PM ₁₀	<0.01	<0.01			
		PM _{2.5}	<0.01	<0.01			
64K-43A	Debutanizer Overhead Compressor Lube Oil Vent	VOC	<0.01	<0.01			
		PM	<0.01	<0.01			
		PM ₁₀	<0.01	<0.01			
		PM _{2.5}	<0.01	<0.01			
64K-43B	Debutanizer Overhead Compressor Lube Oil Vent	VOC	<0.01	<0.01			
		PM	<0.01	<0.01			
		PM ₁₀	<0.01	<0.01			
		PM _{2.5}	<0.01	<0.01			
61K-30	Regen Gas Compressor Lube Oil Vent	VOC	<0.01	<0.01			
		PM	<0.01	<0.01			
		PM ₁₀	<0.01	<0.01			
		PM _{2.5}	<0.01	<0.01			
62K-30	Regen Gas Compressor Lube Oil Vent	VOC	<0.01	<0.01			
		PM	<0.01	<0.01			
		PM ₁₀	<0.01	<0.01			
		PM _{2.5}	<0.01	<0.01			
63K-30	Regen Gas	VOC	<0.01	<0.01			

Major NSR Summary Table

Permit Numbers: 104840 and N170M1					Issuance Date: December 19, 2025		
Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates (4)		Monitoring and Testing Requirements	Recordkeeping Requirements	Reporting Requirements
			lbs/hour	TPY (5)			
	Compressor Lube Oil Vent	PM	<0.01	<0.01			
		PM ₁₀	<0.01	<0.01			
		PM _{2.5}	<0.01	<0.01			
64K-40	Regen Gas Compressor Lube Oil Vent	VOC	<0.01	<0.01			
		PM	<0.01	<0.01			
		PM ₁₀	<0.01	<0.01			
		PM _{2.5}	<0.01	<0.01			
MSS-FUG1-3	Fugitives - Train 1-3 Vessel Opening for Maintenance	VOC	5.05	0.01	32, 33, 34	32, 33, 34, 36	32, 33, 34
		H ₂ S	<0.01	<0.01			
MSS-FUG4	Fugitives - Train 4 Vessel Opening for Maintenance	VOC	5.05	<0.01	32, 33, 34	32, 33, 34, 36	32, 33, 34
		H ₂ S	<0.01	<0.01			
All	Sitewide Emissions	Individual HAPs	-	10.00			
		Total HAPs	-	25.00			

(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) NO_x - total oxides of nitrogen
 CO - carbon monoxide
 VOC - volatile organic compounds as defined in Title 30 Texas Administrative Code § 101.1
 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
 SO₂ - sulfur dioxide
 H₂SO₄ - sulfuric acid mist
 H₂S - hydrogen sulfide
 NH₃ - ammonia
 MSS - maintenance, startup, and shutdown

HAPs - 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

- (4) Compliance with annual emission limits (tons per year) is based on a 12-month rolling period. Annual emission rates for each source include planned SS emissions.
- (5) Planned startup and shutdown (SS) lbs/hr emission for pollutants are authorized even if not specifically identified as SS.
- (6) Emission rate is an estimate and is enforceable through compliance with the applicable special condition(s) and permit application representations.
- (7) Sulfuric acid mist is a subset of PM_{2.5} emissions.
- (8) After construction of the flare gas recovery project.



Texas Commission on Environmental Quality Air Quality Permit

A Permit Is Hereby Issued To
Freeport LNG Development, L.P.
Authorizing the Construction and Operation of
Freeport LNG Pretreatment Facility
Located at Freeport, Brazoria County, Texas
Latitude 28.9791 Longitude -95.3069

Permits: 104840 and N170M1

Amendment Date: 12/19/25

Expiration Date: July 16, 2024

Brooke J. Ray
For the Commission

- Facilities** covered by this permit shall be constructed and operated as specified in the application for the permit. All representations regarding construction plans and operation procedures contained in the permit application shall be conditions upon which the permit is issued. Variations from these representations shall be unlawful unless the permit holder first makes application to the Texas Commission on Environmental Quality (commission) Executive Director to amend this permit in that regard and such amendment is approved. [Title 30 Texas Administrative Code (TAC) Section 116.116 (30 TAC § 116.116)]¹
- 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]
- Construction Progress.** Start of construction, construction interruptions exceeding 45 days, and completion of construction shall be reported to the appropriate regional office of the commission not later than 15 working days after occurrence of the event. [30 TAC § 116.115(b)(2)(A)]
- Start-up Notification.** The appropriate air program regional office shall be notified prior to the commencement of operations of the facilities authorized by the permit in such a manner that a representative of the commission may be present. The permit holder shall provide a separate notification for the commencement of operations for each unit of phased construction, which may involve a series of units commencing operations at different times. Prior to operation of the facilities authorized by the permit, the permit holder shall identify the source or sources of allowances to be utilized for compliance with Chapter 101, Subchapter H, Division 3 of this title (relating to Mass Emissions Cap and Trade Program). [30 TAC § 116.115(b)(2)(B)]
- 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)]
- 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)]
- 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
bbbl = barrel	in H ₂ O = inches of water
bbbl/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	lb/day = pound per day
CFR = Code of Federal Regulations	lb/hr = pound per hour
CN = customer ID number	lb/MMBtu = pound per million British thermal units
CNG = compressed natural gas	LDAR = Leak Detection and Repair (Requirements)
CO = carbon monoxide	LNG = liquefied natural gas
COMS = continuous opacity monitoring system	LPG = liquefied petroleum gas
CPMS = continuous parametric monitoring system	LT/D = long ton per day
DFW = Dallas/ Fort Worth (Metroplex)	m = meter
DE = destruction efficiency	m ³ = cubic meter
DRE = destruction and removal efficiency	m/sec = meters per second
dscf = dry standard cubic foot or feet	MACT = maximum achievable control technology
dscfm = dry standard cubic foot or feet per minute	MAERT = Maximum Allowable Emission Rate Table
ED = (TCEQ) Executive Director	MERA = Modeling and Effects Review Applicability
EF = emissions factor	mg = milligram
EFR = external floating roof tank	mg/g = milligram per gram
EGU = electric generating unit	mL = milliliter
EI = Emissions Inventory	MMBtu = million British thermal units
ELP = El Paso	MMBtu/hr = million British thermal units per hour
EPA = (United States) Environmental Protection Agency	MSDS = material safety data sheet
EPN = emission point number	MSS = maintenance, startup, and shutdown
ESL = effects screening level	MW = megawatt
ESP = electrostatic precipitator	NAAQS = National Ambient Air Quality Standards
FCAA = Federal Clean Air Act	NESHAP = National Emission Standards for Hazardous Air Pollutants
FCCU = fluid catalytic cracking unit	NGL = natural gas liquids
FID = flame ionization detector	NNSR = nonattainment new source review
FIN = facility identification number	NO _x = total oxides of nitrogen
ft = foot or feet	NSPS = New Source Performance Standards
ft/sec = foot or feet per second	
g = gram	
gal/wk = gallon per week	
gal/yr = gallon per year	
GLC = ground level concentration	

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 Numbers 104840 and N170M1

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 on that table and other operating conditions specified in this permit. Also, this permit authorizes the emissions from planned maintenance, startup, and shutdown.
2. Non-fugitive emissions from relief valves, safety valves, or rupture discs of gases containing volatile organic compounds (VOC) at a concentration of greater than 1 percent are not authorized by this permit unless authorized on the MAERT. 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.

Federal Applicability

3. These facilities shall comply with applicable requirements of the U.S. Environmental Protection Agency (EPA) regulations on Standards of Performance for New Stationary Sources, Title 40 Code of Federal Regulations Part 60 (40 CFR Part 60): **(06/19)**
 - A. Subpart A: General Provisions.
 - B. Subpart Db: Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units
 - C. Subpart IIII: Standards of Performance for Stationary Compression Ignition Internal Combustion Engines.
 - D. Subpart KKKK: Standards of Performance for Stationary Combustion Turbines.
4. These facilities shall comply with applicable requirements of the EPA regulations on National Emission Standards for Hazardous Air Pollutants for Source Categories, 40 CFR Part 63:
 - A. Subpart A: General Provisions.
 - B. Subpart ZZZZ: National Emission Standard for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines.

Flare

5. The EPN: PTFFLARE shall be designed and operated in accordance with the following requirements:
 - A. The flare (EPN PTFFLARE) will be pressure-assisted.
 - B. The flare shall be operated with a flame present at all times when in use. The pilot flame shall be continuously monitored by a thermocouple, flame-ionization rod, acoustical monitor, infrared monitor, or other equivalent technology. The time, date, and duration of any loss of pilot flame shall be recorded. If operating with dual, redundant pilot flames, the loss of one of the pilot flames is not considered a loss of pilot flame to the flare system. Each pilot flame monitoring device shall be accurate to within manufacturer's specifications, and shall be calibrated at a frequency in accordance with the manufacturer's specifications. **(4/18)**

- C. The flare shall be operated with no visible emissions except during periods not to exceed a total of five minutes during any two consecutive hours as determined and documented using 40 CFR Part 60, Appendix A, Test Method 22 or equivalent method. **(4/18)**
- D. The permit holder shall install a continuous, pressure and temperature compensated, flow monitor that provides a record of the vent stream flow to the flare in units of standard cubic feet. The flow monitor shall be installed in the vent stream such that the total vent stream to flare is measured. Flow measurements shall be taken continuously and values shall be recorded on an average one hour basis.

The flow monitor shall be calibrated according to manufacturer's instructions, or shall have a calibration check by using a second calibrated flow measurement device, annually to meet the following accuracy (uncertainty) specifications: the flow monitor shall be +/- 5.0%, temperature sensor shall be +/- 2.0% at absolute temperature, and pressure sensor shall be +/- 5.0 mmHg.

