FEDERAL OPERATING PERMIT

A FEDERAL OPERATING PERMIT IS HEREBY ISSUED TO
Natgasoline LLC

AUTHORIZING THE OPERATION OF
Methanol Plant
Natgasoline Methanol Plant
All Other Basic Organic Chemical Manufacturing

LOCATED AT
Jefferson County, Texas
Latitude 30° 0′ 44″ Longitude 94° 2′ 11″
Regulated Entity Number: RN106586795

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: O3963 Issuance Date: _____

_____
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 65, Subpart D as identified in the attached Applicable Requirements Summary table are subject to 30 TAC Chapter 113, Subchapter E, § 113.3030 which incorporates the 40 CFR Part 65 Subpart by reference.

F. Emission units subject to 40 CFR Part 63, Subparts F, G, H, DDDDD or ZZZZ as identified in the attached Applicable Requirements Summary table are subject to 30 TAC Chapter 113, Subchapter C, §113.110, §113.120, §113.130, §113.1130 or §113.1090, respectively, which incorporate the 40 CFR Part 63 Subparts by reference.

2. The permit holder shall comply with the following sections of 30 TAC Chapter 101 (General Air Quality Rules):

A. Title 30 TAC § 101.1 (relating to Definitions), insofar as the terms defined in this section are used to define the terms used in other applicable requirements

B. Title 30 TAC § 101.3 (relating to Circumvention)

C. Title 30 TAC § 101.8 (relating to Sampling), if such action has been requested by the TCEQ

D. Title 30 TAC § 101.9 (relating to Sampling Ports), if such action has been requested by the TCEQ

E. Title 30 TAC § 101.10 (relating to Emissions Inventory Requirements)

F. Title 30 TAC § 101.201 (relating to Emission Event Reporting and Recordkeeping Requirements)

G. Title 30 TAC § 101.211 (relating to Scheduled Maintenance, Start-up, and Shutdown Reporting and Recordkeeping Requirements)

H. Title 30 TAC § 101.221 (relating to Operational Requirements)

I. Title 30 TAC § 101.222 (relating to Demonstrations)

J. Title 30 TAC § 101.223 (relating to Actions to Reduce Excessive Emissions)

3. Permit holder shall comply with the following requirements of 30 TAC Chapter 111:

A. Visible emissions from stationary vents with a flow rate of less than 100,000 actual cubic feet per minute and constructed after January 31, 1972 that are not listed in the Applicable Requirements Summary attachment for 30 TAC Chapter 111, Subchapter A, Division 1, shall not exceed 20% opacity averaged over a six-minute period. The permit holder shall comply with the following requirements for stationary vents at the site subject to this standard:

(i) Title 30 TAC § 111.111(a)(1)(B) (relating to Requirements for Specified Sources)

(ii) Title 30 TAC § 111.111(a)(1)(E)

(iii) Title 30 TAC § 111.111(a)(1)(F)(i), (ii), (iii), or (iv)

(iv) For emission units with vent emissions subject to 30 TAC § 111.111(a)(1)(B), complying with 30 TAC § 111.111(a)(1)(F)(ii), (iii), or (iv), and capable of producing visible emissions from, but not limited to, particulate matter, acid gases

and NO_x, the permit holder shall also comply with the following periodic monitoring requirements for the purpose of annual compliance certification under 30 TAC § 122.146. These periodic monitoring requirements do not apply to vents that are not capable of producing visible emissions such as vents that emit only colorless VOCs; vents from non-fuming liquids; vents that provide passive ventilation, such as plumbing vents; or vent emissions from any other source that does not obstruct the transmission of light. Vents, as specified in the "Applicable Requirements Summary" attachment, that are subject to the emission limitation of 30 TAC § 111.111(a)(1)(B) are not subject to the following periodic monitoring requirements:

(1) An observation of stationary vents from emission units in operation shall be conducted at least once during each calendar quarter unless the emission unit is not operating for the entire quarter.

(2) For stationary vents from a combustion source, if an alternative to the normally fired fuel is fired for a period greater than or equal to 24 consecutive hours, the permit holder shall conduct an observation of the stationary vent for each such period to determine if visible emissions are present. If such period is greater than 3 months, observations shall be conducted once during each quarter. Supplementing the normally fired fuel with natural gas or fuel gas to increase the net heating value to the minimum required value does not constitute creation of an alternative fuel.

(3) Records of all observations shall be maintained.

(4) Visible emissions observations of emission units operated during daylight hours shall be conducted no earlier than one hour after sunrise and no later than one hour before sunset. Visible emissions observations of emission units operated only at night must be made with additional lighting and the temporary installation of contrasting backgrounds. Visible emissions observations shall be made during times when the activities described in 30 TAC § 111.111(a)(1)(E) are not taking place. Visible emissions shall be determined with each stationary vent in clear view of the observer. The observer shall be at least 15 feet, but not more than 0.25 mile, away from each stationary vent during the observation. For outdoor locations, the observer shall select a position where the sun is not directly in the observer's eyes. When condensed water vapor is present within the plume, as it emerges from the emissions outlet, observations must be made beyond the point in the plume at which condensed water vapor is no longer visible. When water vapor within the plume condenses and becomes visible at a distance from the emissions outlet, the observation shall be evaluated at the outlet prior to condensation of water vapor. A certified opacity reader is not required for visible emissions observations.

(5) Compliance Certification:

(a) If visible emissions are not present during the observation, the RO may certify that the source is in compliance with the applicable opacity requirement in 30 TAC § 111.111(a)(1) and (a)(1)(B).

(b) However, if visible emissions are present during the observation, the permit holder shall either list this occurrence as a deviation

on the next deviation report as required under 30 TAC § 122.145(2) or conduct the appropriate opacity test specified in 30 TAC § 111.111(a)(1)(F) as soon as practicable, but no later than 24 hours after observing visible emissions to determine if the source is in compliance with the opacity requirements. If an opacity test is performed and the source is determined to be in compliance, the RO may certify that the source is in compliance with the applicable opacity requirement. However, if an opacity test is performed and the source is determined to be out of compliance, the permit holder shall list this occurrence as a deviation on the next deviation report as required under 30 TAC § 122.145(2). The opacity test must be performed by a certified opacity reader.

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

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

(i) Title 30 TAC § 111.111(a)(7)(A) (relating to Requirements for Specified Sources)

(ii) Title 30 TAC § 111.111(a)(7)(B)(i) or (ii)

(iii) For a building containing an air emission source, enclosed facility, or other structure containing or associated with an air emission source subject to 30 TAC § 111.111(a)(7)(A), complying with 30 TAC § 111.111(a)(7)(B)(i) or (ii), and capable of producing visible emissions from, but not limited to, particulate matter, acid gases and NO_x, the permit holder shall also comply with the following periodic monitoring requirements for the purpose of annual compliance certification under 30 TAC § 122.146:

(1) An observation of visible emissions from a building containing an air emission source, enclosed facility, or other structure containing or associated with an air emission source which is required to comply with 30 TAC § 111.111(a)(7)(A) shall be conducted at least once during each calendar quarter unless the air emission source or enclosed facility is not operating for the entire quarter.

(2) Records of all observations shall be maintained.

(3) Visible emissions observations of air emission sources or enclosed facilities operated during daylight hours shall be conducted no earlier than one hour after sunrise and no later than one hour before sunset. Visible emissions observations of air emission sources or enclosed facilities operated only at night must be made with additional lighting and the temporary installation of contrasting backgrounds. Visible emissions shall be determined with each emissions outlet in clear view of the observer. The observer shall be at least 15 feet, but not more than 0.25 mile, away from each emissions outlet during the observation. For outdoor locations, the observer shall select a position where the sun is not directly in the observer's eyes. When condensed water vapor is present within the plume, as it emerges from the emissions outlet,

observations must be made beyond the point in the plume at which condensed water vapor is no longer visible. When water vapor within the plume condenses and becomes visible at a distance from the emissions outlet, the observation shall be evaluated at the outlet prior to condensation of water vapor. A certified opacity reader is not required for visible emissions observations.

(4) Compliance Certification:

(a) If visible emissions are not present during the observation, the RO may certify that the source is in compliance with the applicable opacity requirement in 30 TAC § 111.111(a)(7) and (a)(7)(A).

(b) However, if visible emissions are present during the observation, the permit holder shall either list this occurrence as a deviation on the next deviation report as required under 30 TAC § 122.145(2) or conduct the appropriate opacity test specified in 30 TAC § 111.111(a)(7)(B) as soon as practicable, but no later than 24 hours after observing visible emissions to determine if the source is in compliance with the opacity requirements. If an opacity test is performed and the source is determined to be in compliance, the RO may certify that the source is in compliance with the applicable opacity requirement. However, if an opacity test is performed and the source is determined to be out of compliance, the permit holder shall list this occurrence as a deviation on the next deviation report as required under 30 TAC § 122.145(2). The opacity test must be performed by a certified opacity reader.

C. 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.

D. For emission units with contributions from uncombined water, the permit holder shall comply with the requirements of 30 TAC § 111.111(b).

E. 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(a)(1).

5. For industrial wastewater specified in 30 TAC Chapter 115, Subchapter B, the permit holder shall comply with the following requirements:

   A. Title 30 TAC § 115.145 (relating to Approved Test Methods)

   B. Title 30 TAC § 115.146 (relating to Recordkeeping Requirements)

   C. Title 30 TAC § 115.147(1) (relating to Exemptions)

   D. Title 30 TAC § 115.148 (relating to Determination of Wastewater Characteristics)

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

   A. Title 40 CFR § 60.7 (relating to Notification and Recordkeeping)

   B. Title 40 CFR § 60.8 (relating to Performance Tests)

   C. Title 40 CFR § 60.11 (relating to Compliance with Standards and Maintenance Requirements)

   D. Title 40 CFR § 60.12 (relating to Circumvention)

   E. Title 40 CFR § 60.13 (relating to Monitoring Requirements)

   F. Title 40 CFR § 60.14 (relating to Modification)

   G. Title 40 CFR § 60.15 (relating to Reconstruction)

   H. Title 40 CFR § 60.19 (relating to General Notification and Reporting Requirements)

7. The permit holder shall comply with the following requirements for units subject to any subpart of 40 CFR Part 61, unless otherwise stated in the applicable subpart:

   A. Title 40 CFR § 61.05 (relating to Prohibited Activities)

   B. Title 40 CFR § 61.07 (relating to Application for Approval of Construction or Modification)

   C. Title 40 CFR § 61.09 (relating to Notification of Start-up)

   D. Title 40 CFR § 61.10 (relating to Source Reporting and Request Waiver)

   E. Title 40 CFR § 61.12 (relating to Compliance with Standards and Maintenance Requirements)

   F. Title 40 CFR § 61.13 (relating to Emissions Tests and Waiver of Emission Tests)

   G. Title 40 CFR § 61.14 (relating to Monitoring Requirements)

   H. Title 40 CFR § 61.15 (relating to Modification)

   I. Title 40 CFR § 61.19 (relating to Circumvention)

8. 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.

9. For the chemical manufacturing process specified in 40 CFR Part 63, Subpart F, the permit holder shall comply with 40 CFR § 63.103(a) (relating to General Compliance, Reporting, and Recordkeeping Provisions) (Title 30 TAC Chapter 113, Subchapter C, § 113.110 incorporated by reference).

10. For the chemical manufacturing facilities with a 40 CFR Part 63, Subpart G Group 2 wastewater stream, the permit holder shall comply with (Title 30 TAC Chapter 113, Subchapter C, § 113.120 incorporated by reference):

    A. Title 40 CFR § 63.132(b), (b)(1), (b)(1)(i), (b)(2), and (b)(2)(i) (relating to Process Wastewater Provisions - General)

    B. Title 40 CFR § 63.146(b)(1) (relating to Process Wastewater Provisions - Reporting)

    C. Title 40 CFR § 63.147(b)(8) (relating to Process Wastewater Provisions - Recordkeeping)

11. For the chemical manufacturing facilities subject to leak detection requirements in 40 CFR Part 63, Subpart G, the permit holder shall comply with the following requirements (Title 30 TAC Chapter 113, Subchapter C, § 113.120 incorporated by reference):

    A. General Leak Detection Requirements:

        (i) Title 40 CFR § 63.148(d)(1) - (3), and (e) (relating to Leak Inspection Provisions)

        (ii) Title 40 CFR § 63.148(c), (g), (g)(2), (h), and (h)(2) (relating to Leak Inspection Provisions), for monitoring and testing requirements

        (iii) Title 40 CFR §§ 63.148(g)(2), (h)(2), (i)(1) - (2), (i)(4)(i) - (viii), (i)(5), and 63.152(a)(1) - (5), for recordkeeping requirements

        (iv) Title 40 CFR §§ 63.148(j), 63.151(a)(6)(i) - (iii), (b)(1) - (2), (j)(1) - (3), 63.152(a)(1) - (5), (b), (b)(1)(i) - (ii), and (b)(4), for reporting requirements

    B. For closed vent system or vapor collection systems constructed of hard piping:

        (i) Title 40 CFR § 63.148(b)(1)(ii) (relating to Leak Inspection Provisions), for monitoring and testing requirements

        (ii) Title 40 CFR § 63.148(i)(6) (relating to Leak Inspection Provisions), for recordkeeping requirements

12. The permit holder shall comply with certified registrations submitted to the TCEQ for purposes of establishing federally enforceable emission limits. A copy of the certified registration shall be maintained with the permit. Records sufficient to demonstrate compliance with the established limits shall be maintained. The certified registration and records demonstrating compliance shall be provided, on request, to representatives of the appropriate TCEQ regional office and any local air pollution control agency having jurisdiction over the site. The permit holder shall submit updated certified registrations when changes at the site require establishment of new emission limits. If changes result in emissions that do not remain below major source thresholds, the permit holder shall submit a revision application to codify the appropriate requirements in the permit.

13. The permit holder shall comply with the requirements of 30 TAC Chapter 113, Subchapter E, § 113.3000 for units subject to any subpart of 40 CFR Part 65, unless otherwise stated in the applicable subpart.

Additional Monitoring Requirements

14. 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. Except for emission units using a CEMS, COMS or PEMS which meets the requirements of 40 CFR § 64.3(d)(2), the permit holder shall comply with either of the following requirements for any capture system associated with the VOC control device subject to CAM. If the results of the following inspections indicate that the capture system is not working properly, the permit holder shall promptly take necessary corrective actions:

        (i) Once a year the permit holder shall inspect the capture system in compliance of CAM for leaks in accordance with 40 CFR Part 60, Appendix A, Test Method 21. Leaks shall be indicated by an instrument reading greater than or equal to 500 ppm above background or as defined by the underlying applicable requirement; or

        (ii) Once a month, the permit holder shall conduct a visual, audible, and/or olfactory inspection of the capture system in compliance of CAM to detect leaking components.

    F. 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.

15. 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

16. 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 January 14, 2025 in the application for project 36358), 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

17. 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.

18. 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).

19. The permit holder shall comply with the following requirements for Air Quality Standard Permits:

    A. Registration requirements listed in 30 TAC § 116.611, unless otherwise provided for in an Air Quality Standard Permit

    B. General Conditions listed in 30 TAC § 116.615, unless otherwise provided for in an Air Quality Standard Permit

    C. Requirements of the non-rule Air Quality Standard Permit for Pollution Control Projects

Compliance Requirements

20. 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.

21. The permit holder shall adhere to the provisions in the Compliance Schedule attachment of this permit and submit certified progress reports consistent with the schedule established under 30 TAC § 122.132(d)(4)(C) and including the information specified in 30 TAC § 122.142(d)(2). Those emission units listed in the Compliance Schedule attachment shall adhere with the requirements in the Compliance Schedule attachment until operating fully in compliance with the applicable requirements.