- E. The flow monitor shall operate at least 95% of the time when the flare is operational, averaged over a rolling twelve (12) month period. The permit holder shall install composition analyzer or calorimeter that meets the requirements in AMOC-71 and follows the QA/QC procedures in AMOC-71.
The calorimeter or composition analyzer shall operate at least 95% of the time when the flare is operational, averaged over a rolling twelve (12) month period.
- F. Planned maintenance, startup, and shutdown vent gas releases to the flare shall be limited to no more than 71.6 MMscf/yr based on a rolling 12-month total.
- G. The requirements of this condition are not applicable during emission events. Emission events are not authorized by this permit.
- H. Operations of the flare are subject to the requirements of the Alternate Means of Control Plan (AMOC-71). Where applicable the requirements of AMOC-71 shall supersede the requirements of this Special Condition.

Fuel Gas

- 6. Combustion units are subject to the following requirements for fuel sulfur:
 - A. Fuel for the flare pilots is limited to boil-off gas, pipeline quality natural gas, or a blend of these fuels.
 - B. Fuel gas streams specified in paragraph A shall have a total sulfur content not to exceed 2 grains per 100 dscf on a rolling 12-month average.
 - C. Compliance with the requirements of paragraph B of this Special Condition shall be verified through sampling of fuel gas at least semi-annually. Fuel gas streams identified in paragraph A may be sampled individually, or a representative sample of blended fuel gas may be taken from the fuel gas header.

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

Emergency Engines

7. The emergency engines authorized in this permit Emission Point Numbers (EPNs): PTFFWP and PTFFWP2, PTFEAC-1 and PTFEAC-2, and PTFEG-1 through PTFEG-6 may only be fired with diesel fuel containing no more than 15 parts per million (ppm) sulfur by weight. **(4/18)**

Upon request by the Executive Director of the Texas Commission on Environmental Quality (TCEQ) or any local air pollution control program having jurisdiction, the holder of this permit shall provide a sample and/or an analysis of the fuel or shall allow air pollution control agency representatives to obtain a sample for analysis.

8. The following requirements apply to the emergency generators (EPNs PTFEG-1 through PTFEG-6) and the emergency firewater pumps (EPNs PTFFWP and PTFFWP2, PTFEAC-1 and PTFEAC-2, and PTFEG-1):
- A. Each emergency firewater pump (EPNs PTFFWP and PTFFWP2) shall be limited to 100 hours per year of maintenance checks, readiness testing, and non-emergency operation, as defined at 40 CFR § 63.6640(f).
 - B. Each emergency generator (EPNs PTFEAC-1 and PTFEAC-2, and PTFEG-1 through PTFEG-6) shall be limited to 50 hours per year of non-emergency operation, as defined at 40 CFR § 63.6640(f).
 - C. Each engine shall be equipped with a non-resettable hour meter.
 - D. Emergency generators (EPNs PTFEG-4 through PTFEG-5 and PTFEAC-1 through PTFEAC-2) shall satisfy the Tier 4 exhaust emission standards specified at 40 CFR Part 1039.102.
 - E. Firewater pumps (EPNs PTFFWP and PTFFWP2) shall satisfy the Tier 3 exhaust emission standards specified at Appendix I to 40 CFR Part 1039.
 - F. Emergency generators (EPNs PTFEG-1 through PTFEG-3 and PTFEG-6) shall satisfy the Tier 2 exhaust emission standards specified at Appendix I to 40 CFR Part 1039.
 - G. Compliance with the emission limits of paragraph E and F of this Special Condition shall be demonstrated by retaining a copy of the manufacturers' certificate of conformity.
9. Opacity of emissions from the turbine, heating medium heaters, and thermal oxidizers shall not exceed five percent averaged over a six-minute period from each stack.
- A. This determination shall be made by first observing for visible emissions while each facility is in normal operation. Observations shall be made at least 15 feet and no more than 0.25 miles from the emission point(s). Up to three emissions points may be read concurrently, provided that all three emissions points are within a 70 degree viewing sector or angle in front of the observer such that the proper sun position (at the observer's back) can be maintained for all three emission points.
 - B. If visible emissions are observed from an emission point, then the opacity shall be determined and documented within 24 hours for that emission point using 40 CFR Part 60, Appendix A, Test Method 9.
 - C. Observations shall be performed and recorded quarterly. If the opacity exceeds five percent, corrective action to eliminate the source of visible emissions shall be taken promptly and documented within one week of first observation.

Combustion Turbine

10. Emissions Standards and Operating Specifications for Combustion Turbine (EPN: CT).

A. The concentration of nitrogen oxides (NO_x) in the exhaust gas shall not exceed 2.0 parts per million by volume dry (ppmvd) corrected to 15 percent oxygen (O₂), on a rolling 3-hour average, subject to the following specifications:

- (1) Hours of startup and shutdown are excluded.
- (2) Excess emissions caused by emission events are excluded.
- (3) Excess emissions during initial or other major dry low NO_x burner tuning sessions are excluded. Major tuning sessions are scheduled events, and would occur after the completion of initial construction, a combustor change-out, a major repair, maintenance to a combustor, or other similar circumstances.

B. The concentration of carbon monoxide (CO) from EPN: CT shall not exceed 4.0 ppmvd corrected to 15 percent O₂, on a rolling 3-hour average, excluding startup and shutdown.

C. The concentration of ammonia (NH₃) from EPN: CT shall not exceed 10 ppmvd corrected to 15 percent O₂, on a rolling 24-hour average.

D. Planned startup or shutdown is limited to two hours per planned startup or shutdown event.

Heaters

11. The heaters are subject to the following requirements

A. For EPNs: 65B-81A through 65B-81E.

- (1) Each heater is limited to firing no more than 132 MMBtu/hr based on the HHV of the fuel. All five heaters totaled (EPNs: 65B-81A through 65B-81E) are limited to firing 1,511,136 MMBtu per rolling 12-month period.
- (2) The concentration of NO_x from the exhaust gas of each stack shall not exceed 5.0 ppmvd corrected to 3 percent O₂, on a one-hour average.
- (3) The concentration of CO from the exhaust gas of each stack shall not exceed 25 ppmvd corrected to 3 percent O₂, on a one-hour average. This is to be demonstrated during initial compliance testing.

B. For EPNs: 69B-81A through 69B-81C.

- (1) Each heater is limited to firing no more than 132 million British thermal units per hour (132 MMBtu/hr) based on the higher heating value (HHV) of the fuel. All three heaters totaled (EPNs: 69B-81A through 69B-81C) are limited to firing 2,312,640 MMBtu per rolling 12-month period.
- (2) The concentration of NO_x from the exhaust gas of each stack shall not exceed 2.0 ppmvd corrected to 3 percent O₂, on a one-hour average.

- (3) The concentration of CO from the exhaust gas of each stack shall not exceed 5.0 ppmvd corrected to 3 percent O₂, on a one-hour average. This is to be demonstrated during initial compliance testing.
 - (4) The concentration of ammonia (NH₃) from EPNs 69B-81A through 81C shall not exceed 10 parts per million by volume dry (ppmvd) corrected to 3 percent oxygen (O₂), on a rolling 24-hour average and an annual average. This concentration limit shall not apply to MSS activities, during which emissions are limited by the emission rates shown on the MAERT.
- C. Heaters at this site are exempt from NO_x and CO operating requirements identified in the special conditions during planned startup and shutdown if the following criteria are satisfied.
- (1) The maximum allowable emission rates in the permit authorizing the facility are not exceeded.
 - (2) The startup period does not exceed 8 hours in duration and the firing rate does not exceed 75 percent of the design firing rate. The time it takes to complete the shutdown does not exceed 4 hours.
 - (3) Control devices are started and operating properly when venting a waste gas stream.

Ammonia Handling

12. The permit holder shall maintain prevention and protection measures for the NH₃ storage system. The NH₃ storage tank area will be marked and protected so as to protect the NH₃ storage area from accidents that could cause a rupture. The aqueous ammonia stored shall have a concentration of less than 20% NH₃ by weight.
13. The permit holder shall maintain the piping and valves in NH₃ service as follows:
 - A. All operating practices and procedures relating to the handling and storage of NH₃ shall conform to the safety recommendations specified for that compound by guidelines of the American National Standards Institute and the Compressed Gas Association.
 - B. Audio, visual, and olfactory (AVO) checks for NH₃ leaks shall be made once per day.
 - C. Immediately, but no later than 24 hours following the detection of a leak, plant personnel shall take one or more of the following actions: **(4/18)**
 - (1) Locate and isolate the leak, if necessary.
 - (2) Commence repair or replacement of the leaking component.
 - (3) Use a leak collection or containment system to control the leak until repair or replacement can be made if immediate repair is not possible.

Fugitives

Piping, Valves, Pumps, Agitators, and Compressors - Intensive Directed Maintenance – 28LAER

14. 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:

- piping and instrumentation diagram (PID);
 - a written or electronic database or electronic file;
 - color coding;
 - a form of weatherproof identification; or
 - 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 Title 30 Texas Administrative Code Chapter 115 (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. In addition, all connectors shall be monitored by leak-checking for fugitive emissions at least quarterly using an approved gas analyzer with a directed maintenance program in accordance with items F thru J of this special condition.

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

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

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

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

$$\frac{C_l + C_s}{C_t} \times 100 = C_p$$

Where:

- C_l = the number of connectors found leaking by the end of the monitoring period, either by Method 21 or sight, sound, and smell.
- C_s = the number of connectors for which repair has been delayed and are listed on the facility shutdown log.
- C_t = the total number of connectors in the facility subject to the monitoring requirements, as of the last day of the monitoring period, not including non-accessible and unsafe-to-monitor connectors.
- C_p = the percentage of leaking connectors for the monitoring period.

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

- (1) a cap, blind flange, plug, or second valve must be installed on the line or valve; or
- (2) The open-ended valve or line shall be monitored once for leaks above background for a plant or unit turnaround lasting up to 45 days with an approved gas analyzer and the results recorded. For all other situations, the open-ended valve or line shall be monitored once by the end of the 72 hours period following the creation of the open ended line and monthly thereafter with an approved gas analyzer and the results recorded. For turnarounds and all other situations, leaks are indicated by readings of 500 ppmv and must be repaired within 24 hours or a cap, blind flange, plug, or second valve must be installed on the line or valve.

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

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.

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

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

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

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

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

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

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

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

$$\frac{(V_l + V_s)}{V_t} \times 100 = V_p$$

Where:

- V_l = the number of valves found leaking by the end of the monitoring period, either by Method 21 or sight, sound, and smell.
- V_s = the number of valves for which repair has been delayed and are listed on the facility shutdown log.
- V_t = the total number of valves in the facility subject to the monitoring requirements, as of the last day of the monitoring period, not including non-accessible and unsafe to-monitor valves.
- V_p = the percentage of leaking valves for the monitoring period.

- M. Any component found to be leaking by physical inspection (i.e., sight, sound, or smell) shall be repaired or monitored with an approved gas analyzer within 15 days to determine whether the component is leaking in excess of 500 ppmv of VOC. If the component is found to be leaking in excess of 500 ppmv of VOC, it shall be subject to the repair and replacement requirements contained in this special condition.
15. The alternative screening procedure ("soap bubble test") as specified in 40 CFR 60, Appendix A-7, Method 21, Section 8.3.3 may be used for the purpose of verifying that the components are not leaking in lieu of the procedure specified in Special Condition No. 14.E, 14.F, or 14.G, or 14.H. **(06/20)**
 16. All accessible connectors in gas/vapor and light liquid service shall be monitored quarterly with an approved gas analyzer in accordance with Items E, F, and H of Special Condition No. 14 that are applicable to monitoring of connectors. **(02/18)**
 - A. Connectors may be monitored on a semiannual basis if the percent of connectors leaking for two consecutive quarterly monitoring periods is less than 0.5 percent.

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

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

- B. The percent of connectors leaking used in paragraph A shall be determined using the following formula:

$$(C_i + C_s) \times 100 / C_t = C_p$$

Where:

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

C_s = the number of connectors for which repair has been delayed and are listed on the facility shutdown log.

C_t = the total number of connectors in the facility subject to the monitoring requirements, as of the last day of the monitoring period, not including non-accessible and unsafe-to-monitor connectors.

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

Optical Gas Imaging

17. The following modifications to the fugitive monitoring program specified in these Special Conditions may be implemented. These modifications are specified in order for the permit holder to be allowed to implement an alternate work practice (AWP) as an alternative to the current Method 21 monitoring requirements specified in Special Condition Nos. 14 and 16. Prior to implementing this AWP, the permit holder shall notify the Houston Regional Office of their intent to use the alternative work practice in writing as described in 30 TAC §115.358 (g). **(08/19)**
- A. In lieu of the Method 21 monitoring requirements of Special Condition Nos. 14 and 16, the permit holder may monitor components on a bi-monthly basis using an optical gas imaging camera (OGIC) meeting the requirements of 40 Code of Federal Regulations (CFR) §60.18(i)(1) as described in Attachment A of this permit. Components that would be considered inaccessible (e.g., insulated components), difficult-to-monitor (DTM), or unsafe-to-monitor (UTM) when using a Method 21 instrument will be monitored with the OGIC so long as such components are not considered DTM or UTM, as defined in Paragraph G of this condition, when using an OGIC.
- B. All components described above must also be monitored annually using an approved gas analyzer conforming to the requirements listed in Method 21 of 40 CFR part 60, appendix A. Subsequent annual monitoring must be conducted every 12 months from the initial annual monitoring period. As an option, a facility may choose to space out the Method 21 monitoring of all components over a 12-month period, as long as all components are monitored on a set schedule every 12 months. Method 21 monitoring for components that are added to an area may be completed during the next scheduled annual Method 21 monitoring event for that area provided that the components are monitored within 12 months of being placed in service. This requirement does not apply to components that would be considered DTM or UTM when using a Method 21 instrument. **(06/20)**

- C. All OGIC operators shall meet the minimum training requirements in 30 Texas Administrative Code (TAC) §115.358(h) as specified in subparagraph 2.1.5 of Attachment A of this permit.
- D. An OGIC daily verification check shall be performed prior to a monitoring survey as specified in 40 CFR 60.18 (i) (2) (i) through (iv). The daily OGIC verification check shall be conducted by each separate OGIC operator that will be performing imaging using the same OGIC for that day.
- E. Bi-monthly monitoring using the OGIC will be performed following the procedures outlined in paragraph 2 and subparagraphs 2.1.1 through 2.1.6 of Attachment A of this permit.
- F. When monitoring using the OGIC, components within the OGIC field of view will be observed for a minimum of three seconds. All emissions imaged by the optical gas imaging instrument are considered to be leaks and are subject to repair. All emissions visible to the naked eye are also considered to be leaks and are subject to repair.
- G. When a leak is identified with the OGIC, an approved gas analyzer conforming to the requirements listed in Method 21 of 40 CFR part 60, appendix A will be used to monitor and record the concentration of the leak before repair. Repaired components will be remonitored to verify the success of the repair using an OGIC, an approved gas analyzer, or the soap bubble test described in Section 8.3.3 of Method 21. Scenarios where a leak is detected by the OGIC but a Method 21 approved gas analyzer reading is not required include: components that are considered DTM or UTM with a Method 21 instrument, and components that are insulated and therefore not accessible for Method 21 instrument monitoring. A difficult-to-monitor component is a component that cannot be inspected without elevating the monitoring personnel more than two meters above a permanent support surface or that requires a permit for confined space entry as defined in 29 CFR §1910.146. An unsafe-to-monitor component is a component that the owner or operator determines is unsafe to monitor because monitoring personnel would be exposed to an immediate danger as a consequence of conducting the monitoring. **(06/20)**
- H. The alternative monitoring schedule authorized in Subparagraph I of Special Condition No. 14 is not applicable.
- I. The following records shall be kept for a period of at least 5 years and be made available to the TCEQ Executive Director or designated representative upon request:
 - (1) Records of the make, model, and manufacturer specifications of each OGIC used to demonstrate compliance with Subparagraph A of this condition.
 - (2) Records demonstrating compliance with Subparagraph C of this condition.
 - (3) The equipment, processes, and facilities for which the owner or operator chooses to use the alternative work practice.
 - (4) The detection sensitivity level selected from Table 1 to subpart A of 40 CFR 60.18 for the optical gas imaging instrument.
 - (5) The analysis to determine the piece of equipment in contact with the lowest mass fraction of chemicals that are detectable, as specified in paragraph (i)(2)(i)(A) of 40 CFR 60.18.
 - (6) The technical basis for the mass fraction of detectable chemicals used in the equation in paragraph (i)(2)(i)(B) of 40 CFR 60.18.
 - (7) Records of the daily OGIC verification check. Record the distance, per paragraph (i)(2)(iv)(B) of 40 CFR 60.18, and the flow meter reading, per paragraph

- (i)(2)(iv)(C) of 40 CFR 60.18, at which the gas was imaged during the daily OGIC verification check. Keep a video record of the daily instrument check for each configuration of the optical gas imaging instrument used during the leak survey (for example, the daily instrument check must be conducted for each lens used). The video record must include a time and date stamp for each daily instrument check. The video record must be kept for 5 years.
- (8) Records of OGIC monitoring shall indicate dates, times, component areas monitored, results of imaging and the results of Method 21 monitoring for those components found leaking with the OGIC. In addition, a video record must be used to document the leak survey results. The video record must include a time and date stamp for each monitoring event. A video record can be used to meet the recordkeeping requirements if each piece of regulated equipment selected for this work practice can be identified in the video record. The video record must be kept for 5 years.
- (9) The records of the annual Method 21 screening required in subparagraph B of this condition shall identify the equipment screened, the screening value measured by Method 21, the time and date of the screening, and calibration information required in Subparagraph F of Special Condition No. 14.
- (10) Records of repairs to fugitive components shall include date of repairs, repair results, justification for delay of repairs, and corrective actions taken for all components.
- (11) Records of maintenance to the OGIC, as applicable, will be maintained by the OGIC owner/operator.

Initial Determination of Compliance

18. Sampling ports and platforms shall be incorporated into the design of all exhaust stacks according to the specifications set forth in the attachment entitled "Chapter 2, Stack Sampling Facilities." Alternate sampling facility designs may be submitted for approval by the TCEQ Regional Director.
19. The holder of this permit shall perform stack sampling and other testing as required to establish the actual quantities of air contaminants being emitted into the atmosphere from EPNs: 69B-81A, 69B-81B, 69B-81C, TO1, TO2, TO3, and TO4 to determine initial compliance with all emission limits established in this permit. Sampling shall be conducted in accordance with the appropriate procedures of the TCEQ Sampling Procedures Manual and in accordance with the appropriate EPA Reference Methods to be determined during the pretest meeting. The initial stack tests for EPNs CT, 65B-81A, 65B-81B, 65B-81C, 65B-81D, 65B-81E, TO1, TO2, and TO3 have been completed.
(4/18)

Fuel sampling using the methods and procedures of 40 CFR § 60.4415 may be conducted in lieu of stack sampling for sulfur dioxide (SO₂) or the permit holder may be exempted from fuel monitoring of SO₂ as provided under 40 CFR § 60.4365(a). If fuel sampling is used, then in order to demonstrate compliance with New Source Performance Standards (NSPS) Subpart KKKK, SO₂ limits shall be based on 100 percent conversion of the sulfur in the fuel to SO₂. Any deviations from those procedures must be approved by the Executive Director of the TCEQ prior to sampling. The TCEQ Executive Director or his designated representative shall be afforded the opportunity to observe all such sampling.

The holder of this permit is responsible for providing sampling and testing facilities and conducting the sampling and testing operations at his expense.

- A. The TCEQ Houston Regional Office shall be contacted as soon as testing is scheduled but not less than 45 days prior to sampling to schedule a pretest meeting.

The notice shall include:

- (1) 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) Procedure used to determine turbine loads during and after 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 submitting the test reports. A written proposed description of any deviation from sampling procedures specified in permit conditions, or the TCEQ or EPA sampling procedures shall be made available to the TCEQ prior to the pretest meeting. The TCEQ Regional Director shall approve or disapprove of any deviation from specified sampling procedures. 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 or equivalent procedure proposals for NSPS testing which must have EPA approval shall be submitted to the EPA and copied to TCEQ Regional Director.