22. 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)

23. 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

24. 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

25. 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

26. 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)

27. 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

Schedules

Alternative Requirement

Applicable Requirements Summary

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
B-01001	PROCESS HEATERS/FURNACES	N/A	63DDDDD	40 CFR Part 63, Subpart DDDDD	No changing attributes.
B-01001FG	EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS	N/A	R5120	30 TAC Chapter 115, Vent Gas Controls	No changing attributes.
B-01001FG	DISTILLATION OPERATIONS	N/A	65-1NNN	40 CFR Part 60, Subpart NNN	No changing attributes.
B-01001FG	REACTOR	N/A	65-1RRR	40 CFR Part 60, Subpart RRR	No changing attributes.
B-01002	BOILERS/STEAM GENERATORS/STEAM GENERATING UNITS	N/A	60DB	40 CFR Part 60, Subpart Db	No changing attributes.
B-01002FG	EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS	N/A	R5120	30 TAC Chapter 115, Vent Gas Controls	No changing attributes.
B-01002FG	DISTILLATION OPERATIONS	N/A	65-2NNN	40 CFR Part 60, Subpart NNN	No changing attributes.
B-01002FG	REACTOR	N/A	65-2RRR	40 CFR Part 60, Subpart RRR	No changing attributes.
B-01002SK	EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS	N/A	R111	30 TAC Chapter 111, Visible Emissions	No changing attributes.
B-14001	BOILERS/STEAM GENERATORS/STEAM GENERATING UNITS	N/A	60DB	40 CFR Part 60, Subpart Db	No changing attributes.
B-14001	BOILERS/STEAM GENERATORS/STEAM GENERATING UNITS	N/A	63DDDDD-01	40 CFR Part 63, Subpart DDDDD	No changing attributes.
B-14001FG	EMISSION	N/A	R5120	30 TAC Chapter 115, Vent	No changing attributes.

Unit Summary

Unit/Group/ Process ID No.	Unit Type	Group/Inclusive Units	SOP Index No.	Regulation	Requirement Driver
	POINTS/STATIONARY VENTS/PROCESS VENTS			Gas Controls	
B-14001FG	DISTILLATION OPERATIONS	N/A	65-3NNN	40 CFR Part 60, Subpart NNN	No changing attributes.
B-14001FG	REACTOR	N/A	65-3RRR	40 CFR Part 60, Subpart RRR	No changing attributes.
B-14001SK	EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS	N/A	R111	30 TAC Chapter 111, Visible Emissions	No changing attributes.
F-07501	STORAGE TANKS/VESSELS	N/A	R5112	30 TAC Chapter 115, Storage of VOCs	No changing attributes.
FUG-MEOH	FUGITIVE EMISSION UNITS	N/A	60VVA-ALL	40 CFR Part 60, Subpart VVa	No changing attributes.
FUG-MEOH	FUGITIVE EMISSION UNITS	N/A	63H-ALL	40 CFR Part 63, Subpart H	No changing attributes.
GRP-TKMEOH	STORAGE TANKS/VESSELS	TK-04001, TK-04002A, TK-04002B	R5112	30 TAC Chapter 115, Storage of VOCs	No changing attributes.
GRP-TKMEOH	STORAGE TANKS/VESSELS	TK-04001, TK-04002A, TK-04002B	63G	40 CFR Part 63, Subpart G	No changing attributes.
H-EMG	SRIC ENGINES	N/A	60IIII	40 CFR Part 60, Subpart IIII	No changing attributes.
H-EMG	SRIC ENGINES	N/A	63ZZZZ	40 CFR Part 63, Subpart ZZZZ	No changing attributes.
H-FWP1	SRIC ENGINES	N/A	60IIII	40 CFR Part 60, Subpart IIII	No changing attributes.
H-FWP1	SRIC ENGINES	N/A	63ZZZZ	40 CFR Part 63, Subpart ZZZZ	No changing attributes.
H-FWP2	SRIC ENGINES	N/A	60IIII	40 CFR Part 60, Subpart IIII	No changing attributes.
H-FWP2	SRIC ENGINES	N/A	63ZZZZ	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	
PRO-MEOH	CHEMICAL MANUFACTURING PROCESS	N/A	63F	40 CFR Part 63, Subpart F	No changing attributes.
S-10001	FLARES	N/A	R1111	30 TAC Chapter 111, Visible Emissions	No changing attributes.
S-10001	FLARES	N/A	60A	40 CFR Part 60, Subpart A	No changing attributes.
S-10001	FLARES	N/A	63A	40 CFR Part 63, Subpart A	No changing attributes.
S-10001VT	EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS	N/A	R5120	30 TAC Chapter 115, Vent Gas Controls	No changing attributes.
S-10001VT	EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS	N/A	63G	40 CFR Part 63, Subpart G	No changing attributes.

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
B-01001	EU	63DDDDD	112(B) HAPS	40 CFR Part 63, Subpart DDDDD	§ 63.7500(a)(1)-Table 3.1 § 63.7500(a)(1) § 63.7500(a)(3) § 63.7505(a) § 63.7540(a) [G]§ 63.7540(a)(10) § 63.7540(a)(12) § 63.7540(a)(13)	A new or existing boiler or process heater with a continuous oxygen trim system that maintains an optimum air to fuel ratio must conduct a tune-up of the boiler or process heater every 5 years as specified in § 63.7540.	§ 63.7510(g) § 63.7515(d) § 63.7525(a)(7) § 63.7540(a) [G]§ 63.7540(a)(10)	§ 63.7555(a) § 63.7555(a)(1) § 63.7560(a) § 63.7560(b) § 63.7560(c)	§ 63.7530(e) § 63.7530(f) § 63.7545(a) § 63.7545(b) § 63.7545(c) [G]§ 63.7545(e) § 63.7550(a) [G]§ 63.7550(b) [G]§ 63.7550(c) [G]§ 63.7550(h)
B-01001FG	EP	R5120	VOC	30 TAC Chapter 115, Vent Gas Controls	§ 115.122(a)(2) § 115.121(a)(2) § 115.122(a)(2)(B)	Any vent gas streams affected by §115.121(a)(2) of this title must be controlled properly with a control efficiency of at least 98% or to a VOC concentration of no more than 20 ppmv (on a dry basis corrected to 3.0% oxygen for combustion devices).	[G]§ 115.125 § 115.126(1) § 115.126(1)(C) § 115.126(2) ** See CAM Summary	§ 115.126 § 115.126(1) § 115.126(1)(C) § 115.126(2)	None
B-01001FG	EP	65-1NNN	VOC/TOC	40 CFR Part 60, Subpart NNN	§ 60.660(d)(2) § 65.142(b)(2) § 65.143(a)(1) § 65.143(a)(2) § 65.143(a)(3)(ii) § 65.149(a)(1) § 65.149(a)(2) § 65.149(a)(3) § 65.62(a) [G]§ 65.62(b) § 65.63(a)(2) § 65.63(a)(2)(i)	Owners or operators of process vents that are subject to this subpart may choose to comply with the provisions of 40 CFR part 65, subpart D, to satisfy the requirements of §§60.662 through 60.665 and 60.668.	§ 65.149(b)(2)(ii) § 65.149(c)(1) [G]§ 65.64	§ 65.163(a)(1)(ii) § 65.163(c)(1) § 65.163(c)(2) § 65.4(a) § 65.4(a)(1) § 65.4(c) § 65.4(c)(1) § 65.4(c)(3) [G]§ 65.6(b) § 65.66(a)	§ 65.165(f) § 65.166(a) § 65.166(b) § 65.166(b)(3) § 65.167(b) § 65.5(a)(1) § 65.5(a)(2) § 65.5(a)(3) § 65.5(a)(4) § 65.5(a)(6) [G]§ 65.5(b) [G]§ 65.5(c) [G]§ 65.5(d) [G]§ 65.5(e) [G]§ 65.5(f) [G]§ 65.5(g) [G]§ 65.5(h)

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]§ 65.5(i) [G]§ 65.6(c) § 65.67(a) § 65.67(b)(3)
B-01001FG	EP	65-1RRR	VOC/TOC	40 CFR Part 60, Subpart RRR	§ 60.700(d)(2) § 65.142(b)(2) § 65.143(a)(1) § 65.143(a)(2) § 65.143(a)(3)(ii) § 65.149(a)(1) § 65.149(a)(2) § 65.149(a)(3) § 65.62(a) [G]§ 65.62(b) § 65.63(a)(2) § 65.63(a)(2)(i)	Owners or operators of process vents that are subject to this subpart may choose to comply with the provisions of 40 CFR part 65, subpart D, to satisfy the requirements of §§60.702 through 60.705 and 60.708.	§ 65.149(b)(2)(ii) § 65.149(c)(1) [G]§ 65.64	§ 65.163(a)(1)(ii) § 65.163(c)(1) § 65.163(c)(2) § 65.4(a) § 65.4(a)(1) § 65.4(c) § 65.4(c)(1) § 65.4(c)(3) [G]§ 65.6(b) § 65.66(a)	§ 65.165(f) § 65.166(a) § 65.166(b) § 65.166(b)(3) § 65.167(b) § 65.5(a)(1) § 65.5(a)(2) § 65.5(a)(3) § 65.5(a)(4) § 65.5(a)(6) [G]§ 65.5(b) [G]§ 65.5(c) [G]§ 65.5(d) [G]§ 65.5(e) [G]§ 65.5(f) [G]§ 65.5(g) [G]§ 65.5(h) [G]§ 65.5(i) [G]§ 65.6(c) § 65.67(a) § 65.67(b)(3)
B-01002	EU	60DB	NO_X	40 CFR Part 60, Subpart Db	§ 60.40b(a)	The affected facility to which this subpart applies is each steam generating unit that commences construction, modification, or reconstruction after June 19, 1984, and that has a heat input capacity from fuels combusted in the steam generating unit of greater than 29 megawatts (MW) (100 million British thermal units per hour	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)
						(MMBtu/hr)).			
B-01002	EU	60DB	PM	40 CFR Part 60, Subpart Db	§ 60.40b(a)	The affected facility to which this subpart applies is each steam generating unit that commences construction, modification, or reconstruction after June 19, 1984, and that has a heat input capacity from fuels combusted in the steam generating unit of greater than 29 megawatts (MW) (100 million British thermal units per hour (MMBtu/hr)).	None	[G]§ 60.49b(d) § 60.49b(o)	§ 60.49b(a) § 60.49b(a)(1) § 60.49b(a)(3)
B-01002	EU	60DB	PM (Opacity)	40 CFR Part 60, Subpart Db	§ 60.40b(a)	The affected facility to which this subpart applies is each steam generating unit that commences construction, modification, or reconstruction after June 19, 1984, and that has a heat input capacity from fuels combusted in the steam generating unit of greater than 29 megawatts (MW) (100 million British thermal units per hour (MMBtu/hr)).	None	[G]§ 60.49b(d) § 60.49b(o)	§ 60.49b(a) § 60.49b(a)(1) § 60.49b(a)(3)
B-01002	EU	60DB	SO_2	40 CFR Part 60, Subpart Db	§ 60.42b(k)(2)	On and after the §60.8 performance test is completed, units constructed, reconstructed, or modified after February 28, 2005, firing only very low sulfur oil, gaseous fuel, a mixture of these fuels, or a mixture of these fuels with	§ 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)
						any other fuels with a potential SO2 emission rate of 140 ng/J (0.32 lb/MMBtu) heat input or less are exempt from the SO2 emissions limit in §60.42b(k)(1).			
B-01002FG	EP	R5120	VOC	30 TAC Chapter 115, Vent Gas Controls	§ 115.122(a)(2) § 115.121(a)(2) § 115.122(a)(2)(B)	Any vent gas streams affected by §115.121(a)(2) of this title must be controlled properly with a control efficiency of at least 98% or to a VOC concentration of no more than 20 ppmv (on a dry basis corrected to 3.0% oxygen for combustion devices).	[G]§ 115.125 § 115.126(1) § 115.126(1)(C) § 115.126(2) ** See CAM Summary	§ 115.126 § 115.126(1) § 115.126(1)(C) § 115.126(2)	None
B-01002FG	EP	65-2NNN	VOC/TOC	40 CFR Part 60, Subpart NNN	§ 60.660(d)(2) § 65.142(b)(2) § 65.143(a)(1) § 65.143(a)(2) § 65.143(a)(3)(ii) § 65.149(a)(1) § 65.149(a)(2) § 65.149(a)(3) § 65.62(a) [G]§ 65.62(b) § 65.63(a)(2) § 65.63(a)(2)(i)	Owners or operators of process vents that are subject to this subpart may choose to comply with the provisions of 40 CFR part 65, subpart D, to satisfy the requirements of §§60.662 through 60.665 and 60.668.	§ 65.149(b)(2)(ii) § 65.149(c)(1) [G]§ 65.64	§ 65.163(a)(1)(ii) § 65.163(c)(1) § 65.163(c)(2) § 65.4(a) § 65.4(a)(1) § 65.4(c) § 65.4(c)(1) § 65.4(c)(3) [G]§ 65.6(b) § 65.66(a)	§ 65.165(f) § 65.166(a) § 65.166(b) § 65.166(b)(3) § 65.167(b) § 65.5(a)(1) § 65.5(a)(2) § 65.5(a)(3) § 65.5(a)(4) § 65.5(a)(6) [G]§ 65.5(b) [G]§ 65.5(c) [G]§ 65.5(d) [G]§ 65.5(e) [G]§ 65.5(f) [G]§ 65.5(g) [G]§ 65.5(h) [G]§ 65.5(i) [G]§ 65.6(c) § 65.67(a)

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
									§ 65.67(b)(3)
B-01002FG	EP	65-2RRR	VOC/TOC	40 CFR Part 60, Subpart RRR	§ 60.700(d)(2) § 65.142(b)(2) § 65.143(a)(1) § 65.143(a)(2) § 65.143(a)(3)(ii) § 65.149(a)(1) § 65.149(a)(2) § 65.149(a)(3) § 65.62(a) [G]§ 65.62(b) § 65.63(a)(2) § 65.63(a)(2)(i)	Owners or operators of process vents that are subject to this subpart may choose to comply with the provisions of 40 CFR part 65, subpart D, to satisfy the requirements of §§60.702 through 60.705 and 60.708.	§ 65.149(b)(2)(ii) § 65.149(c)(1) [G]§ 65.64	§ 65.163(a)(1)(ii) § 65.163(c)(1) § 65.163(c)(2) § 65.4(a) § 65.4(a)(1) § 65.4(c) § 65.4(c)(1) § 65.4(c)(3) [G]§ 65.6(b) § 65.66(a)	§ 65.165(f) § 65.166(a) § 65.166(b) § 65.166(b)(3) § 65.167(b) § 65.5(a)(1) § 65.5(a)(2) § 65.5(a)(3) § 65.5(a)(4) § 65.5(a)(6) [G]§ 65.5(b) [G]§ 65.5(c) [G]§ 65.5(d) [G]§ 65.5(e) [G]§ 65.5(f) [G]§ 65.5(g) [G]§ 65.5(h) [G]§ 65.5(i) [G]§ 65.6(c) § 65.67(a) § 65.67(b)(3)
B-01002SK	EP	R111	Opacity	30 TAC Chapter 111, Visible Emissions	§ 111.111(a)(1)(C) § 111.111(a)(1)(E)	Visible emissions from any stationary vent shall not exceed an opacity of 15% averaged over a six minute period for any source with a total flow rate of at least 100,000 acfm unless a CEMS is installed.	[G]§ 111.111(a)(1)(F) ** See Periodic Monitoring Summary	None	None
B-14001	EU	60DB	NO_X	40 CFR Part 60, Subpart Db	§ 60.40b(a)	The affected facility to which this subpart applies is each steam generating unit that commences construction, modification, or reconstruction after June 19, 1984, and that has a heat input capacity from	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)
						fuels combusted in the steam generating unit of greater than 29 megawatts (MW) (100 million British thermal units per hour (MMBtu/hr)).			
B-14001	EU	60DB	PM	40 CFR Part 60, Subpart Db	§ 60.40b(a)	The affected facility to which this subpart applies is each steam generating unit that commences construction, modification, or reconstruction after June 19, 1984, and that has a heat input capacity from fuels combusted in the steam generating unit of greater than 29 megawatts (MW) (100 million British thermal units per hour (MMBtu/hr)).	None	[G]§ 60.49b(d) § 60.49b(o)	§ 60.49b(a) § 60.49b(a)(1) § 60.49b(a)(3)
B-14001	EU	60DB	PM (Opacity)	40 CFR Part 60, Subpart Db	§ 60.40b(a)	The affected facility to which this subpart applies is each steam generating unit that commences construction, modification, or reconstruction after June 19, 1984, and that has a heat input capacity from fuels combusted in the steam generating unit of greater than 29 megawatts (MW) (100 million British thermal units per hour (MMBtu/hr)).	None	[G]§ 60.49b(d) § 60.49b(o)	§ 60.49b(a) § 60.49b(a)(1) § 60.49b(a)(3)
B-14001	EU	60DB	SO_2	40 CFR Part 60, Subpart Db	§ 60.42b(k)(2)	On and after the §60.8 performance test is completed, units constructed, reconstructed,	§ 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)
						or modified after February 28, 2005, firing only very low sulfur oil, gaseous fuel, a mixture of these fuels, or a mixture of these fuels with any other fuels with a potential SO2 emission rate of 140 ng/J (0.32 lb/MMBtu) heat input or less are exempt from the SO2 emissions limit in §60.42b(k)(1).			
B-14001	EU	63DDDDD-01	112(B) HAPS	40 CFR Part 63, Subpart DDDDD	§ 63.7500(a)(1)-Table 3.1 § 63.7500(a)(1) § 63.7500(a)(3) § 63.7505(a) § 63.7540(a) [G]§ 63.7540(a)(10) § 63.7540(a)(12) § 63.7540(a)(13)	A new or existing boiler or process heater with a continuous oxygen trim system that maintains an optimum air to fuel ratio must conduct a tune-up of the boiler or process heater every 5 years as specified in § 63.7540.	§ 63.7510(g) § 63.7515(d) § 63.7525(a)(7) § 63.7540(a) [G]§ 63.7540(a)(10)	§ 63.7555(a) § 63.7555(a)(1) § 63.7560(a) § 63.7560(b) § 63.7560(c)	§ 63.7530(e) § 63.7530(f) § 63.7545(a) § 63.7545(b) § 63.7545(c) [G]§ 63.7545(e) § 63.7550(a) [G]§ 63.7550(b) [G]§ 63.7550(c) [G]§ 63.7550(h)
B-14001FG	EP	R5120	VOC	30 TAC Chapter 115, Vent Gas Controls	§ 115.122(a)(2) § 115.121(a)(2) § 115.122(a)(2)(B)	Any vent gas streams affected by §115.121(a)(2) of this title must be controlled properly with a control efficiency of at least 98% or to a VOC concentration of no more than 20 ppmv (on a dry basis corrected to 3.0% oxygen for combustion devices).	[G]§ 115.125 § 115.126(1) § 115.126(1)(C) § 115.126(2) ** See CAM Summary	§ 115.126 § 115.126(1) § 115.126(1)(C) § 115.126(2)	None
B-14001FG	EP	65-3NNN	VOC/TOC	40 CFR Part 60, Subpart NNN	§ 60.660(d)(2) § 65.142(b)(2) § 65.143(a)(1) § 65.143(a)(2) § 65.143(a)(3)(ii)	Owners or operators of process vents that are subject to this subpart may choose to comply with the provisions of 40 CFR part	§ 65.149(b)(2)(ii) § 65.149(c)(1) [G]§ 65.64	§ 65.163(a)(1)(ii) § 65.163(c)(1) § 65.163(c)(2) § 65.4(a) § 65.4(a)(1)	§ 65.165(f) § 65.166(a) § 65.166(b) § 65.166(b)(3) § 65.167(b)