- B. Air contaminants and diluents to be sampled and analyzed include (but are not limited to)
- (1) For EPN: CT NO_x, O₂, CO, VOC, SO₂, and NH₃. Fuel sampling using the methods and procedures of 40 CFR § 60.4415 or 40 CFR § 60.4365(a) may be conducted for monitoring SO₂.
 - (2) For EPNs: 65B-81A through 65B-81E and 69B-81A through 69B-81C: NO_x, CO, VOC, and O₂. **(4/18)**
 - (3) For EPNs: TO1, TO2, TO3, and TO4: CO, NO_x, VOC, SO₂, total particulate matter (PM), and O₂. **(4/18)**
- C. For each EPN: TO1, TO2, TO3, and TO4, a VOC destruction efficiency of at least 99% or a VOC outlet concentration of 10 ppmvd or less corrected to 3 percent oxygen on a one-hour average must be demonstrated. The minimum operating temperature shall be the average temperature at which compliance with the above was demonstrated. **(4/18)**
- D. For each regenerative thermal oxidizer (EPNs: TO1, TO2, TO3, and TO4) liquid scrubber system, a SO₂ removal efficiency of 97.2% across the liquid scrubber or a SO₂ outlet concentration at the liquid scrubber outlet of 8 ppmvd or less corrected to 3 percent oxygen on a one-hour average must be demonstrated.

The minimum scrubber liquid pH and flow rate established in accordance with Special Conditions No. 26 and 27 shall be the average pH and minimum liquid flow rate at which compliance with the above was demonstrated based on the results of the average of at least three test runs. **(5/15)**

- E. Testing Conditions.
- (1) EPN: CT shall be tested at or above 90% of the maximum turbine load for the given atmospheric conditions at the time of testing. Each tested turbine load shall be identified in the sampling report.
 - (2) EPNs: 65B-81A through 65B-81E and 69B-81A through 69B-81C shall each be tested at 80% or above of the manufacturer's stated maximum heat input capacity. **(4/18)**
 - (3) EPNs: TO1, TO2, TO3, and TO4 shall each be tested at least 90% of the associated amine treatment system design gas throughput. **(4/18)**
- F. Sampling as required by this condition shall occur within 60 days after achieving the nominal power output at which the turbine will be operated, but no later than 180 days after initial start-up of the combustion turbine. Additional sampling may be required by TCEQ or EPA.
- G. Within 60 days after the completion of the testing and sampling required herein, two copies of the sampling reports shall be distributed as follows:
- (1) One copy to the TCEQ Houston Regional Office.
 - (2) One copy to the EPA Region 6 Office, Dallas.

Continuous Demonstration of Compliance – Combustion Turbine and Heaters

20. The permit holder shall install, calibrate, and maintain a continuous emission monitoring system (CEMS) to measure and record the in-stack concentration of for NO_x and O₂ from the heaters (EPNs 65B-81A through 81E, 69B-81A through 81C); and NO_x, CO, and O₂ from the combustion turbine (EPN: CT). Heaters are not required to have a CO CEMS installed.
- 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, Title 40 Code of Federal Regulation Part 60 (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. Section 1 below applies to sources subject to the quality-assurance requirements of 40 CFR Part 60, Appendix F; section 2 applies to all other 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, Section 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) 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 when four successive quarterly CGA are 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 one hour average concentrations at least once every day, using a minimum of four equally-spaced data points from each one-hour period.
 - 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 heaters or combustion turbine are 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 heaters or combustion turbine 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.
21. The NH₃ concentration in the stack of EPNs 69B-81A through 81C and CT, shall be tested or calculated according to one of the methods listed below and shall be monitored according to one of the methods listed below. Monitoring NH₃ slip is only required on days when the SCR unit is in operation except for periods of startup and shutdown.
- A. The holder of this permit may install, calibrate, maintain, and operate a CEMS to measure and record the concentrations of NH₃. The NH₃ concentrations shall be corrected and reported in accordance with Special Condition No. 20 above.
 - B. The NH₃ slip may be measured using a sorbent or stain tube device specific for NH₃ measurement in the appropriate range. The frequency of sorbent or stain tube testing shall be daily.
 - (1) If the sorbent or stain tube testing indicates an ammonia (NH₃) slip concentration that exceeds 10 parts per million (ppm) at any time, the permit holder shall begin NH₃ testing by either the Phenol-Nitroprusside Method, the Indophenol Method, or EPA Conditional Test Method (CTM) 27 on a quarterly basis in addition to the daily sorbent or stain tube testing.
 - (2) If the daily testing indicates NH₃ slip is 10 ppm or less, the Phenol Nitroprusside Indophenol CTM 27 tests may be suspended until sorbent or stain tube testing again indicate 10 ppm NH₃ slip or greater.

- C. The permit holder may install and operate a second NO_x CEMS probe located before the SCR, upstream of the stack NO_x CEMS, which may be used in association with the SCR efficiency and NH₃ injection rate to estimate NH₃ slip. This condition shall not be construed to set a minimum NO_x reduction efficiency on the SCR unit.
 - D. The permit holder may install and operate a dual stream system of NO_x CEMS at the exit of the SCR. One of the exhaust streams would be routed, in an unconverted state, to one NO_x CEMS and the other exhaust stream would be routed through a NH₃ converter to convert NH₃ to NO_x and then to a second NO_x CEMS. The NH₃ slip concentration shall be calculated from the delta between the two NO_x CEMS readings (converted and unconverted).
 - E. Any other method used for measuring NH₃ slip shall require prior approval from the TCEQ Office of Air, Air Permits Division.
22. The permit holder shall monitor and record the average hourly fuel consumption of the turbine. The fuel flow meter shall be installed, calibrated, maintained, and operated according to the manufacturer's instructions. Alternatively, fuel flow meters that meet the installation, certification, and quality assurance requirements of appendix D to part 75 of this chapter are acceptable for use under this subpart.
23. The permit holder shall monitor and record the average hourly fuel consumption of each heating medium heater. The fuel flow meter shall be installed, calibrated, maintained, and operated according to the manufacturer's instructions.
24. The oxygen concentration for each heating medium heater (EPNs: 65B-81A through 65B-81E and 69B-81A through 69B-81C) shall be monitored when the heater is in operation to ensure compliance with the NO_x limits of this permit.
- A. A minimum exhaust oxygen concentration, based on a one-hour average, shall be established using the most recent performance test data. A process oxygen monitor shall be used to ensure the oxygen content of the flue gas is within the allowable range. The monitor shall be maintained according to the manufacturer's instructions.

Continuous Demonstration of Compliance - Thermal Oxidizers

25. Vents from each amine treatment unit must be directed to the regenerative thermal oxidizers (RTO). The RTO combustion chamber outlet temperatures for EPNs: TO1, TO2, TO3, and TO4 shall be continuously monitored when waste gas is directed to the RTO. The outlet temperature must be recorded at least four times an hour (once per quarter of the hour) when waste gas is directed to the TO and averaged hourly for compliance demonstration. The temperature monitor shall operate at least 95% of the time when the RTO is operational, averaged over a rolling twelve (12) month period. **(10/20)**
- A. The minimum RTO combustion chamber outlet temperature shall be 1400 degrees Fahrenheit until a minimum operating temperature is established by the testing required in previous initial compliance testing or by Special Condition No. 20. The temperature measurement device shall be installed, calibrated, and maintained according to accepted practice and the manufacturer's specifications. The device shall be accurate to within the greater of ± 1 percent of the temperature being measured or ± 4.5 degrees Fahrenheit. **(4/18)**

- B. After a planned shutdown of any pretreatment train, the permit holder shall visually inspect packing to identify any settling or other issues that would negatively affect the RTO performance. This condition does not have to be performed more than once per year if planned shutdowns occur more frequently than once per year.
26. When waste gas is directed to the RTO, the RTO wet scrubber shall be operated at the minimum pH or higher on a 1-hour average based on the most recent performance test data. The liquid pH must be recorded at least four times an hour (once per quarter of the hour) when waste gas is directed to the RTO and averaged on an hourly basis. Each monitoring device shall be cleaned with an automatic cleaning system, or cleaned weekly using hydraulic, chemical, or mechanical cleaning. 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 weekly, whichever is more frequent, and shall be accurate to within ± 0.5 pH units. The pH meter shall operate at least 95% of the time when the RTO is operational, averaged over a rolling twelve (12) month period.
27. When waste gas is directed to the RTO, the RTO scrubber shall be operated at the minimum liquid flow rate or higher on a 1-hour average based on the most recent performance test data. The flow rate must be recorded at least four times an hour (once per quarter of the hour) when waste gas is directed to the RTO and averaged on an hourly basis. 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 $\pm 2\%$ of span or $\pm 5\%$ of design liquid flow rate. The flow monitor shall operate at least 95% of the time when the RTO is operational, averaged over a rolling twelve (12) month period.

Electrostatic Precipitator

28. Each electrostatic precipitator (ESP) shall be operated at a minimum secondary voltage established during the most recent compliance performance test data for the associated RTO (TO1, TO2, TO3, or TO4). The secondary voltage of the ESP shall be continuously monitored and compliance is based upon a block hour and, once per day, the average daily secondary voltage recorded. 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: $\pm 2\%$ of reading; or $\pm 5\%$ over its operating range.
29. Each electrostatic precipitator (ESP) shall be operated between a minimum and maximum spark rate established during the most recent compliance test data for the associated RTO (EPNs: TO1, TO2, TO3, or TO4). The spark rate of the ESP shall be continuously monitored, and compliance shall be based upon a block hour. Once a day the hour average daily spark rate shall be calculated and recorded. 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 $\pm 5\%$ of reading.

Sulfur Content

30. In order to determine SO₂ emissions from the process, the permit holder shall analyze gas sulfur content, at least quarterly, by sampling the plant feed gas prior to the first treatment device and the CO₂-rich amine waste gas prior to the RTOs using ASTM methods D1072, D3246, D4084, D4468, D4810, D6228, D6667, or Gas Processors Association Standard 2377 and perform the following: **(4/18)**
- A. Monitor total feed gas flow into the plant on an hourly basis. The flow monitor must receive an in situ third-party certification on an annual basis to demonstrate it will meet $\pm 5.0\%$ accuracy;
 - B. Monitor total CO₂-rich amine waste gas flow from the amine treatment system on an hourly basis. The flow monitor must receive an in situ third-party certification on an annual basis to demonstrate it will meet $\pm 5.0\%$ accuracy;
 - C. Calculate SO₂ emissions as a mass balance based on the mass of incoming sulfur using the most recent incoming plant feed gas sulfur content data and the data from paragraphs A, B, the conversion of sulfur to SO₂ in the Thermal Oxidizer, and the SO₂ wet scrubber removal efficiency; and
 - D. Any additional analyses besides the above, such as measuring the sulfur content of the LNG prior to being loaded onto a ship, may be used to refine the assumption that all sulfur not removed from the incoming plant feed gas is either scrubbed out of the gas or emitted as SO₂.

Compliance Assurance Monitoring

31. The following requirements apply to capture systems for the flares (EPN PTFFLARE) and thermal oxidizers (EPNs TO1, TO2, TO3, and TO4).
- A. If there is a bypass for the control device, comply with one of the following requirements:
 - (1) Install a flow indicator that records and verifies zero flow at least once every fifteen minutes 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; or
 - (2) Once a month, inspect the valves, verifying the position of the valves and the condition of the car seals/lock-out tags that prevent flow out the bypass and maintain records of each inspection. If the inspection is not satisfactory, the holder of this permit shall take necessary corrective action within 24 hours; or
 - (3) Install an electronic position indicator that records and verifies the open or closed position, at least once every fifteen minutes, of each valve or damper that if opened would allow a vent stream to bypass the control device and be emitted, either directly or indirectly, to the atmosphere.

Maintenance, Startup, and Shutdown

32. The permit holder shall establish, implement, and update, as appropriate, a program to maintain and repair facilities. The minimum requirements of this program must include:

- A. A maintenance program developed by the permit holder for all equipment that is consistent with good air pollution control practices, or alternatively, manufacturer's specifications and recommended programs applicable to equipment performance and the effect on emissions;
 - B. Cleaning and routine inspection of all equipment;
 - C. Repair of equipment on timeframes that minimize equipment failures and maintain performance;
 - D. Training of personnel who implement the maintenance program; and
 - E. Records of conducted planned MSS activities.
33. Sections of the plant handling natural gas or natural gas liquids undergoing shutdown or maintenance that requires breaking a line or opening a vessel shall be depressurized, emptied, degassed, and placed in service in accordance with the following requirements.
- A. The process equipment shall be degassed using good engineering and best management practices to ensure air contaminants are removed from the system through the control device (EPN: PTFFLARE) to the extent allowed by process equipment or storage vessel design. 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.
 - B. Equipment that only contains material that is liquid with VOC true vapor pressure (TVP) less than 0.50 psi at the normal process temperature or 95°F may be opened to atmosphere and drained without depressuring or degassing to a control device.
 - C. The locations and/or identifiers where the purge gas enters the process equipment or storage vessel and the exit points for the exhaust gases shall be documented; (process flow diagrams [PFDs] or piping and instrumentation diagrams [P&IDs] may be used to demonstrate compliance with the requirement). **(4/18)**
 - D. If the process equipment requires purging, it will be conducted using best management and good air pollution control practices.
34. All contents from process equipment or storage tanks must be removed to the maximum extent possible practicable prior to opening equipment to commence degassing and maintenance. Liquid and solid removal must be directed to covered containment, recycled, or disposed of properly. If it is necessary to drain liquid into an open pan or the sump, the liquid must be covered and transferred to a covered vessel within one hour of being drained.

Netting and Offsets

35. This Nonattainment New Source Review permit is issued/approved based on the requirement that the permit holder offset the project emission increase for facilities authorized by this permit prior to the commencement of operation, through participation in the TCEQ Emission Banking and Trading (EBT) Program in accordance with the rules in 30 TAC Chapter 101, Subchapter H.

- A. The permit holder shall use 58.3 tons per year (tpy) of NO_x credits to offset the 44.82 tpy project emission increase for the facilities authorized by this permit at a ratio of 1.3 to 1.0.
- (1) The permit holder shall use 21.5 tpy of ECs from TCEQ credit certificate numbers 2824 and 2826 to offset the 16.53 tpy NO_x project emission increase at a ratio of 1.3 to 1.0.
 - (2) The permit holder shall use 36.8 tpy of Mass Emission Cap and Trade (MECT) allowances available to offset the 28.29 tpy NO_x project emission increase for the MECT facilities authorized by this permit at a ratio of 1.3 to 1.0.

Identify each MECT facility using the EPN and/or FIN from the MAERT.

MECT Applicable Facility Identification Numbers (FINs):

Trains 1 – 3	
EPN	FIN
CT	CT
65B-81B	65B-81B
65B-81A	65B-81A
65B-81D	65B-81D
65B-81E	65B-81E
65B-81C	65B-81C

- B. Prior to the start of operation of the flare gas recovery project (an emissions reduction project, the permit holder shall use 45.0 tpy of NO_x credits to offset the 34.6 tpy NO_x project emission increase for the facilities authorized by this permit at a ratio of 1.3 to 1.0.
- (1) The permit holder shall use 45.0 tpy of NO_x credits from TCEQ credit certificate numbers D3818, D3819, and D3820 to offset the NO_x project emission increase at a ratio of 1.3 to 1.0.
- C. Prior to the commencement of operation, the permit holder shall obtain approval from the TCEQ EBT Program for the credits being used and then submit a permit alteration or amendment request to the TCEQ Air Permits Division (and copy the TCEQ Regional Office) to identify approved credits by TCEQ credit certificate number.

Recordkeeping

36. The records required by these special conditions shall be maintained in either hard copy or electronic format and shall be maintained for at least five years. These records shall be made immediately available at the request of personnel from the TCEQ or any air pollution control agency with jurisdiction.

Date: 12/19/25
 Brooke J. Paup

Attachment A

Permit Number 104840 and N170

General Optical Gas Imaging Camera Operational Procedures

Freeport LNG

1 OGIC SPECIFICATIONS

Freeport LNG will utilize a FLIR GF320 Optical Gas Imaging Camera (OGIC) for streams with predominantly high concentrations of hydrocarbons and a FLIR GF343 for streams with predominantly high concentrations of carbon dioxide, or other equivalent OGICs. The FLIR GF320 is designed to detect hydrocarbons (e.g., methane and VOCs), while the FLIR GF343 is designed to detect carbon dioxide.

Freeport LNG will maintain records of the make, model, and manufacturer specifications of each OGIC instrument used under Freeport LNG's LDAR program.

2 OGIC MONITORING PROCEDURES

OGIC monitoring will be performed by appropriately trained personnel in accordance with the procedures summarized below.

- A. On a daily basis, prior to beginning each OGIC monitoring event, monitoring personnel will complete an OGIC daily verification check in accordance with Section 2.1.1 of this Plan.
- B. All components subject to the LDAR program and designated for OGIC monitoring will be monitored with the OGIC unless considered difficult-to-monitor or unsafe-to-monitor.
- C. The distance between the OGIC and the components being surveyed shall not exceed the maximum distance (D_{Max}) established during the OGIC daily verification check. The operator will establish an optimized D_{Max} (i.e., as large as possible) during the survey, taking into account weather conditions, thermal background, viewing angle of components, and distance to monitored components.
- D. Throughout the survey, monitoring personnel will endeavor to stay within a close distance to monitored components, if possible. If, based on the judgement of monitoring personnel, the distance to the monitored component is equal to or greater than 50% of D_{Max} , monitoring personnel will use a laser range finder or equivalent device to ensure compliance with the established D_{Max} . Monitoring personnel may perform an additional OGIC daily verification check to establish a new D_{Max} , as needed.
- E. All visible emissions from fugitive components identified using the OGIC are considered leaks subject to repair requirements.
- F. Monitoring personnel will qualitatively assess monitoring conditions throughout the survey and will follow the procedures identified in Section 2.1.2 if adverse monitoring conditions are encountered.
- G. The procedures identified in Section 2.1.3 will be followed to ensure that adequate thermal background exists when viewing each component with the OGIC.
- H. The procedures identified in Section 2.1.4 will be followed if interferences are encountered during the survey.
- I. Monitoring personnel will meet the qualification and experience criteria outlined in Section 2.1.5 of this Plan.

J. The OGIC will be maintained as outlined in Section 2.1.6 of this Plan.

2.1.1 OGIC Daily Verification Check

An OGIC performance check will be performed on a daily basis prior to OGIC monitoring surveys, and at other times as needed, in accordance with the following procedure.

1. Start the OGIC according to the manufacturer's instructions, ensuring that all appropriate settings conform to the manufacturer's instructions.
2. After the OGIC start-up process is completed and the OGIC is set to the intended settings, view the image produced by the OGIC to ensure that the image is normal. If the image is abnormal, perform a lens assessment and follow a proper lens cleaning procedure, if necessary.
3. Calculate the mass flow rate to be used in the daily instrument check by the following method (see Note 1):
 - a. Determine the piece of equipment in contact with the lowest mass fraction of detectable chemicals, within the distance at or below the standard detection sensitivity level.
 - b. Multiply the standard detection sensitivity level by the mass fraction of chemicals from the stream to determine the mass flow rate to be used in the daily instrument check using the following equation:

$$E_{DIC} = (E_{SDS}) \cdot \sum(X)$$

Where:

E_{DIC} = Mass flow rate for the daily instrument check (grams per hour)

E_{SDS} = Standard detection sensitivity level from Table 1 to Subpart A, (grams per hour)

X = Mass fraction of detectable chemical(s) seen by the optical gas imaging instrument, within the operating distance at or below the E_{SDS} .