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
					§ 65.149(a)(1) § 65.149(a)(2) § 65.149(a)(3) § 65.62(a) [G]§ 65.62(b) § 65.63(a)(2) § 65.63(a)(2)(i)	65, subpart D, to satisfy the requirements of §§60.662 through 60.665 and 60.668.		§ 65.4(c) § 65.4(c)(1) § 65.4(c)(3) [G]§ 65.6(b) § 65.66(a)	§ 65.5(a)(1) § 65.5(a)(2) § 65.5(a)(3) § 65.5(a)(4) § 65.5(a)(6) [G]§ 65.5(b) [G]§ 65.5(c) [G]§ 65.5(d) [G]§ 65.5(e) [G]§ 65.5(f) [G]§ 65.5(g) [G]§ 65.5(h) [G]§ 65.5(i) [G]§ 65.6(c) § 65.67(a) § 65.67(b)(3)
B-14001FG	EP	65-3RRR	VOC/TOC	40 CFR Part 60, Subpart RRR	§ 60.700(d)(2) § 65.142(b)(2) § 65.143(a)(1) § 65.143(a)(2) § 65.143(a)(3)(ii) § 65.149(a)(1) § 65.149(a)(2) § 65.149(a)(3) § 65.62(a) [G]§ 65.62(b) § 65.63(a)(2) § 65.63(a)(2)(i)	Owners or operators of process vents that are subject to this subpart may choose to comply with the provisions of 40 CFR part 65, subpart D, to satisfy the requirements of §§60.702 through 60.705 and 60.708.	§ 65.149(b)(2)(ii) § 65.149(c)(1) [G]§ 65.64	§ 65.163(a)(1)(ii) § 65.163(c)(1) § 65.163(c)(2) § 65.4(a) § 65.4(a)(1) § 65.4(c) § 65.4(c)(1) § 65.4(c)(3) [G]§ 65.6(b) § 65.66(a)	§ 65.165(f) § 65.166(a) § 65.166(b) § 65.166(b)(3) § 65.167(b) § 65.5(a)(1) § 65.5(a)(2) § 65.5(a)(3) § 65.5(a)(4) § 65.5(a)(6) [G]§ 65.5(b) [G]§ 65.5(c) [G]§ 65.5(d) [G]§ 65.5(e) [G]§ 65.5(f) [G]§ 65.5(g) [G]§ 65.5(h) [G]§ 65.5(i) [G]§ 65.6(c) § 65.67(a) § 65.67(b)(3)
B-14001SK	EP	R111	Opacity	30 TAC Chapter	§ 111.111(a)(1)(C)	Visible emissions from any	[G]§	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)
				111, Visible Emissions	§ 111.111(a)(1)(E)	stationary vent shall not exceed an opacity of 15% averaged over a six minute period for any source with a total flow rate of at least 100,000 acfm unless a CEMS is installed.	111.111(a)(1)(F) ** See Periodic Monitoring Summary		
F-07501	EU	R5112	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
FUG-MEOH	EU	60VVA-ALL	VOC	40 CFR Part 60, Subpart VVa	[G]§ 60.482-1a(e) § 60.482-1a(a) § 60.482-1a(b) § 60.485a(b) § 60.486a(a)(1) § 60.486a(a)(2) § 60.486a(k)	Equipment that an owner or operator designates as being in VOC service less than 300 hours (hr)/yr is excluded from the requirements of §§ 60.482-2a through 60.482-11a if it is identified as required in §60.486a(e)(6) and it meets any of the conditions specified in paragraphs (e)(1) through (3) of this section. §60.482-1a(e)(1)-(3)	[G]§ 60.485a(b)(1) § 60.485a(b)(2)	§ 60.485a(b)(2) § 60.486a(e) § 60.486a(e)(1) § 60.486a(e)(6)	None
FUG-MEOH	EU	60VVA-ALL	VOC	40 CFR Part 60, Subpart VVa	§ 60.482-1a(d) § 60.482-1a(a) § 60.482-1a(b) § 60.485a(b) § 60.486a(a)(1) § 60.486a(a)(2) § 60.486a(k)	Equipment that is in vacuum service is excluded from the requirements of §60.482-2a to §60.482-10a, if it is identified as required in §60.486a(e)(5).	[G]§ 60.485a(b)(1) § 60.485a(b)(2)	§ 60.485a(b)(2) § 60.486a(e) § 60.486a(e)(1) § 60.486a(e)(5)	None
FUG-MEOH	EU	60VVA-ALL	VOC	40 CFR Part 60, Subpart VVa	§ 60.482-7a(b) § 60.482-1a(a)	At a valve in gas vapor service if an instrument	§ 60.482-1a(f)(1) § 60.482-1a(f)(2)	§ 60.482-1a(g) § 60.485a(b)(2)	§ 60.487a(a) § 60.487a(b)

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
					§ 60.482-1a(b) § 60.482-1a(g) § 60.482-7a(a)(1) [G]§ 60.482-7a(d) [G]§ 60.482-7a(e) [G]§ 60.482-7a(f) [G]§ 60.482-7a(g) [G]§ 60.482-7a(h) § 60.482-9a(a) § 60.482-9a(b) [G]§ 60.482-9a(c) § 60.482-9a(e) § 60.482-9a(f) § 60.485a(b) § 60.485a(c) § 60.485a(c)(1) § 60.485a(f) § 60.486a(a)(1) § 60.486a(a)(2) § 60.486a(k)	reading of 500 ppm or greater is measured, a leak is detected.	[G]§ 60.482-1a(f)(3) § 60.482-1a(g) § 60.482-7a(a)(1) [G]§ 60.482-7a(a)(2) [G]§ 60.482-7a(c) § 60.482-9a(a) § 60.485a(a) [G]§ 60.485a(b)(1) § 60.485a(b)(2) § 60.485a(c)(2) [G]§ 60.485a(d) [G]§ 60.485a(e)	[G]§ 60.486a(a)(3) [G]§ 60.486a(b) [G]§ 60.486a(c) § 60.486a(e) § 60.486a(e)(1) [G]§ 60.486a(e)(2) [G]§ 60.486a(e)(4) [G]§ 60.486a(e)(8) § 60.486a(f) § 60.486a(f)(1) § 60.486a(f)(2)	§ 60.487a(b)(1) § 60.487a(b)(2) § 60.487a(c) § 60.487a(c)(1) § 60.487a(c)(2) § 60.487a(c)(2)(i) § 60.487a(c)(2)(ii) § 60.487a(c)(2)(xi) § 60.487a(c)(3) § 60.487a(c)(4) § 60.487a(e)
FUG-MEOH	EU	60VVA-ALL	VOC	40 CFR Part 60, Subpart VVa	[G]§ 60.482-2a(b)(1) § 60.482-1a(a) § 60.482-1a(b) § 60.482-1a(g) § 60.482-2a(b)(2) § 60.482-2a(b)(2)(ii) § 60.482-2a(c)(1) [G]§ 60.482-2a(c)(2) § 60.482-2a(d) [G]§ 60.482-2a(d)(1) § 60.482-2a(d)(2) § 60.482-2a(d)(3) [G]§ 60.482-2a(d)(6) [G]§ 60.482-2a(e)	The instrument reading that defines a leak in a pump in light liquid service is 5,000 parts per million (ppm) or greater for pumps handling polymerizing monomers or 2,000 ppm or greater for all other pumps, as specified in paragraphs (b)(1)(i) and (ii) of this section. §60.482-2a(b)(1)(i)-(ii)	§ 60.482-1a(f)(1) § 60.482-1a(f)(2) [G]§ 60.482-1a(f)(3) § 60.482-1a(g) § 60.482-2a(a)(1) § 60.482-2a(a)(2) § 60.482-2a(b)(2)(i) [G]§ 60.482-2a(d)(4) [G]§ 60.482-2a(d)(5) § 60.482-9a(a) § 60.485a(a) [G]§ 60.485a(b)(1) § 60.485a(b)(2) § 60.485a(c)(2) [G]§ 60.485a(d) [G]§ 60.485a(e)	§ 60.482-1a(g) § 60.485a(b)(2) [G]§ 60.486a(a)(3) [G]§ 60.486a(b) [G]§ 60.486a(c) § 60.486a(e) § 60.486a(e)(1) [G]§ 60.486a(e)(2) [G]§ 60.486a(e)(4) § 60.486a(e)(7) [G]§ 60.486a(e)(8) § 60.486a(f) § 60.486a(f)(1) [G]§ 60.486a(h)	§ 60.487a(a) § 60.487a(b) § 60.487a(b)(1) § 60.487a(b)(3) § 60.487a(c) § 60.487a(c)(1) § 60.487a(c)(2) § 60.487a(c)(2)(iii) § 60.487a(c)(2)(iv) § 60.487a(c)(2)(xi) § 60.487a(c)(3) § 60.487a(c)(4) § 60.487a(e)

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
					§ 60.482-2a(f) [G]§ 60.482-2a(g) § 60.482-2a(h) § 60.482-9a(a) § 60.482-9a(b) [G]§ 60.482-9a(d) § 60.482-9a(f) § 60.485a(b) § 60.485a(c) § 60.485a(c)(1) § 60.485a(f) § 60.486a(a)(1) § 60.486a(a)(2) § 60.486a(k)				
FUG-MEOH	EU	60VVA-ALL	VOC	40 CFR Part 60, Subpart VVa	§ 60.482-3a(a) § 60.482-1a(a) § 60.482-1a(b) § 60.482-1a(g) [G]§ 60.482-3a(b) § 60.482-3a(c) § 60.482-3a(d) § 60.482-3a(e)(2) § 60.482-3a(f) [G]§ 60.482-3a(g) § 60.482-3a(h) [G]§ 60.482-3a(i) § 60.482-3a(j) § 60.482-9a(a) § 60.482-9a(b) § 60.485a(b) § 60.485a(c) § 60.485a(c)(1) § 60.485a(f) § 60.486a(a)(1) § 60.486a(a)(2) § 60.486a(k)	Each compressor shall be equipped with a seal system that includes a barrier fluid system and that prevents leakage of VOC to the atmosphere, except as provided in §60.482–3a(c) and paragraphs (h), (i), and (j) of this section.	§ 60.482-1a(g) § 60.482-3a(e)(1) § 60.482-9a(a) § 60.485a(a) [G]§ 60.485a(b)(1) § 60.485a(b)(2) § 60.485a(c)(2) [G]§ 60.485a(d)	§ 60.482-1a(g) § 60.485a(b)(2) [G]§ 60.486a(a)(3) [G]§ 60.486a(b) [G]§ 60.486a(c) § 60.486a(e) § 60.486a(e)(1) [G]§ 60.486a(e)(2) [G]§ 60.486a(e)(4) [G]§ 60.486a(e)(8) [G]§ 60.486a(h)	§ 60.487a(a) § 60.487a(b) § 60.487a(b)(1) § 60.487a(b)(4) § 60.487a(c) § 60.487a(c)(1) § 60.487a(c)(2) § 60.487a(c)(2)(v) § 60.487a(c)(2)(vi) § 60.487a(c)(2)(xi) § 60.487a(c)(3) § 60.487a(c)(4) § 60.487a(e)
FUG-MEOH	EU	60VVA-ALL	VOC	40 CFR Part 60, Subpart VVa	§ 60.482-8a(b) § 60.482-1a(a)	At a pressure relief device in light liquid or heavy liquid	§ 60.482-1a(g) § 60.482-8a(a)(1)	§ 60.482-1a(g) § 60.485a(b)(2)	§ 60.487a(a) § 60.487a(b)