4. Prior to the beginning of the monitoring survey, test the OGIC as follows:
 - a. Record ambient temperature as measured from an onsite temperature gauge or local weather station data reported via a public feed (e.g., weather.com).
 - b. Record wind speed as measured from a handheld anemometer or similar device.
 - c. Install a regulator on a gas cylinder containing a gas that is visible by the OGIC (e.g., methane). The regulator flow rate and gas cylinder composition shall be selected to represent the process stream(s) to be surveyed on that day. Place the cylinder in the area where the OGIC monitoring survey will take place or where similar environmental (wind, rain, etc.) conditions exist. If the wind speed increases noticeably during the monitoring survey, repeat the OGIC daily verification check. (See Note 2).
 - d. Set up the OGIC at a distance from the outlet of the cylinder regulator.
 - e. Open the valve on the regulator to provide a mass flow rate that is no greater than the mass flow rate calculated in Step 3 while observing the gas flow through the OGIC.

- f. Gradually increase the distance between the OGIC and the outlet of the cylinder regulator and view the emission with the OGIC at each distance interval. The maximum distance where the emission is viewed by the OGIC for a minimum duration of 10 seconds is D_{Max} . Upon establishing D_{Max} , the OGIC daily verification check is complete.

Notes:

- 1) The calculation described in Step 3 may be performed once for all streams at the facility based on the heat and material balance (HMB) and need not be repeated for the daily instrument check. The results of the calculation described in Step 3 will be maintained.
- 2) Monitoring personnel may use a single regulator/cylinder composition combination for all process streams to be monitored with the hydrocarbon OGIC as long as the combination provides a mass flow rate that is no greater than the maximum flow rate calculated in Step 3 for all process streams to be monitored.

2.1.2 OGIC Use in Adverse Conditions

2.1.2.1 Wind

Wind speed is recorded during the OGIC daily verification check. If the wind speed within the survey area(s) has a Beaufort number of five or higher, the survey will be postponed in those areas until the wind speed has decreased. A wind speed chart is presented in Table 5-1.

Table 5.1 Wind speed Chart

Beaufort number	Wind (km/h)	Wind (mph)	Wind classification	Wind effects on land	Wind effects on water
0	<1	<1	Calm	Smoke rises vertically	Water calm, mirror-like
1	1-5	1-3	Light air	Smoke drift indicates wind direction; still wind vanes	Scale-like ripples with no foam crests
2	6-11	4-7	Light breeze	Leaves rustle; wind felt on face; wind vanes moved by wind	Small wavelets; crests have a glassy appearance and do not break
3	12-19	8-12	Gentle breeze	Leaves and twigs constantly moving; light flags extended	Large wavelets; crests begin to break, scattered whitecaps
4	20-29	13-18	Moderate breeze	Dust and loose paper raised; small branches move	Small waves 1-4' becoming longer; many whitecaps
5	30-38	19-24	Fresh breeze	Small trees with leaves begin to Sway	Moderate, longer waves 4-8'; whitecaps common; some spray
6	39-50	25-31	Strong breeze	Larger tree branches moving; phone lines whistle	Larger waves 8-13 whitecaps common; more spray
7	51-61	32-38	Near gale	Whole trees moving; difficult to walk against wind	Sea heaps up; waves 13-20'; crests break; white foam streaking off breakers
8	62-74	39-46	Gale	Twigs break off trees; difficult to walk against wind	Moderately high waves, 13-20', with greater lengths; crests beginning to break into foam blown in white streaks

Beaufort number	Wind (km/h)	Wind (mph)	Wind classification	Wind effects on land	Wind effects on water
9	75-86	47-54	Strong gale	Slight damage to buildings; shingles and slates torn off roofs	High waves of 20'; rolling seas; dense streaks of foam; spray may reduce visibility
10	87-101	55-63	Storm	Trees uprooted; considerable structural damage to buildings	Very high waves, 20-30', with overhanging crests; sea white with blown foam
11	102-115	64-72	Violent storm	Widespread damage	Huge waves, 30-45', foam patches cover sea; air filled with spray; visibility reduced
12	>115	>72	Hurricane	Widespread damage	Huge waves, over 45' air filled with foam; sea all white with driving spray; little visibility

2.1.2.2 Rain

The OGIC may be used in light rain as long as the OGIC daily verification check is performed in the same rain conditions. If conditions change, additional OGIC daily verification checks will be conducted prior to the survey.

2.1.2.3 Temperature

Monitoring personnel will record the ambient temperature during the OGIC daily verification check and will confirm that the temperature is within the acceptable operating range of the OGIC. In the unlikely event that temperature within the survey area falls outside of the acceptable operating range of the OGIC, the survey will be postponed until acceptable operating conditions exist.

2.1.3 Thermal Background

The ability to easily identify fugitive emissions using an OGIC decreases as the thermal energy differential between the fugitive emission and background decreases. Monitoring personnel will view components within the field of view using multiple camera angles and will select an angle that provides an adequate thermal background. During the survey, monitoring personnel will continuously perform a qualitative analysis of the thermal properties of the background to ensure that adequate thermal background is present. If monitoring personnel identify an area where questionable thermal background is present that may reduce the detection capabilities of the OGIC, one or both of the following procedures will be followed.

- 1) An additional OGIC verification check will be performed in the area of question to verify that adequate thermal background is present.
- 2) A temporary background (e.g., a person or other background) will be inserted into the scene(s) to create an adequate thermal background when feasible to increase the thermal energy differential between the fugitive emission and the background.

2.1.4 Handling Interferences

Monitoring personnel will be knowledgeable of the process streams typically present at a LNG facility and specifically present at the site being surveyed and will be able to identify sources of potential interference,

such as steam. If potential interference is identified, monitoring personnel will utilize alternate viewing angles to differentiate between the component and potential interference source. In addition, monitoring personnel may utilize a secondary confirmation instrument (e.g., handheld gas detector or bubbles) to confirm the presence of hydrocarbons in the emissions of interest.

2.1.5 OGIC Operator Training and Experience

OGIC monitoring will be performed by personnel that are trained in the proper operation of the OGIC to be used in the survey and that have prior experience using OGICs for the purposes of identifying fugitive emissions. All OGIC operators will meet the minimum training requirements of 30 TAC §115.358(h).

2.1.6 OGIC Maintenance

Maintenance of the OGIC will be performed in accordance with manufacturer's recommendations. Records of maintenance, as applicable, will be maintained by the OGIC owner/operator.

OGICs are not calibrated like a traditional Method 21 gas analyzer. However, performance is verified as previously described on at least a daily basis when used for monitoring. If the OGIC malfunctions, it will be sent to the manufacturer for repair or replacement.

Date: August 15, 2019

Emission Sources - Maximum Allowable Emission Rates

Permit Number 104840 and N170

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 (5)	
			lbs/hour	TPY (4)
65B-81A	Heating Medium Heater A	NO _x	0.80	-
		CO	2.44	-
		VOC	1.00	-
		PM	0.92	-
		PM ₁₀	0.92	-
		PM _{2.5}	0.92	-
		SO ₂	1.98	-
		H ₂ SO ₄ (7)	0.15	-
65B-81B	Heating Medium Heater B	NO _x	0.80	-
		CO	2.44	-
		VOC	1.00	-
		PM	0.92	-
		PM ₁₀	0.92	-
		PM _{2.5}	0.92	-
		SO ₂	1.98	-
		H ₂ SO ₄ (7)	0.15	-

Emission Sources - Maximum Allowable Emission Rates

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates (5)	
			lbs/hour	TPY (4)
65B-81C	Heating Medium Heater C	NO _x	0.80	-
		CO	2.44	-
		VOC	1.00	-
		PM	0.92	-
		PM ₁₀	0.92	-
		PM _{2.5}	0.92	-
		SO ₂	1.98	-
		H ₂ SO ₄ (7)	0.15	-
65B-81D	Heating Medium Heater D	NO _x	0.80	-
		CO	2.44	-
		VOC	1.00	-
		PM	0.92	-
		PM ₁₀	0.92	-
		PM _{2.5}	0.92	-
		SO ₂	1.98	-
		H ₂ SO ₄	0.15	-
65B-81E	Heating Medium Heater E	NO _x	0.80	-
		CO	2.44	-
		VOC	1.00	-
		PM	0.92	-
		PM ₁₀	0.92	-
		PM _{2.5}	0.92	-
		SO ₂	1.98	-
		H ₂ SO ₄ (7)	0.15	-

Emission Sources - Maximum Allowable Emission Rates

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates (5)	
			lbs/hour	TPY (4)
65B-81A through 81E	Heating Medium Heaters, A through E Annual Emission Cap	NO _x	-	4.58
		CO	-	13.94
		VOC	-	5.70
		PM	-	5.29
		PM ₁₀	-	5.29
		PM _{2.5}	-	5.29
		SO ₂	-	11.33
		H ₂ SO ₄ (7)	-	0.87
69B-81A	Heating Medium Heater 69A	NO _x	0.32	-
		CO	0.49	-
		VOC	0.25	-
		PM	0.92	-
		PM ₁₀	0.92	-
		PM _{2.5}	0.92	-
		SO ₂	1.98	-
		H ₂ SO ₄ (7)	0.15	-
NH ₃	0.62	-		

Emission Sources - Maximum Allowable Emission Rates

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates (5)	
			lbs/hour	TPY (4)
69B-81B	Heating Medium Heater 69B	NO _x	0.32	-
		CO	0.49	-
		VOC	0.25	-
		PM	0.92	-
		PM ₁₀	0.92	-
		PM _{2.5}	0.92	-
		SO ₂	1.98	-
		H ₂ SO ₄ (7)	0.15	-
		NH ₃	0.62	-
69B-81C	Heating Medium Heater 69C	NO _x	0.32	-
		CO	0.49	-
		VOC	0.25	-
		PM	0.92	-
		PM ₁₀	0.92	-
		PM _{2.5}	0.92	-
		SO ₂	1.98	-
		H ₂ SO ₄ (7)	0.15	-
		NH ₃	0.62	-

Emission Sources - Maximum Allowable Emission Rates

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates (5)	
			lbs/hour	TPY (4)
69B-81A through 81C	Heating Medium Heaters, A through C Annual Emission Cap	NO _x	-	2.80
		CO	-	4.27
		VOC	-	2.18
		PM	-	8.09
		PM ₁₀	-	8.09
		PM _{2.5}	-	8.09
		SO ₂	-	17.34
		H ₂ SO ₄ (7)	-	1.33
		NH ₃	-	5.43
TO1	Amine Unit/Thermal Oxidizer 61	NO _x	0.28	1.21
		CO	2.91	12.76
		VOC	2.12	2.42
		PM	1.29	5.65
		PM ₁₀	1.29	5.65
		PM _{2.5}	1.29	5.65
		SO ₂	1.08	4.72
		H ₂ SO ₄ (7)	0.08	0.36
		H ₂ S	0.12	0.54

Emission Sources - Maximum Allowable Emission Rates

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates (5)	
			lbs/hour	TPY (4)
TO2	Amine Unit/Thermal Oxidizer 62	NO _x	0.28	1.21
		CO	2.91	12.76
		VOC	2.12	2.42
		PM	1.29	5.65
		PM ₁₀	1.29	5.65
		PM _{2.5}	1.29	5.65
		SO ₂	1.08	4.72
		H ₂ SO ₄ (7)	0.08	0.36
		H ₂ S	0.12	0.54
TO3	Amine Unit/Thermal Oxidizer 63	NO _x	0.28	1.21
		CO	2.91	12.76
		VOC	2.12	2.42
		PM	1.29	5.65
		PM ₁₀	1.29	5.65
		PM _{2.5}	1.29	5.65
		SO ₂	1.08	4.72
		H ₂ SO ₄ (7)	0.08	0.36
		H ₂ S	0.12	0.54

Emission Sources - Maximum Allowable Emission Rates

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates (5)	
			lbs/hour	TPY (4)
TO4	Amine Unit/Thermal Oxidizer 64	NO _x	0.28	1.21
		CO	2.91	12.76
		VOC	2.12	2.42
		PM	1.29	5.65
		PM ₁₀	1.29	5.65
		PM _{2.5}	1.29	5.65
		SO ₂	1.08	4.72
		H ₂ SO ₄ (7)	0.08	0.36
		H ₂ S	0.12	0.54

Emission Sources - Maximum Allowable Emission Rates

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates (5)	
			lbs/hour	TPY (4)
CT	Combustion Turbine	NO _x	8.09	30.73
		NO _x (MSS)	87.00	
		CO	9.85	37.07
		CO (MSS)	57.00	
		VOC	0.34	1.27
		VOC (MSS)	1.27	
		PM	10.00	43.80
		PM (MSS)	2.90	
		PM ₁₀	10.00	43.80
		PM ₁₀ (MSS)	2.90	
		PM _{2.5}	10.00	43.80
		PM _{2.5} (MSS)	2.90	
		SO ₂	4.08	11.98
		H ₂ SO ₄ (7)	0.43	0.73
		NH ₃	14.95	56.27
LUBVENT	Lube Oil Vent	VOC	0.05	0.22
		PM	0.05	0.22
		PM ₁₀	0.05	0.22
		PM _{2.5}	0.05	0.22
PTFFLARE	PTF Flare (Before construction of flare gas recovery and Train 4)	NO _x	149.31	39.60
		NO _x (MSS)	2010.41	
		CO	594.63	155.37
		CO (MSS)	8006.66	
		VOC	39.15	1.36

Emission Sources - Maximum Allowable Emission Rates

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates (5)	
			lbs/hour	TPY (4)
		VOC(MSS)	420.38	
		SO ₂	5.37	1.47
		SO ₂ (MSS)	52.66	
		H ₂ S	0.01	<0.01
		H ₂ S(MSS)	0.11	
		PTFFLARE	PTF Flare (Before construction of Train 4 and after construction of flare gas recovery)	NO _x
NO _x (MSS)	1861.37			
CO	1.06			19.88
CO (MSS)	7413.09			
VOC	0.05			0.22
VOC(MSS)	381.28			
SO ₂	0.01			0.23
SO ₂ (MSS)	47.30			
H ₂ S	<0.01			<0.01
H ₂ S(MSS)	0.10			
PTFFLARE	PTF Flare (After construction of Train 4 and flare gas recovery)	NO _x	0.27	5.47
		NO _x (MSS)	2037.28	
		CO	1.06	21.78
		CO (MSS)	8113.70	
		VOC	0.05	0.49
		VOC(MSS)	479.64	
		SO ₂	0.01	0.23
		SO ₂ (MSS)	47.31	
		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 (5)	
			lbs/hour	TPY (4)
PTFFWP	Fire Water Pump	H ₂ S(MSS)	0.10	
		NO _x	2.56	0.13
		CO	0.67	0.03
		VOC	0.09	<0.01
		PM	0.08	<0.01
		PM ₁₀	0.08	<0.01
		PM _{2.5}	0.08	<0.01
		SO ₂	<0.01	<0.01
PTFFWP2	Fire Water Pump Train 4	NO _x	2.56	0.13
		CO	0.67	0.03
		VOC	0.09	<0.01
		PM	0.08	<0.01
		PM ₁₀	0.08	<0.01
		PM _{2.5}	0.08	<0.01
		SO ₂	<0.01	<0.01
		H ₂ SO ₄ (7)	<0.01	<0.01
PTFEG-1	Emergency Generator (DFEJ)	NO _x	8.57	0.21
		CO	0.70	0.02
		VOC	0.13	<0.01
		PM	0.05	<0.01
		PM ₁₀	0.05	<0.01
		PM _{2.5}	0.05	<0.01
		SO ₂	<0.01	<0.01

Emission Sources - Maximum Allowable Emission Rates

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates (5)	
			lbs/hour	TPY (4)
		H ₂ SO ₄ (7)	<0.01	<0.01
PTFEG-2	Emergency Generator (DFEJ)	NO _x	8.57	0.21
		CO	0.70	0.02
		VOC	0.13	<0.01
		PM	0.05	<0.01
		PM ₁₀	0.05	<0.01
		PM _{2.5}	0.05	<0.01
		SO ₂	<0.01	<0.01
		H ₂ SO ₄ (7)	<0.01	<0.01
PTFEG-3	Emergency Generator (DFEJ)	NO _x	8.57	0.21
		CO	0.70	0.02
		VOC	0.13	<0.01
		PM	0.05	<0.01
		PM ₁₀	0.05	<0.01
		PM _{2.5}	0.05	<0.01
		SO ₂	<0.01	<0.01
		H ₂ SO ₄	<0.01	<0.01

Emission Sources - Maximum Allowable Emission Rates

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates (5)	
			lbs/hour	TPY (4)
PTFEG-4	Emergency Generator (DQFAH)	NO _x	1.38	0.03
		CO	2.00	0.05
		VOC	0.13	<0.01
		PM	0.07	<0.01
		PM ₁₀	0.07	<0.01
		PM _{2.5}	0.07	<0.01
		SO ₂	0.02	<0.01
		H ₂ SO ₄	<0.01	<0.01
		NH ₃	0.51	0.01
PTFEG-5	Emergency Generator (DQFAH)	NO _x	1.38	0.03
		CO	2.00	0.05
		VOC	0.13	<0.01
		PM	0.07	<0.01
		PM ₁₀	0.07	<0.01
		PM _{2.5}	0.07	<0.01
		SO ₂	0.02	<0.01
		H ₂ SO ₄	<0.01	<0.01
		NH ₃	0.51	0.01

Emission Sources - Maximum Allowable Emission Rates

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates (5)	
			lbs/hour	TPY (4)
PTFEG-6	Emergency Generator (DFEJ)	NO _x	8.57	0.21
		CO	0.70	0.02
		VOC	0.13	<0.01
		PM	0.05	<0.01
		PM ₁₀	0.05	<0.01
		PM _{2.5}	0.05	<0.01
		SO ₂	<0.01	<0.01
		H ₂ SO ₄	<0.01	<0.01
PTFEAC-1	Emergency Air Compressor	NO _x	1.87	0.05
		CO	1.73	0.04
		VOC	0.10	<0.01
		PM	0.10	<0.01
		PM ₁₀	0.10	<0.01
		PM _{2.5}	0.10	<0.01
		SO ₂	<0.01	<0.01
		H ₂ SO ₄	<0.01	<0.01
	NH ₃	0.14	<0.01	

Emission Sources - Maximum Allowable Emission Rates

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates (5)	
			lbs/hour	TPY (4)
PTFEAC-2	Emergency Air Compressor	NO _x	1.87	0.05
		CO	1.73	0.04
		VOC	0.10	<0.01
		PM	0.10	<0.01
		PM ₁₀	0.10	<0.01
		PM _{2.5}	0.10	<0.01
		SO ₂	<0.01	<0.01
		H ₂ SO ₄	<0.01	<0.01
		NH ₃	0.14	<0.01
FUG-TREAT	Pretreatment 1-3 VOC Fugitives (6)	VOC	1.05	4.62
		VOC (8)	1.08	4.72
		H ₂ S	<0.01	<0.01
FUG-TRN4	Pretreatment Train 4 VOC Fugitives (6)	VOC	0.35	1.54
		VOC (8)	0.39	1.71
		H ₂ S	<0.01	<0.01
FUG-CT	Pretreatment Ammonia Fugitives (6)	NH ₃	0.12	0.51
FUG-HTR	Heater Ammonia Fugitives (6)	NH ₃	0.12	0.51
67Z-97-Z1	Ammonia Loading	NH ₃	<0.01	<0.01
PTFSOT	Slop Oil Tank	VOC	<0.01	<0.01
PTFOWT	Oily Water Tank	VOC	<0.01	<0.01
PTFHMT	Heating Medium Tank	VOC	3.57	0.01
PTFSOT-T4	Slop Oil Tank	VOC	<0.01	<0.01