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
					§ 60.482-1a(b) § 60.482-1a(g) [G]§ 60.482-2a(c)(2) [G]§ 60.482-7a(e) § 60.482-8a(a) § 60.482-8a(a)(2) [G]§ 60.482-8a(c) § 60.482-8a(d) § 60.482-9a(a) § 60.482-9a(b) § 60.485a(b) § 60.485a(f) § 60.486a(a)(1) § 60.486a(a)(2) § 60.486a(k)	service, if an instrument reading of 10,000 ppm or greater is measured, a leak is detected.	§ 60.482-9a(a) § 60.485a(a) [G]§ 60.485a(b)(1) § 60.485a(b)(2) [G]§ 60.485a(d) [G]§ 60.485a(e)	[G]§ 60.486a(a)(3) [G]§ 60.486a(b) [G]§ 60.486a(c) § 60.486a(e) § 60.486a(e)(1) [G]§ 60.486a(e)(8)	§ 60.487a(b)(1) § 60.487a(c) § 60.487a(c)(1) § 60.487a(c)(2) § 60.487a(c)(2)(xi) § 60.487a(c)(3) § 60.487a(c)(4) § 60.487a(e)
FUG-MEOH	EU	60VVA-ALL	VOC	40 CFR Part 60, Subpart VVa	§ 60.482-4a(a) § 60.482-1a(a) § 60.482-1a(b) § 60.482-1a(g) § 60.482-4a(b)(1) § 60.482-4a(b)(2) § 60.482-4a(c) § 60.482-4a(d)(1) § 60.482-4a(d)(2) § 60.482-9a(a) § 60.482-9a(b) § 60.485a(b) § 60.485a(c) § 60.485a(c)(1) § 60.485a(f) § 60.486a(a)(1) § 60.486a(a)(2) § 60.486a(k)	Except during pressure releases, each pressure relief device in gas/vapor service shall be operated with no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, as determined by the methods specified in §60.485a(c).	§ 60.482-1a(g) § 60.482-4a(b)(2) § 60.482-9a(a) § 60.485a(a) [G]§ 60.485a(b)(1) § 60.485a(b)(2) § 60.485a(c)(2) [G]§ 60.485a(d)	§ 60.482-1a(g) § 60.485a(b)(2) § 60.486a(e) § 60.486a(e)(1) § 60.486a(e)(10) § 60.486a(e)(3) [G]§ 60.486a(e)(4) [G]§ 60.486a(e)(8)	§ 60.487a(a) § 60.487a(b) § 60.487a(b)(1) § 60.487a(c) § 60.487a(c)(1) § 60.487a(c)(2) § 60.487a(c)(2)(xi) § 60.487a(c)(3) § 60.487a(c)(4) § 60.487a(e)
FUG-MEOH	EU	60VVA-ALL	VOC	40 CFR Part 60, Subpart VVa	§ 60.482-5a(a) § 60.482-1a(a) § 60.482-1a(b) § 60.482-1a(g)	Each sampling connection system shall be equipped with a closed-purge, closed-loop, or closed-vent system,	§ 60.482-1a(g) § 60.485a(a) [G]§ 60.485a(b)(1) § 60.485a(b)(2)	§ 60.482-1a(g) § 60.485a(b)(2) § 60.486a(e) § 60.486a(e)(1)	§ 60.487a(a) § 60.487a(b) § 60.487a(b)(1) § 60.487a(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]§ 60.482-5a(b) § 60.482-5a(c) § 60.485a(b) § 60.485a(f) § 60.486a(a)(1) § 60.486a(a)(2) § 60.486a(k)	except as provided in §60.482–1a(c) and paragraph (c) of this section.	[G]§ 60.485a(d)	[G]§ 60.486a(e)(8)	§ 60.487a(c)(1) § 60.487a(c)(2) § 60.487a(c)(2)(xi) § 60.487a(c)(3) § 60.487a(c)(4) § 60.487a(e)
FUG-MEOH	EU	60VVA-ALL	VOC	40 CFR Part 60, Subpart VVa	§ 60.482-6a(a)(1) § 60.482-1a(a) § 60.482-1a(b) § 60.482-1a(g) § 60.482-6a(a)(2) § 60.482-6a(b) § 60.482-6a(c) § 60.482-6a(d) § 60.482-6a(e) § 60.485a(b) § 60.485a(f) § 60.486a(a)(1) § 60.486a(a)(2) § 60.486a(k)	Each open-ended valve or line shall be equipped with a cap, blind flange, plug, or a second valve, except as provided in §60.482–1a(c) and paragraphs (d) and (e) of this section.	§ 60.482-1a(g) § 60.485a(a) [G]§ 60.485a(b)(1) § 60.485a(b)(2) [G]§ 60.485a(d)	§ 60.482-1a(g) § 60.485a(b)(2) § 60.486a(e) § 60.486a(e)(1) [G]§ 60.486a(e)(8)	§ 60.487a(a) § 60.487a(b) § 60.487a(b)(1) § 60.487a(c) § 60.487a(c)(1) § 60.487a(c)(2) § 60.487a(c)(2)(xi) § 60.487a(c)(3) § 60.487a(c)(4) § 60.487a(e)
FUG-MEOH	EU	60VVA-ALL	VOC	40 CFR Part 60, Subpart VVa	§ 60.482-8a(b) § 60.482-1a(a) § 60.482-1a(b) § 60.482-1a(g) [G]§ 60.482-2a(c)(2) [G]§ 60.482-7a(e) § 60.482-8a(a) § 60.482-8a(a)(2) [G]§ 60.482-8a(c) § 60.482-8a(d) § 60.482-9a(a) § 60.482-9a(b) [G]§ 60.482-9a(c) § 60.482-9a(f) § 60.485a(b) § 60.485a(f)	At a connector in heavy liquid service, if an instrument reading of 10,000 ppm or greater is measured, a leak is detected.	§ 60.482-1a(g) § 60.482-8a(a)(1) § 60.482-9a(a) § 60.485a(a) [G]§ 60.485a(b)(1) § 60.485a(b)(2) [G]§ 60.485a(d)	§ 60.482-1a(g) § 60.485a(b)(2) [G]§ 60.486a(a)(3) [G]§ 60.486a(b) [G]§ 60.486a(c) § 60.486a(e) § 60.486a(e)(1) [G]§ 60.486a(e)(8)	§ 60.487a(a) § 60.487a(b) § 60.487a(b)(1) § 60.487a(c) § 60.487a(c)(1) § 60.487a(c)(2) § 60.487a(c)(2)(xi) § 60.487a(c)(3) § 60.487a(c)(4) § 60.487a(e)

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
					§ 60.486a(a)(1) § 60.486a(a)(2) § 60.486a(k)				
FUG-MEOH	EU	60VVA-ALL	VOC	40 CFR Part 60, Subpart VVa	§ 60.482-11a(b)(2) § 60.482-11a(b)(3) § 60.482-11a(d) [G]§ 60.482-11a(e) [G]§ 60.482-11a(f)(1) § 60.482-11a(f)(2) § 60.482-11a(g) § 60.482-9a(a) § 60.482-9a(b) [G]§ 60.482-9a(c) § 60.482-9a(f) § 60.485a(b) § 60.486a(a)(1) § 60.486a(a)(2) § 60.486a(k)	If an instrument reading greater than or equal to 500 ppm is measured in connectors in gas and vapor and light liquid service, a leak is detected.	§ 60.482-11a(a) § 60.482-11a(b) § 60.482-11a(b)(1) § 60.482-11a(b)(3) § 60.482-11a(b)(3)(i) § 60.482-11a(b)(3)(ii) [G]§ 60.482-11a(b)(3)(iii) § 60.482-11a(b)(3)(iv) § 60.482-11a(c) § 60.482-9a(a) § 60.485a(a) [G]§ 60.485a(b)(1) § 60.485a(b)(2) [G]§ 60.485a(d) [G]§ 60.485a(e)	§ 60.482-11a(b)(3)(v) § 60.485a(b)(2) [G]§ 60.486a(a)(3) [G]§ 60.486a(b) [G]§ 60.486a(c) § 60.486a(e) § 60.486a(e)(1) [G]§ 60.486a(e)(8) § 60.486a(e)(9) § 60.486a(f) § 60.486a(f)(1)	§ 60.487a(a) § 60.487a(b) § 60.487a(b)(1) § 60.487a(b)(5) § 60.487a(c) § 60.487a(c)(1) § 60.487a(c)(2) § 60.487a(c)(2)(i) § 60.487a(c)(2)(vii) § 60.487a(c)(2)(viii) § 60.487a(c)(2)(xi) § 60.487a(c)(3) § 60.487a(c)(4) § 60.487a(e)
FUG-MEOH	EU	60VVA-ALL	VOC	40 CFR Part 60, Subpart VVa	§ 60.482-8a(b) § 60.482-1a(a) § 60.482-1a(b) § 60.482-1a(g) [G]§ 60.482-2a(c)(2) [G]§ 60.482-7a(e) § 60.482-8a(a) § 60.482-8a(a)(2) [G]§ 60.482-8a(c) § 60.482-8a(d) § 60.482-9a(a) § 60.482-9a(b) [G]§ 60.482-9a(d) § 60.482-9a(f) § 60.485a(b)	At a pump in heavy liquid service, if an instrument reading of 10,000 ppm or greater is measured, a leak is detected.	§ 60.482-1a(g) § 60.482-8a(a)(1) § 60.482-9a(a) § 60.485a(a) [G]§ 60.485a(b)(1) § 60.485a(b)(2) [G]§ 60.485a(d)	§ 60.482-1a(g) § 60.485a(b)(2) [G]§ 60.486a(a)(3) [G]§ 60.486a(b) [G]§ 60.486a(c) § 60.486a(e) § 60.486a(e)(1) [G]§ 60.486a(e)(8)	§ 60.487a(a) § 60.487a(b) § 60.487a(b)(1) § 60.487a(c) § 60.487a(c)(1) § 60.487a(c)(2) § 60.487a(c)(2)(xi) § 60.487a(c)(3) § 60.487a(c)(4) § 60.487a(e)

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
					§ 60.485a(f) § 60.486a(a)(1) § 60.486a(a)(2) § 60.486a(k)				
FUG-MEOH	EU	60VVA-ALL	VOC	40 CFR Part 60, Subpart VVa	§ 60.482-8a(b) § 60.482-1a(a) § 60.482-1a(b) § 60.482-1a(g) [G]§ 60.482-2a(c)(2) [G]§ 60.482-7a(e) § 60.482-8a(a) § 60.482-8a(a)(2) [G]§ 60.482-8a(c) § 60.482-8a(d) § 60.482-9a(a) § 60.482-9a(b) [G]§ 60.482-9a(c) § 60.482-9a(e) § 60.482-9a(f) § 60.485a(b) § 60.485a(f) § 60.486a(a)(1) § 60.486a(a)(2) § 60.486a(k)	At a valve in heavy liquid service, if an instrument reading of 10,000 ppm or greater is measured, a leak is detected.	§ 60.482-1a(g) § 60.482-8a(a)(1) § 60.482-9a(a) § 60.485a(a) [G]§ 60.485a(b)(1) § 60.485a(b)(2) [G]§ 60.485a(d)	§ 60.482-1a(g) § 60.485a(b)(2) [G]§ 60.486a(a)(3) [G]§ 60.486a(b) [G]§ 60.486a(c) § 60.486a(e) § 60.486a(e)(1) [G]§ 60.486a(e)(8)	§ 60.487a(a) § 60.487a(b) § 60.487a(b)(1) § 60.487a(c) § 60.487a(c)(1) § 60.487a(c)(2) § 60.487a(c)(2)(xi) § 60.487a(c)(3) § 60.487a(c)(4) § 60.487a(e)
FUG-MEOH	EU	63H-ALL	112(B) HAPS	40 CFR Part 63, Subpart H	§ 63.162(e) § 63.162(a) § 63.162(c) [G]§ 63.162(g) § 63.162(h)	Equipment that is in organic HAP service less than 300 hours per year is excluded from the requirements of §§63.163 - 63.174 and §63.178 if it is identified as required in §63.181(j).	[G]§ 63.180(d)	§ 63.181(a) [G]§ 63.181(b) § 63.181(c) [G]§ 63.181(i) § 63.181(j)	[G]§ 63.182(a) [G]§ 63.182(b)
FUG-MEOH	EU	63H-ALL	112(B) HAPS	40 CFR Part 63, Subpart H	[G]§ 63.164 § 63.162(a) § 63.162(c) [G]§ 63.162(f) [G]§ 63.162(g) § 63.162(h)	Standards: Compressors. §63.164(a)-(i)	[G]§ 63.164 [G]§ 63.180(b) [G]§ 63.180(c) [G]§ 63.180(d)	§ 63.181(a) [G]§ 63.181(b) § 63.181(c) [G]§ 63.181(d) [G]§ 63.181(f)	[G]§ 63.182(a) [G]§ 63.182(b) § 63.182(c) [G]§ 63.182(c)(1) § 63.182(c)(4) [G]§ 63.182(d)

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
					[G]§ 63.171				
FUG-MEOH	EU	63H-ALL	112(B) HAPS	40 CFR Part 63, Subpart H	[G]§ 63.165 § 63.162(a) § 63.162(c) [G]§ 63.162(g) § 63.162(h) [G]§ 63.171	Standards: Pressure relief device in gas/vapor service. §63.165(a)-(d)	[G]§ 63.165 [G]§ 63.180(b) [G]§ 63.180(c) [G]§ 63.180(d)	§ 63.181(a) [G]§ 63.181(b) § 63.181(c) [G]§ 63.181(f)	[G]§ 63.182(a) [G]§ 63.182(b) § 63.182(c) [G]§ 63.182(c)(1) § 63.182(c)(4) [G]§ 63.182(d)
FUG-MEOH	EU	63H-ALL	112(B) HAPS	40 CFR Part 63, Subpart H	[G]§ 63.166 § 63.162(a) § 63.162(c) [G]§ 63.162(g) § 63.162(h) [G]§ 63.171	Standards: Sampling connection systems. §63.166(a)-(c)	[G]§ 63.180(b) [G]§ 63.180(d)	§ 63.181(a) [G]§ 63.181(b) § 63.181(c) [G]§ 63.181(i)	[G]§ 63.182(a) [G]§ 63.182(b) § 63.182(c) [G]§ 63.182(c)(1) § 63.182(c)(4) [G]§ 63.182(d)
FUG-MEOH	EU	63H-ALL	112(B) HAPS	40 CFR Part 63, Subpart H	[G]§ 63.169 § 63.162(a) § 63.162(c) [G]§ 63.162(f) [G]§ 63.162(g) § 63.162(h) [G]§ 63.171	Standards: Pumps in heavy liquid service. §63.169(a)-(d)	[G]§ 63.169 [G]§ 63.180(b) [G]§ 63.180(d)	§ 63.181(a) [G]§ 63.181(b) § 63.181(c) [G]§ 63.181(d) [G]§ 63.181(i)	[G]§ 63.182(a) [G]§ 63.182(b) § 63.182(c) [G]§ 63.182(c)(1) § 63.182(c)(4) [G]§ 63.182(d)
FUG-MEOH	EU	63H-ALL	112(B) HAPS	40 CFR Part 63, Subpart H	[G]§ 63.169 § 63.162(a) § 63.162(c) [G]§ 63.162(f) [G]§ 63.162(g) § 63.162(h) [G]§ 63.171	Standards: Valves in heavy liquid service. §63.169(a)-(d)	[G]§ 63.169 [G]§ 63.180(b) [G]§ 63.180(d)	§ 63.181(a) [G]§ 63.181(b) § 63.181(c) [G]§ 63.181(d) [G]§ 63.181(i)	[G]§ 63.182(a) [G]§ 63.182(b) § 63.182(c) [G]§ 63.182(c)(1) § 63.182(c)(4) [G]§ 63.182(d)
FUG-MEOH	EU	63H-ALL	112(B) HAPS	40 CFR Part 63, Subpart H	[G]§ 63.169 § 63.162(a) § 63.162(c) [G]§ 63.162(f) [G]§ 63.162(g) § 63.162(h) [G]§ 63.171	Standards: Connectors in heavy liquid service. §63.169(a)-(d)	[G]§ 63.169 [G]§ 63.180(b) [G]§ 63.180(d)	§ 63.181(a) [G]§ 63.181(b) § 63.181(c) [G]§ 63.181(d) [G]§ 63.181(i)	[G]§ 63.182(a) [G]§ 63.182(b) § 63.182(c) [G]§ 63.182(c)(1) § 63.182(c)(4) [G]§ 63.182(d)
FUG-MEOH	EU	63H-ALL	112(B)	40 CFR Part 63,	[G]§ 63.169	Standards: Agitators in	[G]§ 63.169	§ 63.181(a)	[G]§ 63.182(a)

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
			HAPS	Subpart H	§ 63.162(a) § 63.162(c) [G]§ 63.162(f) [G]§ 63.162(g) § 63.162(h) [G]§ 63.171	heavy liquid service. §63.169(a)-(d)	[G]§ 63.180(b) [G]§ 63.180(d)	[G]§ 63.181(b) § 63.181(c) [G]§ 63.181(d) [G]§ 63.181(i)	[G]§ 63.182(b) § 63.182(c) [G]§ 63.182(c)(1) § 63.182(c)(4) [G]§ 63.182(d)
FUG-MEOH	EU	63H-ALL	112(B) HAPS	40 CFR Part 63, Subpart H	[G]§ 63.169 § 63.162(a) § 63.162(c) [G]§ 63.162(f) [G]§ 63.162(g) § 63.162(h) [G]§ 63.171	Standards: Instrumentation systems. §63.169(a)-(d)	[G]§ 63.169 [G]§ 63.180(b) [G]§ 63.180(d)	§ 63.181(a) [G]§ 63.181(b) § 63.181(c) [G]§ 63.181(d)	[G]§ 63.182(a) [G]§ 63.182(b) § 63.182(c) [G]§ 63.182(c)(1) § 63.182(c)(4) [G]§ 63.182(d)
FUG-MEOH	EU	63H-ALL	112(B) HAPS	40 CFR Part 63, Subpart H	[G]§ 63.169 § 63.162(a) § 63.162(c) [G]§ 63.162(f) [G]§ 63.162(g) § 63.162(h) [G]§ 63.171	Standards: Pressure relief devices in liquid service. §63.169(a)-(d)	[G]§ 63.169 [G]§ 63.180(b) [G]§ 63.180(d)	§ 63.181(a) [G]§ 63.181(b) § 63.181(c) [G]§ 63.181(d)	[G]§ 63.182(a) [G]§ 63.182(b) § 63.182(c) [G]§ 63.182(c)(1) § 63.182(c)(4) [G]§ 63.182(d)
FUG-MEOH	EU	63H-ALL	112(B) HAPS	40 CFR Part 63, Subpart H	§ 63.170 § 63.162(a) § 63.162(c) [G]§ 63.162(g) § 63.162(h) [G]§ 63.171	Standards: Surge control vessels and bottom receivers.	[G]§ 63.180(b) [G]§ 63.180(d)	§ 63.181(a) [G]§ 63.181(b) § 63.181(c)	[G]§ 63.182(a) [G]§ 63.182(b) § 63.182(c) [G]§ 63.182(c)(1) § 63.182(c)(4) [G]§ 63.182(d)
FUG-MEOH	EU	63H-ALL	112(B) HAPS	40 CFR Part 63, Subpart H	§ 63.172(d) § 63.11(b) § 63.172(e) [G]§ 63.172(h) § 63.172(m)	Flares used to comply with this subpart shall comply with the requirements of § 63.11(b) of 40 CFR 63, Subpart A.	§ 63.172(e) [G]§ 63.172(h) [G]§ 63.180(b) [G]§ 63.180(d) [G]§ 63.180(e)	§ 63.181(a) [G]§ 63.181(b) § 63.181(c) [G]§ 63.181(d) § 63.181(g) § 63.181(g)(1)(i) § 63.181(g)(1)(ii) § 63.181(g)(1)(iii) § 63.181(g)(1)(iv) [G]§ 63.181(g)(2)	[G]§ 63.182(a) [G]§ 63.182(b) § 63.182(c) [G]§ 63.182(c)(1) § 63.182(c)(4) [G]§ 63.182(d)

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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)
FUG-MEOH	EU	63H-ALL	112(B) HAPS	40 CFR Part 63, Subpart H	[G]§ 63.173 § 63.162(a) § 63.162(c) [G]§ 63.162(f) [G]§ 63.162(g) § 63.162(h) [G]§ 63.171	Standards: Agitators gas/vapor service and in light liquid service. §63.173(a)-(j).	[G]§ 63.173 [G]§ 63.180(b) [G]§ 63.180(d)	§ 63.181(a) [G]§ 63.181(b) § 63.181(c) [G]§ 63.181(d)	[G]§ 63.182(a) [G]§ 63.182(b) § 63.182(c) [G]§ 63.182(c)(1) § 63.182(c)(4) [G]§ 63.182(d)
FUG-MEOH	EU	63H-ALL	112(B) HAPS	40 CFR Part 63, Subpart H	[G]§ 63.174 § 63.162(a) § 63.162(c) [G]§ 63.162(f) [G]§ 63.162(g) § 63.162(h) [G]§ 63.171	Standards: Connectors in gas/vapor service and in light liquid service. §63.174(a)-(j)	[G]§ 63.174 [G]§ 63.180(b) [G]§ 63.180(d)	§ 63.181(a) [G]§ 63.181(b) § 63.181(c) [G]§ 63.181(d)	[G]§ 63.182(a) [G]§ 63.182(b) § 63.182(c) [G]§ 63.182(c)(1) § 63.182(c)(4) [G]§ 63.182(d)
FUG-MEOH	EU	63H-ALL	112(B) HAPS	40 CFR Part 63, Subpart H	[G]§ 63.163 § 63.162(a) § 63.162(c) [G]§ 63.162(f) [G]§ 63.162(g) § 63.162(h) [G]§ 63.171 [G]§ 63.176	Standards: Pumps in light liquid service. §63.163(a)-(j)	[G]§ 63.163 [G]§ 63.176 [G]§ 63.180(b) [G]§ 63.180(d)	§ 63.181(a) [G]§ 63.181(b) § 63.181(c) [G]§ 63.181(d) § 63.181(h) [G]§ 63.181(h)(3) § 63.181(h)(4) [G]§ 63.181(h)(5) § 63.181(h)(6) § 63.181(h)(7) § 63.181(h)(8)	[G]§ 63.182(a) [G]§ 63.182(b) § 63.182(c) [G]§ 63.182(c)(1) § 63.182(c)(4) [G]§ 63.182(d)
FUG-MEOH	EU	63H-ALL	112(B) HAPS	40 CFR Part 63, Subpart H	[G]§ 63.167 § 63.162(a) § 63.162(c) [G]§ 63.162(g) § 63.162(h) [G]§ 63.171 [G]§ 63.175	Standards: Open-ended valves or lines. §63.167(a)-(e).	[G]§ 63.175 [G]§ 63.180(b) [G]§ 63.180(d)	§ 63.181(a) [G]§ 63.181(b) § 63.181(c) § 63.181(h) [G]§ 63.181(h)(1) [G]§ 63.181(h)(2) § 63.181(h)(4) [G]§ 63.181(h)(5) § 63.181(h)(6) § 63.181(h)(7) [G]§ 63.181(i)	[G]§ 63.182(a) [G]§ 63.182(b) § 63.182(c) [G]§ 63.182(c)(1) § 63.182(c)(4) [G]§ 63.182(d)
FUG-MEOH	EU	63H-ALL	112(B)	40 CFR Part 63,	[G]§ 63.168	Standards: Valves in	[G]§ 63.168	§ 63.181(a)	[G]§ 63.182(a)

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Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
			HAPS	Subpart H	§ 63.162(a) § 63.162(c) [G]§ 63.162(f) [G]§ 63.162(g) § 63.162(h) [G]§ 63.171 [G]§ 63.175	gas/vapor service and in light liquid service. §63.168(a)-(j)	[G]§ 63.175 [G]§ 63.180(b) [G]§ 63.180(d)	[G]§ 63.181(b) § 63.181(c) [G]§ 63.181(d) § 63.181(h) [G]§ 63.181(h)(1) [G]§ 63.181(h)(2) § 63.181(h)(4) [G]§ 63.181(h)(5) § 63.181(h)(6) § 63.181(h)(7)	[G]§ 63.182(b) § 63.182(c) [G]§ 63.182(c)(1) § 63.182(c)(4) [G]§ 63.182(d)
GRP-TKMEOH	EU	R5112	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.112(a)(1) § 115.112(a)(3)	Tanks shall not store VOC unless the required pressure is maintained, or they are equipped with the appropriate control device specified in Table I(a) or Table II(a).	§ 115.115(a) § 115.115(a)(6) § 115.116(a)(1) [G]§ 115.117	§ 115.118(a)(4) § 115.118(a)(4)(F) § 115.118(a)(5) § 115.118(a)(7)	None
GRP-TKMEOH	EU	63G	112(B) HAPS	40 CFR Part 63, Subpart G	§ 63.119(e) § 63.119(a)(1) § 63.119(e)(1) § 63.119(e)(3) § 63.119(e)(4) § 63.119(e)(5) [G]§ 63.148(d) § 63.148(e)	The owner or operator who elects to use a closed vent system and control device (defined in § 63.111) to comply with§63.119(a)(1) or (a)(2) shall comply with §63.119(e)(1)-(5).	§ 63.120(d)(1) § 63.120(d)(1)(ii) § 63.120(d)(1)(ii)(A) § 63.120(d)(5) § 63.120(d)(6) § 63.148(b)(1)(ii) [G]§ 63.148(c) § 63.148(g) § 63.148(g)(2) § 63.148(h) § 63.148(h)(2)	§ 63.123(a) § 63.123(f)(1) [G]§ 63.123(f)(2) § 63.148(g)(2) § 63.148(h)(2) § 63.148(i)(1) § 63.148(i)(2) [G]§ 63.148(i)(4) § 63.148(i)(5) § 63.148(i)(6) [G]§ 63.152(a)	§ 63.120(d)(1)(ii)(B) § 63.120(d)(2) § 63.120(d)(2)(i) [G]§ 63.120(d)(2)(iii) § 63.120(d)(3) § 63.120(d)(3)(i) § 63.120(d)(3)(ii) § 63.120(d)(4) § 63.122(b) § 63.122(c)(1) [G]§ 63.122(g)(1) [G]§ 63.122(g)(2) § 63.148(j) § 63.148(j)(1) § 63.151(a)(7) [G]§ 63.151(b) [G]§ 63.151(j) [G]§ 63.152(a) § 63.152(b) [G]§ 63.152(b)(1) § 63.152(b)(4)

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Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
									§ 63.152(c)(1) § 63.152(c)(2) § 63.152(c)(2)(i) [G]§ 63.152(c)(2)(ii) § 63.152(c)(2)(iii) § 63.152(c)(3) § 63.152(c)(3)(i) § 63.152(c)(4)(ii) [G]§ 63.152(c)(6)
H-EMG	EU	60IIII	CO	40 CFR Part 60, Subpart IIII	§ 60.4205(b) § 1039-Appendix I § 60.4202(a)(2) § 60.4204(f) § 60.4206 § 60.4207(b) [G]§ 60.4211(a) § 60.4211(c) [G]§ 60.4211(f)	Owners and operators of emergency stationary CI ICE, that are not fire pump engines, with a maximum engine power greater than or equal to 130 KW and less than or equal to 2237 KW and a displacement of less than 10 liters per cylinder and is a 2007 model year and later must comply with a CO emission limit of 3.5 g/KW-hr, as stated in 40 CFR 60.4202(a)(2) and 40 CFR 1039-Appendix I.	None	None	[G]§ 60.4214(d) § 60.4214(e)
H-EMG	EU	60IIII	NMHC and NO_X	40 CFR Part 60, Subpart IIII	§ 60.4205(b) § 1039-Appendix I § 60.4202(a)(2) § 60.4204(f) § 60.4206 § 60.4207(b) [G]§ 60.4211(a) § 60.4211(c) [G]§ 60.4211(f)	Owners and operators of emergency stationary CI ICE, that are not fire pump engines, with a maximum engine power greater than 560 KW and less than or equal to 2237 KW and a displacement of less than 10 liters per cylinder and is a 2007 model year and later must comply with an NMHC+NOx emission limit of 6.4 g/KW-hr, as stated in 40 CFR 60.4202(a)(2) and	None	None	[G]§ 60.4214(d) § 60.4214(e)

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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)
						40 CFR 1039-Appendix I.			
H-EMG	EU	60IIII	PM	40 CFR Part 60, Subpart IIII	§ 60.4205(b) § 1039-Appendix I § 60.4202(a)(2) § 60.4204(f) § 60.4206 § 60.4207(b) [G]§ 60.4211(a) § 60.4211(c) [G]§ 60.4211(f)	Owners and operators of emergency stationary CI ICE, that are not fire pump engines, with a maximum engine power greater than or equal to 130 KW and less than or equal to 2237 KW and a displacement of less than 10 liters per cylinder and is a 2007 model year and later must comply with a PM emission limit of 0.20 g/KW-hr, as stated in 40 CFR 60.4202(a)(2) and 40 CFR 1039-Appendix I.	None	None	[G]§ 60.4214(d) § 60.4214(e)
H-EMG	EU	63ZZZZ	112(B) HAPS	40 CFR Part 63, Subpart ZZZZ	§ 63.6590(b)(1) § 63.6595(c) § 63.6640(f)(1) § 63.6640(f)(2) § 63.6640(f)(2)(i) § 63.6640(f)(3)	An affected source which meets either of the criteria in paragraphs §63.6590(b)(1)(i)-(ii) of this section does not have to meet the requirements of this subpart and of subpart A of this part except for the initial notification requirements of §63.6645(f).	None	None	§ 63.6645(f)
H-FWP1	EU	60IIII	NMHC and NO_X	40 CFR Part 60, Subpart IIII	§ 60.4205(c)-Table 4 § 60.4206 § 60.4207(b) [G]§ 60.4211(a) § 60.4211(c) [G]§ 60.4211(f)	Owners and operators of emergency stationary fire pump CI ICE with a maximum engine power greater than 560 KW and a displacement of less than 30 liters per cylinder and is a 2008 model year and later must comply with an NMHC+NOx emission limit of 6.4 g/KW-hr, as listed in	None	None	[G]§ 60.4214(d)

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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)
						Table 4 to this subpart.			
H-FWP1	EU	60IIII	PM	40 CFR Part 60, Subpart IIII	§ 60.4205(c)-Table 4 § 60.4206 § 60.4207(b) [G]§ 60.4211(a) § 60.4211(c) [G]§ 60.4211(f)	Owners and operators of emergency stationary fire pump CI ICE with a maximum engine power greater than 560 KW and a displacement of less than 30 liters per cylinder and is a 2008 model year and later must comply with a PM emission limit of 0.20 g/KW-hr, as listed in Table 4 to this subpart.	None	None	[G]§ 60.4214(d)
H-FWP1	EU	63ZZZZ	112(B) HAPS	40 CFR Part 63, Subpart ZZZZ	§ 63.6590(b)(1) § 63.6595(c) § 63.6640(f)(1) § 63.6640(f)(2) § 63.6640(f)(2)(i) § 63.6640(f)(3)	An affected source which meets either of the criteria in paragraphs §63.6590(b)(1)(i)-(ii) of this section does not have to meet the requirements of this subpart and of subpart A of this part except for the initial notification requirements of §63.6645(f).	None	None	§ 63.6645(f)
H-FWP2	EU	60IIII	NMHC and NO_X	40 CFR Part 60, Subpart IIII	§ 60.4205(c)-Table 4 § 60.4206 § 60.4207(b) [G]§ 60.4211(a) § 60.4211(c) [G]§ 60.4211(f)	Owners and operators of emergency stationary fire pump CI ICE with a maximum engine power greater than 560 KW and a displacement of less than 30 liters per cylinder and is a 2008 model year and later must comply with an NMHC+NOx emission limit of 6.4 g/KW-hr, as listed in Table 4 to this subpart.	None	None	[G]§ 60.4214(d)
H-FWP2	EU	60IIII	PM	40 CFR Part 60,	§ 60.4205(c)-Table	Owners and operators of	None	None	[G]§ 60.4214(d)

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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)
				Subpart IIII	4 § 60.4206 § 60.4207(b) [G]§ 60.4211(a) § 60.4211(c) [G]§ 60.4211(f)	emergency stationary fire pump CI ICE with a maximum engine power greater than 560 KW and a displacement of less than 30 liters per cylinder and is a 2008 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.			
H-FWP2	EU	63ZZZZ	112(B) HAPS	40 CFR Part 63, Subpart ZZZZ	§ 63.6590(b)(1) § 63.6595(c) § 63.6640(f)(1) § 63.6640(f)(2) § 63.6640(f)(2)(i) § 63.6640(f)(3)	An affected source which meets either of the criteria in paragraphs §63.6590(b)(1)(i)-(ii) of this section does not have to meet the requirements of this subpart and of subpart A of this part except for the initial notification requirements of §63.6645(f).	None	None	§ 63.6645(f)
PRO-MEOH	PRO	63F	112(B) HAPS	40 CFR Part 63, Subpart F	§ 63.100(b) [G]§ 63.102(a) [G]§ 63.102(c) § 63.104(a) [G]§ 63.104(d) § 63.104(e) § 63.104(e)(1) [G]§ 63.104(e)(2) § 63.105(d)	Except as provided in paragraphs (b)(4) and (c) of this section, the provisions of subparts F, G, and H apply to chemical manufacturing process units that meet the criteria.	§ 63.103(b)(1) § 63.103(b)(3) § 63.103(b)(4) [G]§ 63.103(b)(5) § 63.103(b)(6) [G]§ 63.104(b)	[G]§ 63.103(c) [G]§ 63.104(e)(2) [G]§ 63.104(f)(1) [G]§ 63.105(b) § 63.105(c) § 63.105(e)	§ 63.103(b)(2) [G]§ 63.103(b)(5) [G]§ 63.103(d) [G]§ 63.104(f)(2)
S-10001	CD	R1111	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	§ 111.111(a)(4)(A)(i) § 111.111(a)(4)(A)(ii)	§ 111.111(a)(4)(A)(ii)	None

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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)
						§101.222(b).			
S-10001	CD	60A	Opacity	40 CFR Part 60, Subpart A	§ 60.18(b) § 60.18(c)(1) § 60.18(c)(2) § 60.18(c)(3)(ii) § 60.18(c)(4)(iii) § 60.18(c)(6) § 60.18(e)	Flares shall comply with paragraphs (c)-(f) of § 60.18.	§ 60.18(d) § 60.18(f)(1) § 60.18(f)(2) § 60.18(f)(3) § 60.18(f)(4) § 60.18(f)(5)	None	None
S-10001	CD	63A	Opacity	40 CFR Part 63, Subpart A	§ 63.11(b)(4) § 63.11(b)(1) § 63.11(b)(2) § 63.11(b)(3) § 63.11(b)(5) § 63.11(b)(6)(ii) § 63.11(b)(7)(iii)	Flares shall be designed and operated with no visible emissions, except for periods of a total of 5 minutes or less during any 2 consecutive hrs. Test Method 22 in App. A of part 60 of this chapter shall be used.	§ 63.11(b)(4) § 63.11(b)(5) § 63.11(b)(7)(i)	None	None
S-10001VT	EP	R5120	VOC	30 TAC Chapter 115, Vent Gas Controls	§ 115.122(a)(1) § 115.121(a)(1) § 115.122(a)(1)(B) § 60.18	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) concentration of no more than 20 parts per million (ppmv) (on a dry basis corrected to 3.0% oxygen for combustion devices).	[G]§ 115.125 § 115.126(1) § 115.126(1)(B) § 115.126(2) ** See CAM Summary	§ 115.126 § 115.126(1) § 115.126(1)(B) § 115.126(2)	None
S-10001VT	EP	63G	112(B) HAPS	40 CFR Part 63, Subpart G	[G]§ 63.113(a)(1) § 63.11 § 63.113(h) [G]§ 63.115(f)	Reduce emissions of organic HAP using a flare.§63.113(a)(1)(i)-(ii)	§ 63.114(a) § 63.114(a)(2) [G]§ 63.115(f) [G]§ 63.116(a)	[G]§ 63.117(a)(5) § 63.118(a)(1) § 63.118(a)(2) [G]§ 63.152(a) [G]§ 63.152(f)	[G]§ 63.117(a)(5) § 63.117(f) § 63.118(f)(2) § 63.118(f)(5) [G]§ 63.151(b) § 63.151(e) [G]§ 63.151(e)(1) § 63.151(e)(2) § 63.151(e)(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)
									[G]§ 63.151(j) [G]§ 63.152(a) § 63.152(b) [G]§ 63.152(b)(1) [G]§ 63.152(b)(2) § 63.152(c)(1) § 63.152(c)(2) § 63.152(c)(2)(i) [G]§ 63.152(c)(2)(ii) § 63.152(c)(2)(iii) § 63.152(c)(4)(ii) [G]§ 63.152(c)(6)

Additional Monitoring Requirements

CAM Summary

Unit/Group/Process Information	
ID No.: B-01001FG	
Control Device ID No.: B-01001	Control Device Type: Steam generating unit (boiler)/process heater (design heat input is greater than or equal to 44 megawatts)
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 115, Vent Gas Controls	SOP Index No.: R5120
Pollutant: VOC	Main Standard: § 115.122(a)(2)
Monitoring Information	
Indicator: Period of Operation	
Minimum Frequency: N/A	
Averaging Period: N/A	
Deviation Limit: All periods of operation that is not recorded.	
CAM Text: Monitor and record the periods of operation of the steam generating units or process heater. The records must be readily available for inspection.	