Emission Sources - Maximum Allowable Emission Rates

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates (5)	
			lbs/hour	TPY (4)
PTFOWT-T4	Oily Water Tank	VOC	<0.01	<0.01
PTFHMT-T4	Heating Medium Tank	VOC	3.57	0.01
67T-90	Amine Storage Tank	VOC	<0.01	<0.01
PTFFWPT-1	Diesel Firewater Pump Tank	VOC	0.01	<0.01
PTFFWPT-2	Diesel Firewater Pump Tank 2	VOC	0.01	<0.01

Emission Sources - Maximum Allowable Emission Rates

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates (5)	
			lbs/hour	TPY (4)
PTFEGT-1	Diesel Emergency Generator (DFEJ) Tank	VOC	0.01	<0.01
PTFEGT-2	Diesel Emergency Generator (DFEJ) Tank	VOC	0.01	<0.01
PTFEGT-3	Diesel Emergency Generator (DFEJ) Tank	VOC	0.01	<0.01
PTFEGT-4	Diesel Emergency Generator (DQFAH) Tank	VOC	0.01	<0.01
PTFEGT-5	Diesel Emergency Generator (DQFAH) Tank	VOC	0.01	<0.01
PTFEGT-6	Diesel Emergency Generator (DFEJ) Tank	VOC	0.01	<0.01
PTFEACT-1	Diesel Emergency Air Compressor Tank	VOC	0.01	<0.01
PTFEACT-2	Diesel Emergency Air Compressor Tank	VOC	0.01	<0.01
60K-11A	Booster Compressors Lube Oil Vent	VOC	<0.01	<0.01
		PM	<0.01	<0.01
		PM ₁₀	<0.01	<0.01
		PM _{2.5}	<0.01	<0.01

Emission Sources - Maximum Allowable Emission Rates

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates (5)	
			lbs/hour	TPY (4)
60K-11B	Booster Compressors Lube Oil Vent	VOC	<0.01	<0.01
		PM	<0.01	<0.01
		PM ₁₀	<0.01	<0.01
		PM _{2.5}	<0.01	<0.01
60K-11C	Booster Compressors Lube Oil Vent	VOC	<0.01	<0.01
		PM	<0.01	<0.01
		PM ₁₀	<0.01	<0.01
		PM _{2.5}	<0.01	<0.01

Emission Sources - Maximum Allowable Emission Rates

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates (5)	
			lbs/hour	TPY (4)
69K-11A	Booster Compressors Lube Oil Vent	VOC	<0.01	<0.01
		PM	<0.01	<0.01
		PM ₁₀	<0.01	<0.01
		PM _{2.5}	<0.01	<0.01
60K-11ATK	Lube Oil Run Down Tank	VOC	<0.01	<0.01
		PM	<0.01	<0.01
		PM ₁₀	<0.01	<0.01
		PM _{2.5}	<0.01	<0.01
60K-11BTK	Lube Oil Run Down Tank	VOC	<0.01	<0.01
		PM	<0.01	<0.01
		PM ₁₀	<0.01	<0.01
		PM _{2.5}	<0.01	<0.01
60K-11CTK	Lube Oil Run Down Tank	VOC	<0.01	<0.01
		PM	<0.01	<0.01
		PM ₁₀	<0.01	<0.01
		PM _{2.5}	<0.01	<0.01
69K-11ATK	Lube Oil Run Down Tank	VOC	<0.01	<0.01
		PM	<0.01	<0.01
		PM ₁₀	<0.01	<0.01
		PM _{2.5}	<0.01	<0.01
60K-40A	Residue Compressor Lube Oil Vent	VOC	<0.01	<0.01
		PM	<0.01	<0.01
		PM ₁₀	<0.01	<0.01
		PM _{2.5}	<0.01	<0.01

Emission Sources - Maximum Allowable Emission Rates

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates (5)	
			lbs/hour	TPY (4)
60K-40B	Residue Compressor Lube Oil Vent	VOC	<0.01	<0.01
		PM	<0.01	<0.01
		PM ₁₀	<0.01	<0.01
		PM _{2.5}	<0.01	<0.01
60K-40C	Residue Compressor Lube Oil Vent	VOC	<0.01	<0.01
		PM	<0.01	<0.01
		PM ₁₀	<0.01	<0.01
		PM _{2.5}	<0.01	<0.01
69K-40A	Residue Compressor Lube Oil Vent	VOC	<0.01	<0.01
		PM	<0.01	<0.01
		PM ₁₀	<0.01	<0.01
		PM _{2.5}	<0.01	<0.01
60K40ATK	Lube Oil Run Down Tank Vent	VOC	<0.01	<0.01
		PM	<0.01	<0.01
		PM ₁₀	<0.01	<0.01
		PM _{2.5}	<0.01	<0.01
60K40BTK	Lube Oil Run Down Tank Vent	VOC	<0.01	<0.01
		PM	<0.01	<0.01
		PM ₁₀	<0.01	<0.01
		PM _{2.5}	<0.01	<0.01
60K40CTK	Lube Oil Run Down Tank Vent	VOC	<0.01	<0.01
		PM	<0.01	<0.01
		PM ₁₀	<0.01	<0.01
		PM _{2.5}	<0.01	<0.01

Emission Sources - Maximum Allowable Emission Rates

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates (5)	
			lbs/hour	TPY (4)
69K40CTK	Lube Oil Run Down Tank Vent	VOC	<0.01	<0.01
		PM	<0.01	<0.01
		PM ₁₀	<0.01	<0.01
		PM _{2.5}	<0.01	<0.01
61K-43A	Debutanizer Overhead Compressor Lube Oil Vent	VOC	<0.01	<0.01
		PM	<0.01	<0.01
		PM ₁₀	<0.01	<0.01
		PM _{2.5}	<0.01	<0.01
61K-43B	Debutanizer Overhead Compressor Lube Oil Vent	VOC	<0.01	<0.01
		PM	<0.01	<0.01
		PM ₁₀	<0.01	<0.01
		PM _{2.5}	<0.01	<0.01
62K-43A	Debutanizer Overhead Compressor Lube Oil Vent	VOC	<0.01	<0.01
		PM	<0.01	<0.01
		PM ₁₀	<0.01	<0.01
		PM _{2.5}	<0.01	<0.01
62K-43B	Debutanizer Overhead Compressor Lube Oil Vent	VOC	<0.01	<0.01
		PM	<0.01	<0.01
		PM ₁₀	<0.01	<0.01
		PM _{2.5}	<0.01	<0.01
63K-43A	Debutanizer Overhead Compressor Lube Oil Vent	VOC	<0.01	<0.01
		PM	<0.01	<0.01
		PM ₁₀	<0.01	<0.01
		PM _{2.5}	<0.01	<0.01

Emission Sources - Maximum Allowable Emission Rates

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates (5)	
			lbs/hour	TPY (4)
63K-43B	Debutanizer Overhead Compressor Lube Oil Vent	VOC	<0.01	<0.01
		PM	<0.01	<0.01
		PM ₁₀	<0.01	<0.01
		PM _{2.5}	<0.01	<0.01
64K-43A	Debutanizer Overhead Compressor Lube Oil Vent	VOC	<0.01	<0.01
		PM	<0.01	<0.01
		PM ₁₀	<0.01	<0.01
		PM _{2.5}	<0.01	<0.01
64K-43B	Debutanizer Overhead Compressor Lube Oil Vent	VOC	<0.01	<0.01
		PM	<0.01	<0.01
		PM ₁₀	<0.01	<0.01
		PM _{2.5}	<0.01	<0.01
61K-30	Regen Gas Compressor Lube Oil Vent	VOC	<0.01	<0.01
		PM	<0.01	<0.01
		PM ₁₀	<0.01	<0.01
		PM _{2.5}	<0.01	<0.01
62K-30	Regen Gas Compressor Lube Oil Vent	VOC	<0.01	<0.01
		PM	<0.01	<0.01
		PM ₁₀	<0.01	<0.01
		PM _{2.5}	<0.01	<0.01
63K-30	Regen Gas Compressor Lube Oil Vent	VOC	<0.01	<0.01
		PM	<0.01	<0.01
		PM ₁₀	<0.01	<0.01
		PM _{2.5}	<0.01	<0.01

Emission Sources - Maximum Allowable Emission Rates

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates (5)	
			lbs/hour	TPY (4)
64K-40	Regen Gas Compressor Lube Oil Vent	VOC	<0.01	<0.01
		PM	<0.01	<0.01
		PM ₁₀	<0.01	<0.01
		PM _{2.5}	<0.01	<0.01
MSS-FUG1-3	Fugitives - Train 1- 3 Vessel Opening for Maintenance	VOC	5.05	0.01
		H ₂ S	<0.01	<0.01
MSS-FUG4	Fugitives - Train 4 Vessel Opening for Maintenance	VOC	5.05	<0.01
		H ₂ S	<0.01	<0.01
All	Sitewide Emissions	Individual HAPs	---	10.00
		Total HAPs	---	25.00

- (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) NO_x - total oxides of nitrogen
 CO - carbon monoxide
 VOC - volatile organic compounds as defined in Title 30 Texas Administrative Code § 101.1
 PM - total particulate matter, suspended in the atmosphere, including PM₁₀ and PM_{2.5}
 PM₁₀ - total particulate matter equal to or less than 10 microns in diameter, including PM_{2.5}
 PM_{2.5} - particulate matter equal to or less than 2.5 microns in diameter
 SO₂ - sulfur dioxide
 H₂SO₄ - sulfuric acid mist
 H₂S - hydrogen sulfide
 NH₃ - ammonia
 MSS - maintenance, startup, and shutdown
 HAPs - 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
- (4) Compliance with annual emission limits (tons per year) is based on a 12-month rolling period. Annual emission rates for each source include planned SS emissions.
- (5) Planned startup and shutdown (SS) lbs/hr emission for pollutants are authorized even if not specifically identified as SS.
- (6) Emission rate is an estimate and is enforceable through compliance with the applicable special condition(s) and permit application representations.
- (7) Sulfuric acid mist is a subset of PM_{2.5} emissions.
- (8) After construction of the flare gas recovery project.

Date: 12/19/25
Brooke J. Paup