CAM Summary

Unit/Group/Process Information	
ID No.: B-01002FG	
Control Device ID No.: B-01002	Control Device Type: Steam generating unit (boiler)/process heater (design heat input is greater than or equal to 44 megawatts)
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 115, Vent Gas Controls	SOP Index No.: R5120
Pollutant: VOC	Main Standard: § 115.122(a)(2)
Monitoring Information	
Indicator: Period of Operation	
Minimum Frequency: N/A	
Averaging Period: N/A	
Deviation Limit: All periods of operation that is not recorded.	
CAM Text: Monitor and record the periods of operation of the steam generating units or process heater. The records must be readily available for inspection.	

CAM Summary

Unit/Group/Process Information	
ID No.: B-14001FG	
Control Device ID No.: B-14001	Control Device Type: Steam generating unit (boiler)/process heater (design heat input is less than 44 megawatts)
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 115, Vent Gas Controls	SOP Index No.: R5120
Pollutant: VOC	Main Standard: § 115.122(a)(2)
Monitoring Information	
Indicator: Period of Operation	
Minimum Frequency: N/A	
Averaging Period: N/A	
Deviation Limit: All periods of operation that is not recorded.	
CAM Text: Monitor and record the periods of operation of the steam generating units or process heater. The records must be readily available for inspection.	

CAM Summary

Unit/Group/Process Information	
ID No.: S-10001VT	
Control Device ID No.: S-10001	Control Device Type: Flare
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 115, Vent Gas Controls	SOP Index No.: R5120
Pollutant: VOC	Main Standard: § 115.122(a)(1)
Monitoring Information	
Indicator: Pilot Flame	
Minimum Frequency: Continuous	
Averaging Period: N/A	
Deviation Limit: No pilot flame.	
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.: B-01002SK	
Control Device ID No.: N/A	Control Device Type: N/A
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 111, Visible Emissions	SOP Index No.: R111
Pollutant: Opacity	Main Standard: § 111.111(a)(1)(C)
Monitoring Information	
Indicator: Visible Emissions	
Minimum Frequency: once per week	
Averaging Period: N/A	
Deviation Limit: Observable visible emissions will be reported as a deviation, unless an opacity of less than 15% is determined using 40 CFR 60, Appendix A, Test Method 9 after visible emissions are observed.	
Periodic Monitoring Text: Visible emissions observations shall be made and recorded. Note that to properly determine the presence of visible emissions, all sources must be in clear view of the observer. The observer shall be at least 15 feet, but not more than 0.25 miles, away from the emission source during the observation. The observer shall select a position where the sun is not directly in the observer's eyes. If the observations cannot be conducted due to weather conditions, the date, time, and specific weather conditions shall be recorded. When condensed water vapor is present within the plume, as it emerges from the emissions outlet, observations must be made beyond the point in the plume at which condensed water vapor is no longer visible. When water vapor within the plume condenses and becomes visible at a distance from the emissions outlet, the observation shall be evaluated at the outlet prior to condensation of water vapor. If visible emissions are observed, the permit holder shall report a deviation. As an alternative, the permit holder may determine the opacity consistent with Test Method 9, as soon as practicable, but no later than 24 hours after observing visible emissions. If the result of the Test Method 9 is opacity above the opacity limit in the applicable requirement, the permit holder shall report a deviation.	

Periodic Monitoring Summary

Unit/Group/Process Information	
ID No.: B-14001SK	
Control Device ID No.: N/A	Control Device Type: N/A
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 111, Visible Emissions	SOP Index No.: R111
Pollutant: Opacity	Main Standard: § 111.111(a)(1)(C)
Monitoring Information	
Indicator: Visible Emissions	
Minimum Frequency: once per week	
Averaging Period: N/A	
Deviation Limit: Observable visible emissions will be reported as a deviation unless an opacity of less than 15% is determined using 40 CFR 60, Appendix A, Test Method 9 after visible emissions are observed.	
Periodic Monitoring Text: Visible emissions observations shall be made and recorded. Note that to properly determine the presence of visible emissions, all sources must be in clear view of the observer. The observer shall be at least 15 feet, but not more than 0.25 miles, away from the emission source during the observation. The observer shall select a position where the sun is not directly in the observer's eyes. If the observations cannot be conducted due to weather conditions, the date, time, and specific weather conditions shall be recorded. When condensed water vapor is present within the plume, as it emerges from the emissions outlet, observations must be made beyond the point in the plume at which condensed water vapor is no longer visible. When water vapor within the plume condenses and becomes visible at a distance from the emissions outlet, the observation shall be evaluated at the outlet prior to condensation of water vapor. If visible emissions are observed, the permit holder shall report a deviation. As an alternative, the permit holder may determine the opacity consistent with Test Method 9, as soon as practicable, but no later than 24 hours after observing visible emissions. If the result of the Test Method 9 is opacity above the opacity limit in the applicable requirement, the permit holder shall report a deviation.	

Permit Shield

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
B-01001	N/A	30 TAC Chapter 117, Subchapter B	New unit placed into service after November 15, 1992.
B-01001	N/A	40 CFR Part 60, Subpart D	Unit does not burn fossil fuel for the purpose of producing steam by heat transfer.
B-01001	N/A	40 CFR Part 60, Subpart Db	Unit is a process heater and not a steam generating unit.
B-01001	N/A	40 CFR Part 60, Subpart Dc	Unit is a process heater and not a steam generating unit.
B-01001FG	N/A	40 CFR Part 63, Subpart G	Fuel gas stream does not meet the process vent definition in §63.101 and is therefore exempted from all MACT F and G process vent gas requirements.
B-01002	N/A	30 TAC Chapter 117, Subchapter B	New unit placed into service after November 15, 1992.
B-01002	N/A	40 CFR Part 60, Subpart D	Boiler meets applicability requirements under 60.40b(a) of NSPS Db.
B-01002	N/A	40 CFR Part 60, Subpart Dc	Boiler has maximum fuel heat input capacity greater than 29 MW.
B-01002FG	N/A	40 CFR Part 63, Subpart G	Fuel gas stream does not meet the process vent definition in §63.101 and is therefore exempted from all MACT F and G process vent gas requirements.
B-14001	N/A	30 TAC Chapter 117, Subchapter B	New unit placed into service after November 15, 1992.
B-14001	N/A	40 CFR Part 60, Subpart D	Boiler meets applicability requirements under 60.40b(a) of NSPS Db.

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
B-14001	N/A	40 CFR Part 60, Subpart Dc	Boiler has maximum fuel heat input capacity greater than 29 MW.
B-14001FG	N/A	40 CFR Part 63, Subpart G	Fuel gas stream does not meet the process vent definition in §63.101 and is therefore exempted from all MACT F and G process vent gas requirements.
F-07501	N/A	40 CFR Part 60, Subpart Kb	Storage capacity is less than 75 cubic meters.
FUG-MEOH	N/A	40 CFR Part 63, Subpart EEEE	Part of an affected source under another 40 CFR Part 63 Subpart (MACT G).
GRP-TKMEOH	TK-04001, TK-04002A, TK-04002B	40 CFR Part 60, Subpart Kb	Tanks are MACT G Group 1 storage vessels.
GRP-TKMEOH	TK-04001, TK-04002A, TK-04002B	40 CFR Part 63, Subpart EEEE	Part of an effected source under another 40 CFR Part 63, Subpart (MACT G).
H-EMG	N/A	30 TAC Chapter 117, Subchapter B	New unit placed into service after November 15, 1992.
H-FWP1	N/A	30 TAC Chapter 117, Subchapter B	New unit placed into service after November 15, 1992.
H-FWP2	N/A	30 TAC Chapter 117, Subchapter B	New unit placed into service after November 15, 1992.
S-10001VT	N/A	40 CFR Part 60, Subpart NNN	Vent is a MACT G Group 1 process vent.
S-10001VT	N/A	40 CFR Part 60, Subpart RRR	Vent is a MACT G Group 1 process vent.
T-06001	N/A	40 CFR Part 63, Subpart Q	No chromium-based treatment chemicals will be added to cooling water.

New Source Review Authorization References

New Source Review Authorization References

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

Prevention of Significant Deterioration (PSD) Permits	
PSD Permit No.: GHGPSDTX54	Issuance Date: 08/09/2024
PSD Permit No.: PSDTX1340	Issuance Date: 08/09/2024
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.: 107764	Issuance Date: 08/09/2024
Authorization No.: 174371	Issuance Date: 11/14/2023
Permits By Rule (30 TAC Chapter 106) for the Application Area	
Number: 106.373	Version No./Date: 09/04/2000
Number: 106.472	Version No./Date: 09/04/2000
Number: 106.474	Version No./Date: 09/04/2000
Number: 106.511	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**
B-01001	REFORMER FURNACE	107764, GHGPSDTX54, PSDTX1340
B-01001FG	REFORMER FURNACE FUEL GAS	107764, GHGPSDTX54, PSDTX1340
B-01002	REFORMER AUX BURNERS	107764, GHGPSDTX54, PSDTX1340
B-01002FG	REFORMER AUX BURNER FUEL GAS	107764, GHGPSDTX54, PSDTX1340
B-01002SK	REFORMER COMBINED STACK	107764, GHGPSDTX54, PSDTX1340
B-14001	AUXILLIARY BOILER	107764, GHGPSDTX54, PSDTX1340
B-14001FG	AUXILLIARY BOILER FUEL GAS	107764, GHGPSDTX54, PSDTX1340
B-14001SK	AUXILLIARY BOILER STACK	107764, GHGPSDTX54, PSDTX1340
F-07501	DIESEL STORAGE TANK	106.472/09/04/2000
FUG-MEOH	MEOH FUGITIVES	107764, GHGPSDTX54, PSDTX1340
H-EMG	EMERGENCY GENERATOR	107764, GHGPSDTX54, PSDTX1340, 106.511/09/04/2000
H-FWP1	FIREWATER PUMP ENGINE 1	107764, GHGPSDTX54, PSDTX1340, 106.511/09/04/2000
H-FWP2	FIREWATER PUMP ENGINE 2	107764, GHGPSDTX54, PSDTX1340, 106.511/09/04/2000
PRO-MEOH	GAS-TO-METHANOL PROCESS	107764, GHGPSDTX54, PSDTX1340
S-10001	MEOH FLARE	107764, GHGPSDTX54, PSDTX1340
S-10001VT	MEOH FLARE FEED VENT	107764, GHGPSDTX54, PSDTX1340
T-06001	MEOH COOLING TOWER	107764, GHGPSDTX54, PSDTX1340
TK-04001	CRUDE MEOH TANK	107764, GHGPSDTX54, PSDTX1340
TK-04002A	MEOH SHIFT TANK	107764, GHGPSDTX54, PSDTX1340

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**
TK-04002B	MEOH SHIFT TANK	107764, GHGPSDTX54, PSDTX1340

**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.

Schedules

Compliance Schedule

A. Compliance Schedule

1. Specific Non-Compliance Situation

Unit/Group/ Process ID. No(s).	SOP Index No.	Pollutant	Applicable Requirement	
			Citation	Text Description
B-01001		NH3	NSR Permit 107764, SC 6C	Limit shall not exceed 10 PPMVD NH3 corrected to 3% O2 on an hourly average

2. Compliance Status Assessment Method and Records Location

Compliance Status Assessment Method		Location of Records/Documentation
Citation	Text Description	
SC 17 CEMS monitoring	Process data analysis	Semi-annual deviation report (SDR) for reporting period 1/1/2024 to 6/30/2024, Item 3

3. Non-compliance Situation Description

NH3 emissions exceeded 10 PPMVD in reformer stack

4. Corrective Action Plan Description

Natgasoline Operations will revise existing operator training and standard operating procedures to expand the NOx operating window to include a slight increase in allowable NOx emissions and as a result reduce NH3 injection.

5. List of Activities/Milestones to Implement the Corrective Action Plan

1	Based on our new permit limits for NOx energy (0.015 lb/mmbtu), in the near term Natgasoline Operations will revise existing operator training and standard operating procedures to expand the NOx operating window to include a slight increase in allowable NOx emissions and as a result reduce NH3 injection. It is believed that with optimization, both limits can be met. Estimated implementation date of Q3 2025.

6. Previously Submitted Compliance Plan(s)	Type of Action	Date Submitted
	NOV of 1/12/2024	03/04/2024

7. Progress Report Submission Schedule	Progress reports will be submitted semiannually as part of the semiannual deviation report until corrective actions are complete or compliance is achieved.

Compliance Schedule

A. Compliance Schedule

1. Specific Non-Compliance Situation

Unit/Group/ Process ID. No(s).	SOP Index No.	Pollutant	Applicable Requirement	
			Citation	Text Description
B-01001		NH3	NSR Permit 107764 MAERT	Permitted emissions

2. Compliance Status Assessment Method and Records Location

Compliance Status Assessment Method		Location of Records/Documentation
Citation	Text Description	
MAERT exceedance	lb/hr limit	Semi-annual deviation report (SDR) for reporting period 1/1/2024 to 6/30/2024, Item 4

3. Non-compliance Situation Description

Permit exceedance in lb/hr

4. Corrective Action Plan Description

Natgasoline Operations will revise existing operator training and standard operating procedures to expand the NOx operating window to include a slight increase in allowable NOx emissions and as a result reduce NH3 injection.

5. List of Activities/Milestones to Implement the Corrective Action Plan

1	Based on our new permit limits for NOx energy (0.015 lb/mmbtu), Natgasoline Operations will revise existing operator training and standard operating procedures to expand the NOx operating window to include a slight increase in allowable NOx emissions and as a result reduce NH3 injection. It is believed that with optimization, both limits can be met.

6. Previously Submitted Compliance Plan(s)	Type of Action	Date Submitted
	NOV of 1/12/2024	03/04/2024

7. Progress Report Submission Schedule	Progress reports will be submitted semiannually as part of the semiannual deviation report until corrective actions are complete or compliance is achieved.

Compliance Schedule

A. Compliance Schedule				
1. Specific Non-Compliance Situation				
Unit/Group/ Process ID. No(s).	**SOP Index No.**	**Pollutant**	**Applicable Requirement**	
			Citation	**Text Description**
B-01001			NSR Permit 107764, SC 8C	The percent of natural gas, on an hourly basis, shall not exceed the maximum percent of natural gas established during performance testing

2. Compliance Status Assessment Method and Records Location		
Compliance Status Assessment Method		**Location of Records/Documentation**
Citation	**Text Description**	
NSR Permit 107764, SC 8C	Natural gas percentage	Semi-annual deviation report (SDR) for reporting period 1/1/2024 to 6/30/2024, Item 6

3. Non-compliance Situation Description
Reformer operated above the maximum total natural gas established through performance testing.

4. Corrective Action Plan Description
Natgasoline has a performance test tentatively scheduled for the first quarter of 2025 to reestablish the maximum percent of natural gas operating condition.

5. List of Activities/Milestones to Implement the Corrective Action Plan	
1	Reestablish the maximum percent of natural gas through a tentatively scheduled performance test in 2025.

6. Previously Submitted Compliance Plan(s)	Type of Action	Date Submitted
	NOV of 1/12/2024	03/04/2024

7. Progress Report Submission Schedule	Progress reports will be submitted semiannually as part of the semiannual deviation report until corrective actions are complete or compliance is achieved.

Compliance Schedule

A. Compliance Schedule

1. Specific Non-Compliance Situation

Unit/Group/ Process ID. No(s).	SOP Index No.	Pollutant	Applicable Requirement	
			Citation	Text Description
B-14001		PM2.5	NSR Permit 107764 MAERT	Permitted emissions

2. Compliance Status Assessment Method and Records Location

Compliance Status Assessment Method		Location of Records/Documentation
Citation	Text Description	
MAERT exceedance	lb/hr limit	Semi-annual deviation report (SDR) for reporting period 1/1/2024 to 6/30/2024, Item 14

3. Non-compliance Situation Description

PM 2.5 lb/hr emissions exceeded maximum allowable emission rate during normal operating conditions as per MAERT Table.

4. Corrective Action Plan Description

The previous performance test did not speciate PM2.5 from PM. The emissions from PM2.5 were assumed to be equal to PM10. Natgasoline will conduct a new performance test in the first quarter of 2025 to speciate PM.

5. List of Activities/Milestones to Implement the Corrective Action Plan

1	Reestablish the PM2.5 emissions limit through a tentatively scheduled performance test in 2025.

6. Previously Submitted Compliance Plan(s)	Type of Action	Date Submitted
	N/A	N/A

7. Progress Report Submission Schedule	Progress reports will be submitted semiannually as part of the semiannual deviation report until corrective actions are complete or compliance is achieved.

Alternative Requirement

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

September 21, 2022

MR MIGUEL MARTINEZ
ENVIRONMENTAL MANAGER
NATGASOLINE LLC
PO BOX 20339
BEAUMONT TX 77720-0339

Re: Alternative Method of Compliance (AMOC) No. 215
Reformer and Auxiliary Boiler at Methanol Plant
Alternative Ammonia Monitoring
Regulated Entity Number: RN106586795
Customer Reference Number: CN604256412
Associated Permit Numbers: 107764, PSDTX1340, and O3963

Dear Mr. Martinez:

This correspondence is in response to Natgasoline LLC's August 4, 2022 request for an alternative ammonia (NH_3) monitoring method for compliance with 30 Texas Administrative Code (TAC) Chapter 117 NH_3 compliance requirements, which include specifications on NH_3 analysis methods in § 117.8130.

We understand that Natgasoline is requesting to use a different analyzer method to demonstrate compliance for the Reformer (EPN B-01001) and Auxiliary Boiler (B-14001) which are each equipped with selective catalytic reduction (SCR) to control NO_x emissions and resulting in collateral NH_3 "slip" emissions. We understand that you propose to use a Tunable Diode Laser (TDL) Ammonia analyzer (SICK, Inc., Model GM700) which is expected to have increased measurement accuracy, faster response times, and minimal maintenance.

The Texas Commission on Environmental Quality (TCEQ) Executive Director has made a final decision to approve your AMOC request. 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. By copy of this letter, we are informing the Environmental Protection Agency, Region 6, of this decision as required by TCEQ's delegation of authority.

This AMOC approval may supersede certain requirements or representations in Permit Nos. 107764 and PSDTX1340. To ensure effective and consistent enforceability, we understand that Nasgasoline will incorporate this AMOC into the pending permit amendment application (Project No. 343112).

This approval may also change applicable requirements for the site, which are identified in the site operating permit (SOP) O3963. The TCEQ recommends the submittal of a SOP administrative revision if any changes are necessary. Changes meeting the criteria for an administrative revision can be operated before issuance of the revision if a complete application is submitted to the TCEQ and this information is maintained with the SOP records at the site.

Re: Permit Numbers: 107764, PSDTX1340, and O3963

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.

Sincerely,

Samuel Short, Deputy Director
Air Permits Division
Office of Air
Texas Commission on Environmental Quality

cc: Sarah, , Compliance Strategies & Solutions Inc, Houston
Air Section Manager, Region 10 - Beaumont
Jesse E. Chacon, P.E., Manager, Operating Permits Section, Air Permits Division, OA: MC-163
Christopher J. Loughran, P.E., Manager, Energy New Source Review Permits 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

Project Number: 345948

Appendix A

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_2S ..... hydrogen sulfide
ID No. ..... identification number
lb/hr ..... pound(s) per hour
MACT ..... Maximum Achievable Control Technology (40 CFR Part 63)
MMBtu/hr ..... Million British thermal units per hour
NA ..... nonattainment
N/A ..... not applicable
NADB ..... National Allowance Data Base
NESHAP ..... National Emission Standards for Hazardous Air Pollutants (40 CFR Part 61)
NO_x ..... nitrogen oxides
NSPS ..... New Source Performance Standard (40 CFR Part 60)
NSR ..... New Source Review
ORIS ..... Office of Regulatory Information Systems
Pb ..... lead
PBR ..... Permit By Rule
PEMS ..... predictive emissions monitoring system
PM ..... particulate matter
ppmv ..... parts per million by volume
PRO ..... process unit
PSD ..... prevention of significant deterioration
psia ..... pounds per square inch absolute
SIP ..... state implementation plan
SO_2 ..... sulfur dioxide
TCEQ ..... Texas Commission on Environmental Quality
TSP ..... total suspended particulate
TVP ..... true vapor pressure
U.S.C. ..... United States Code
VOC ..... volatile organic compound

Appendix B

Major NSR Summary Table

Permit Numbers 107764 and PSDTX1340					Issuance Date: 08/09/2024		
Emission Point No. (1)	**Source Name (2)**	**Air Contaminant Name (3)**	**Emission Rates**		**Monitoring and Testing Requirements**	**Recordkeeping Requirements**	**Reporting Requirements**
			lb/hr	**TPY (4)**	**Special Condition/Application Information**	**Special Condition/Application Information**	**Special Condition/Application Information**
B-01001	Reformer	NOx	23.28	58.69	2, 5, 8, 17, 18, 20	2, 17, 18, 20	2, 17, 18
		NOx (6)	62.08	6.83			
		NH_3	5.71	21.57			
		CO	93.84	124.18			
		VOC	8.37	10.16			
		SO_2	1.52	5.75			
		PM	6.29	23.77			
		PM_{10}	6.29	23.77			
		$PM_{2.5}$	5.53	20.92			
		$PM_{2.5}$ (7)	6.64	0.4			

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			lb/hr	TPY (4)	Special Condition/Application Information	Special Condition/Application Information	Special Condition/Application Information
B-14001	Auxiliary Boiler	NOx	14.25	30.57	2, 5, 17, 18, 19	2, 17, 18, 19	2, 17, 18
		NOx (6)	38.00	3.42			
		NH_3	3.64	11.71			
		CO	59.96	38.57			
		VOC	5.12	16.479			
		SO_2	0.53	1.71			
		PM	4.49	14.44			
		PM_{10}	4.49	14.44			
		$PM_{2.5}$	3.95	12.71			
S-10001	MeOH Flare	NOx	2.28	10.01	3, 5, 11, 18, 19	3, 11, 18, 19	3
		CO	15.39	67.57			
		VOC	0.84	3.68			
		MeOH	0.42	1.83			
		SO_2	0.043	0.19			

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Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates		Monitoring and Testing Requirements	Recordkeeping Requirements	Reporting Requirements
			lb/hr	TPY (4)	Special Condition/Application Information	Special Condition/Application Information	Special Condition/Application Information
S-10001 MSS	MeOH Flare MSS	NOx	425.11	19.70	3, 5, 11	3, 11, 23	3
		CO	3644.98	300.31			
		VOC	158.59	1.12			
		MeOH	151.04	0.85			
		SO_2	12.55	0.6			
D-04001	MeOH Water Scrubber 1	VOC	7.24	1.65	3, 12, 18	3, 10, 12, 18	3, 18
		MeOH	7.24	1.65			
FUG-MeOH	MeOH Fugitives (5)	VOC	9.73	7.44	3, 13, 15, 16	3, 13, 15, 16	3, 15
		MeOH	9.63	6.94			
		NH_3	0.01	0.01			
T-06001	MeOH Cooling Tower	VOC	7.54	10.41	3, 14	3, 14	3
		MeOH	7.54	10.41			
		PM	37.70	82.57			
		PM_{10}	0.58	1.27			
		$PM_{2.5}$	0.01	0.03			

Major NSR Summary Table

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Emission Point No. (1)	**Source Name (2)**	**Air Contaminant Name (3)**	**Emission Rates**		**Monitoring and Testing Requirements**	**Recordkeeping Requirements**	**Reporting Requirements**
			lb/hr	**TPY (4)**	**Special Condition/Application Information**	**Special Condition/Application Information**	**Special Condition/Application Information**
TEMP-MSS	Controlled Tank MSS Emissions	NOx	0.59	0.01	26, 27, 28	23, 26, 27, 28	
		CO	1.17	0.02			
		VOC	6.74	0.12			
		MeOH	6.73	0.12			
		SO_2	<0.01	<0.01			
		PM	0.03	<0.01			
		PM_{10}	0.03	<0.01			
		$PM_{2.5}$	0.03	<0.01			
FUG-MSS	Atmosphere MSS Emissions	VOC	29.00	0.09	25, 26, 27	23, 24, 25, 26, 27	
		MeOH	29.00	0.09			

(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) NH_3 - ammonia
VOC - volatile organic compounds as defined in Title 30 Texas Administrative Code § 101.1
NO_x - total oxides of nitrogen
SO_2 - sulfur dioxide
PM - total particulate matter, suspended in the atmosphere, including PM_{10} and $PM_{2.5}$, as represented
PM_{10} - total particulate matter equal to or less than 10 microns in diameter, including $PM_{2.5}$, as represented
$PM_{2.5}$ - particulate matter equal to or less than 2.5 microns in diameter
CO - carbon monoxide
MeOH - methanol
(4) Compliance with annual emission limits (tons per year) is based on a 12 month rolling period.

(5) Emission rate is an estimate and is enforceable through compliance with the applicable special condition(s) and permit application representations.
(6) The emission limit applies only during startup as defined in Special Condition 7.
(7) This emission limit applies only during start-up of the methanol unit (Reformer) for a maximum of 220 hours per year.

Texas Commission on Environmental Quality
Air Quality Permit

A Permit Is Hereby Issued To
Natgasoline LLC
Authorizing the Continued Operation of
Methanol Plant
Located at **Beaumont, Jefferson County, Texas**
Latitude 30.033725 Longitude -94.049174

Permits: 107764, GHGPSDTX54 and PSDTX1340

Issuance Date: August 9, 2024

Expiration Date: August 9, 2034

For the Commission

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

operating hours; keep all required records in a file at the plant site. If, however, the facility normally operates unattended, records shall be maintained at the nearest staffed location within Texas specified in the application; make the records available at the request of personnel from the commission or any air pollution control program having jurisdiction in a timely manner; comply with any additional recordkeeping requirements specified in special conditions in the permit; and retain information in the file for at least two years following the date that the information or data is obtained. [30 TAC § 116.115(b)(2)(E)]

1. **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]
2. **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)]
3. **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)]
4. **This** permit may not be transferred, assigned, or conveyed by the holder except as provided by rule. [30 TAC § 116.110(e)]
5. **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)]
6. **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.
7. **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
°F = Temperature in degrees Fahrenheit
°K = Temperature in degrees Kelvin
µg = microgram
µg/m^3 = microgram per cubic meter
acfm = actual cubic feet per minute
AMOC = alternate means of control
AOS = alternative operating scenario
AP-42 = Air Pollutant Emission Factors, 5th edition
APD = Air Permits Division
API = American Petroleum Institute
APWL = air pollutant watch list
BPA = Beaumont/ Port Arthur
BACT = best available control technology
BAE = baseline actual emissions
bbl = barrel
bbl/day = barrel per day
bhp = brake horsepower
BMP = best management practices
Btu = British thermal unit
Btu/scf = British thermal unit per standard cubic foot or feet
CAA = Clean Air Act
CAM = compliance-assurance monitoring
CEMS = continuous emissions monitoring systems
cfm = cubic feet (per) minute
CFR = Code of Federal Regulations
CN = customer ID number
CNG = compressed natural gas
CO = carbon monoxide
COMS = continuous opacity monitoring system
CPMS = continuous parametric monitoring system
DFW = Dallas/ Fort Worth (Metroplex)
DE = destruction efficiency
DRE = destruction and removal efficiency
dscf = dry standard cubic foot or feet
dscfm = dry standard cubic foot or feet per minute
ED = (TCEQ) Executive Director
EF = emissions factor
EFR = external floating roof tank
EGU = electric generating unit
EI = Emissions Inventory
ELP = El Paso
EPA = (United States) Environmental Protection Agency
EPN = emission point number
ESL = effects screening level
ESP = electrostatic precipitator
FCAA = Federal Clean Air Act
FCCU = fluid catalytic cracking unit
FID = flame ionization detector
FIN = facility identification number
ft = foot or feet
ft/sec = foot or feet per second
g = gram
gal/wk = gallon per week
gal/yr = gallon per year
GLC = ground level concentration
GLC_{max} = maximum (predicted) ground-level concentration
gpm = gallon per minute
gr/1000scf = grain per 1000 standard cubic feet
gr/dscf = grain per dry standard cubic feet
H_2CO = formaldehyde
H_2S = hydrogen sulfide
H_2SO_4 = sulfuric acid
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
HC = hydrocarbons
HCl = hydrochloric acid, hydrogen chloride
Hg = mercury
HGB = Houston/Galveston/Brazoria
hp = horsepower
hr = hour
IFR = internal floating roof tank
in H_2O = inches of water
in Hg = inches of mercury
IR = infrared
ISC3 = Industrial Source Complex, a dispersion model
ISCST3 = Industrial Source Complex Short-Term, a dispersion model
K = Kelvin; extension of the degree Celsius scaled-down to absolute zero
LACT = lease automatic custody transfer
LAER = lowest achievable emission rate
lb = pound
lb/day = pound per day
lb/hr = pound per hour
lb/MMBtu = pound per million British thermal units
LDAR = Leak Detection and Repair (Requirements)
LNG = liquefied natural gas
LPG = liquefied petroleum gas
LT/D = long ton per day
m = meter
m^3 = cubic meter
m/sec = meters per second
MACT = maximum achievable control technology
MAERT = Maximum Allowable Emission Rate Table
MERA = Modeling and Effects Review Applicability
mg = milligram
mg/g = milligram per gram
mL = milliliter
MMBtu = million British thermal units
MMBtu/hr = million British thermal units per hour
MSDS = material safety data sheet
MSS = maintenance, startup, and shutdown
MW = megawatt
NAAQS = National Ambient Air Quality Standards
NESHAP = National Emission Standards for Hazardous Air Pollutants
NGL = natural gas liquids
NNSR = nonattainment new source review
NO_x = total oxides of nitrogen
NSPS = New Source Performance Standards
PAL = plant-wide applicability limit

PBR = Permit(s) by Rule
PCP = pollution control project
PEMS = predictive emission monitoring system
PID = photo ionization detector
PM = periodic monitoring
PM = total particulate matter, suspended in the atmosphere, including PM_{10} and $PM_{2.5}$, as represented
$PM_{2.5}$ = particulate matter equal to or less than 2.5 microns in diameter
PM_{10} = 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
SO_2 = 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 107764 and PSDTX1340

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

   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

2. These facilities shall comply with all applicable requirements of the U.S. Environmental Protection Agency. The permit holder shall comply with all applicable requirements of the U.S. Environmental Protection Agency (EPA) regulations on New Source Performance Standards promulgated in Title 40 Code of Federal Regulations (40 CFR) Part 60 for the following:

   A. Industrial-Commercial-Institutional Steam Generating Units, Subparts A and Db;

   B. Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced after July 23, 1984, Subparts A and Kb;

   C. Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry for Which Construction, Reconstruction, or Modification Commenced After November 7, 2006, Subparts A and VVa;

   D. Volatile Organic Compound (VOC) Emissions from Synthetic Organic Chemical Manufacturing Industry (SOCMI) Distillation Operations, Subparts A and NNN.

3. The permit holder shall comply with all applicable requirements of the U.S. EPA regulations on National Emission Standards for Hazardous Air Pollutants for Source Categories promulgated in 40 CFR Part 63 for the following:

   A. Organic Hazardous Air Pollutants From the Synthetic Organic Chemical Manufacturing Industry, Subparts A and F;

   B. Organic Hazardous Air Pollutants From the Synthetic Organic Chemical Manufacturing Industry for Process Vents, Storage Vessels, Transfer Operations, and Wastewater, Subparts A and G;

C. Organic Hazardous Air Pollutants for Equipment Leaks, Subparts A and H;

D. Industrial, Commercial, and Institutional Boilers and Process Heaters, Subparts A and DDDDD.

Emission Standards and Operational Specifications

4. FINs B-01001 and B-14001A, shall be fired with natural gas or blended fuel gas containing no more than 5 grains of total sulfur per 100 dry standard cubic feet (dscf).

5. The natural gas and blended fuel gas shall be sampled every 6 months to determine total sulfur and net heating value. Test results from the fuel supplier may be used to satisfy this requirement.

6. NOx emissions from the reformer and the boiler, FINs B-01001 and B-14001A, respectively, shall be controlled by an SCR. NOx and CO emissions shall not exceed the following, except during periods of startup:

   A. 0.015 lb NO_x/MMBtu on an hourly average for the reformer and 0.015 lb NOx/MMBtu on an hourly average for the auxiliary boiler;

   B. 100 ppmvd CO corrected to 3 percent oxygen on an hourly average and 50 ppmvd corrected to 3 percent oxygen on an annual basis; and

   C. 10 ppmvd ammonia corrected to 3 percent oxygen on an hourly average.

7. SCR start-up for the Auxiliary Boiler (EPN: B-14001) and Reformer (EPN: B-01001) shall be defined as the period that begins with the introduction of fuel and ends when the SCR is operational, as determined by the minimum required operating temperature of 500 °F and verified introduction of ammonia to the SCR for a period of two hours. Periods of start-up shall not exceed 180 hours for the Auxiliary Boiler and 220 hours for the reformer within any rolling 12 month period.

8. The permit holder shall install and maintain fuel flow monitors to monitor both the natural gas and the fuel gas to the reformer, EPN B-01001.

   A. Readings shall be taken at least once every 15 minutes and the average hourly values of the flows and the percent natural gas to the reformer shall be recorded each hour.

   B. The percent of natural gas to the reformer, on an hourly basis, shall not exceed the maximum percent of natural gas established during the performance test under Special Condition 20 during normal operations.

C. The monitors shall be calibrated on an annual basis to be accurate to ±5.0%.

D. The monitors and analyzers shall operate as required by this section at least 95% of the time the reformer is operational, averaged over a rolling 12 month period.

9. Storage tank throughput and service shall be limited to the following:

Tank	Service	Rolling 12 Month Throughput (bbl)	Fill/Withdrawal rate (gallons/hour)
TK-04001	methanol	1,449,728	158,503
TK-04002 A	methanol	9,060,798	79,252
TK-04002 B	methanol	9,060,798	

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

A. All vents from Tanks TK-04001, TK-04002 A, and TK-04002 B shall be routed to scrubber D-04001, except during plant shutdowns when a temporary VCU may be utilized for combusting tank emissions.

B. Except for labels, logos, etc. not to exceed 15 percent of the tank total surface area, uninsulated tank exterior surfaces exposed to the sun shall be white or unpainted aluminum. Storage tanks must be equipped with permanent submerged fill pipes.

C. The permit holder shall maintain a record of tank throughput for the previous month and the past consecutive 12 month period for each tank.

11. Flares shall be designed and operated in accordance with the following requirements:

A. The flare systems shall be designed such that the combined assist natural gas and waste stream to each flare meets the 40 CFR § 60.18

specifications of minimum heating value and maximum tip velocity under normal, upset, and maintenance flow conditions.

The heating value (LHV 200 Btu/scf) and velocity requirements shall be satisfied during operations authorized by this permit. Flare testing per 40 CFR § 60.18(f) may be requested by the appropriate regional office to demonstrate compliance with these requirements.

B. The flare shall be operated with a flame present at all times and/or have a constant pilot flame. The pilot flame shall be continuously monitored by a thermocouple or an infrared monitor. The time, date, and duration of any loss of pilot flame shall be recorded. Each monitoring device shall be accurate to, and shall be calibrated at a frequency in accordance with, the manufacturer's specifications.

C. The flare shall be operated with no visible emissions except periods not to exceed a total of five minutes during any two consecutive hours.

The permit holder shall install a continuous flow monitor that provides a record of the vent stream flow to the flare. The flow monitor sensor sample points shall be installed in the vent stream as near as possible to the flare inlet such that the total vent stream to the flare is measured. The permit holder shall also continuously monitor and record the net heating value of the vent stream sent to the flare with a calorimeter analyzer (asset number 100-AT-0101). Readings shall be taken at least once every 15 minutes and the average hourly values of the flow shall be recorded each hour.

The monitors shall be calibrated on an annual basis to meet the following accuracy specifications: the flow monitor shall be ±5.0%, temperature monitor shall be ±2.0% at absolute temperature, and pressure monitor shall be ±5.0 mm Hg; The calorimeter shall be calibrated and maintained in accordance with manufacturer's specifications.

The monitors and analyzers shall operate as required by this section at least 95% of the time when the flare is operational, averaged over a rolling 12 month period. Actual exit velocity determined in accordance with 40 CFR §60.18(f)(4) shall be recorded at least once every 15 minutes. Hourly mass emission rates shall be determined and recorded using the above readings and the emission factors used in the permit renewal or amendment application.

12. Absorber D-04001 shall be a once through scrubber and shall operate with no less than 99% removal efficiency for methanol on an hourly average.

A. The minimum liquid flow to the D-04001 absorber shall be 13 gallons per minute for D-04001 prior to the first stack test performed in accordance with Special Condition 18. After the first satisfactory stack test, the hourly average flow shall be at least equal to that maintained during the last satisfactory stack test. The circulation rate shall be monitored and recorded at least once an hour.

B. The flow monitoring devices shall be calibrated at a frequency in accordance with the manufacturer's specifications, or at least annually, whichever is more frequent, and shall be accurate to within 2 percent of span or 5 percent of the design value.

C. Except during the performance of a zero check, quality assured (or valid) data must be generated for D-04001 at all times the methanol tanks contain methanol during methanol loading operations. Loss of valid data due to periods of monitor breakdown, out-of-control operation (producing inaccurate data), repair, maintenance, or calibration may be exempted provided it does not exceed 5 percent of operating time (in hours) over the previous rolling 12 month period. The measurements missed shall be estimated using engineering judgment and the methods used recorded. A zero check of the flow monitoring devices will be performed at a frequency in accordance with manufacturer's specifications.

D. During the Methanol Plant shutdowns, the methanol storage tank emissions may be routed to a temporary VCU, in accordance with the Natgasoline Standard Permit 174371. The 13 gpm minimum scrubber flow requirement will not apply during this period. In addition, the D-04001 Methanol Scrubber has been added to the bottom of the MSS Activity Summary Table - Attachment A.

13. The following requirements apply to capture systems for the scrubber and plant flare (FINS D-04001 and S-10001).

A. The permit holder shall comply with the following monitoring requirements.

(1) Conduct a once a month visual, audible, and/or olfactory inspection of the capture system to verify there are no leaking components in the capture system; or

(2) Once a year, verify the capture system is leak-free by inspecting in accordance with 40 CFR Part 60, Appendix A, Test Method 21. Leaks shall be indicated by an instrument reading greater than or equal to 500 ppmv above background.

B. The control device shall not have a bypass unless the permit holder complies with 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 that the position of the valves and the condition of the car seals prevent flow out the bypass.

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

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

14. The following requirements apply to the cooling tower, T-06001:

A. Cooling water VOC concentrations above 0.08 ppmw indicate faulty equipment. Equipment shall be maintained so as to minimize VOC emissions into the cooling water. Faulty equipment shall be repaired at the earliest opportunity but no later than the next scheduled shutdown of the process unit in which the leak occurs.

B. Emissions from the cooling tower are not authorized if the VOC concentration of the water returning to the cooling tower exceeds 0.8 ppmw. The VOC concentrations above 0.8 ppmw are not subject to extensions for delay of repair under this permit condition. The results of the monitoring and maintenance efforts shall be recorded.

C. The VOC associated with cooling tower water shall be monitored monthly with an air stripping system meeting the requirements of the TCEQ Sampling Procedures Manual, Appendix P (dated January 2003 or a later edition) or an approved equivalent sampling method. The results of the monitoring, cooling water flow rate, and maintenance activities on the cooling water system shall be recorded. The monitoring results and cooling water hourly mass flow rate shall be used to determine cooling tower hourly VOC emissions. The rolling 12 month cooling water emission rate shall be recorded on a monthly basis and be determined by summing the VOC emissions between VOC monitoring periods over the rolling 12 month period. The emissions between VOC monitoring periods

shall be obtained by multiplying the total cooling water mass flow between cooling water monitoring periods by the higher of the two VOC monitored results.

D. Each cooling tower shall be equipped with drift eliminators having manufacturer's design assurance of 0.001% drift or less. Drifts eliminators shall be maintained and inspected at least annually. The permit holder shall maintain records of all inspections and repairs.

E. Total dissolved solids (TDS) shall not exceed 40,000 parts per million by weight (ppmw) on an hourly basis and 20,000 ppmw on a rolling 12 month basis. Dissolved solids in the cooling water drift are considered to be emitted as PM, PM10, and PM2.5 as represented in the permit application calculations.

F. Cooling towers shall be analyzed for particulate emissions using one of the following methods:

(1) Cooling water shall be sampled at least once per day for total dissolved solids (TDS); or

(2) TDS monitoring may be reduced to weekly if conductivity is monitored daily and TDS is calculated using a ratio of TDS-to-conductivity (in ppmw per µmho/cm or ppmw/siemens). The ratio of TDS-to-conductivity shall be determined by concurrently monitoring TDS and conductivity on a weekly basis. The permit holder may use the average of two consecutive TDS-to-conductivity ratios to calculate daily TDS; or

(3) TDS monitoring may be reduced to quarterly if conductivity is monitored daily and TDS is calculated using a correlation factor established for each cooling tower. The correlation factor shall be the average of nine consecutive weekly TDS-to-conductivity ratios determined using subparagraph (2) above provided the highest ratio is not more than 10% larger than the smallest ratio.

The permit holder shall validate the TDS-to-conductivity correlation factor once each calendar quarter. If the ratio of concurrently sampled TDS and conductivity is more than 10% higher or lower than the established factor, the permit holder shall increase TDS monitoring to weekly until a new correlation factor can be established.

G. Cooling water sampling shall be representative of the cooling tower feed water and shall be conducted using approved methods.

(4) The analysis method for TDS shall be EPA Method 160.1, ASTM D5907, and SM 2540 C [SM - 19th edition of Standard Methods for Examination of Water]. Water samples should be capped upon collection, and

transferred to a laboratory area for analysis. Short term and annual average emission rates of PM, PM_{10} and $PM_{2.5}$ shall be calculated using the measured TDS, the design drift rate and the daily maximum and average actual cooling water circulation rate. Alternately, the design maximum circulation rate may be used for all calculations.

(5) The analysis method for conductivity shall be either ASTM D1125-95A (field or routine laboratory testing) or ASTM D1125-95B (continuous monitor). The analysis may be conducted at the sample site or with a calibrated process conductivity meter. If a conductivity meter is used, it shall be calibrated at least annually. Documentation of the method and any associated calibration records shall be maintained.

(6) Alternate sampling and analysis methods may be used to comply with G(1) and G(2) with written approval from the TCEQ Regional Director.

(7) Records of all instrument calibrations and test results and process measurements used for the emission calculations shall be retained.

H. Emission rates of PM, PM_{10} and $PM_{2.5}$ shall be calculated using the measured TDS and the ratio or correlation of TDS to conductivity measurements, the design drift rate and the daily maximum and average actual cooling water circulation rate for the short term and annual average rates. Alternately, the design maximum circulation rate may be used for all calculations. Emission records shall be updated monthly.

Piping, Valves, Connectors, Pumps, Agitators, and Compressors - 28VHP

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

A. The requirements of paragraphs F and G shall not apply (1) where the Volatile Organic Compound (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:

(8) piping and instrumentation diagram (PID);

(9) a written or electronic database or electronic file;

(10) color coding;

(11) a form of weatherproof identification; or

(12) 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 subparagraph A above. If an unsafe to monitor component is not considered safe to monitor within a calendar year, then it shall be monitored as soon as possible during safe to monitor times. A difficult to monitor component for which quarterly monitoring is specified may instead be monitored annually.

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

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

(13) a cap, blind flange, plug, or second valve must be installed on the line or valve; or

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

F. Accessible valves shall be monitored by leak checking for fugitive emissions at least quarterly using an approved gas analyzer. Sealless/leakless valves (including, but not limited to, welded bonnet bellows and diaphragm valves) and relief valves equipped with a rupture disc upstream or venting to a control device are not required to be monitored. If a relief valve is equipped with rupture disc, a pressure-sensing device shall be installed between the relief valve and rupture disc to monitor disc integrity.

A check of the reading of the pressure-sensing device to verify disc integrity shall be performed at least quarterly and recorded in the unit log or equivalent. Pressure-sensing devices that are continuously monitored with alarms are exempt from recordkeeping requirements specified in this paragraph. All leaking discs shall be replaced at the earliest opportunity but no later than the next process shutdown.

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

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

G. Except as may be provided for in the special conditions of this permit, all pump, compressor, and agitator seals shall be monitored with an

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

H. Damaged or leaking valves or connectors found to be emitting VOC in excess of 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. Damaged or leaking pump, compressor, and agitator seals found to be emitting VOC in excess of 2,000 ppmv or found by visual inspection to be leaking (e.g., dripping process fluids) shall be tagged and replaced or repaired. A first attempt to repair the leak must be made within 5 days and a record of the attempt shall be maintained.

I. A leaking component shall be repaired as soon as practicable, but no later than 15 days after the leak is found. If the repair of a component would require a unit shutdown that would create more emissions than the repair would eliminate, the repair may be delayed until the next scheduled shutdown. All leaking components which cannot be repaired until a scheduled shutdown shall be identified for such repair by tagging within 15 days of the detection of the leak. A listing of all components that qualify for delay of repair shall be maintained on a delay of repair list. The cumulative daily emissions from all components on the delay of repair list shall be estimated by multiplying by 24 the mass emission rate for each component calculated in accordance with the instructions in 30 TAC 115.782 (c)(1)(B)(i)(II). The calculations of the cumulative daily emissions from all components on the delay of repair list shall be updated within ten days of when the latest leaking component is added to the delay of repair list. When the cumulative daily emission rate of all components on the delay of repair list times the number of days until the next scheduled unit shutdown is equal to or exceeds the total emissions from a unit 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.

J. Records of repairs shall include date of repairs, repair results, justification for delay of repairs, and corrective actions taken for all components.

Records of instrument monitoring shall indicate dates and times, test methods, and instrument readings. The instrument monitoring record shall include the time that monitoring took place for no less than 95% of the instrument readings recorded. Records of physical inspections shall be noted in the operator's log or equivalent.

K. Alternative monitoring frequency schedules of 30 TAC §§115.352 - 115.359 or National Emission Standards for Organic Hazardous Air Pollutants, 40 CFR Part 63, Subpart H, may be used in lieu of Items F through G of this condition.

L. Compliance with the requirements of this condition does not assure compliance with requirements of 30 TAC Chapter 115, an applicable New Source Performance Standard (NSPS), or an applicable National Emission Standard for Hazardous Air Pollutants (NESHAPS) and does not constitute approval of alternative standards for these regulations.

M. Process drains shall be flushed once per week and monitored annually using a gas analyzer conforming to the requirements of this condition. A leak shall be defined as 500 ppmv.

Piping, Valves, Pumps, and Compressors in Ammonia Service

16. Audio, olfactory, and visual checks for ammonia leaks within the operating area shall be made every eight hours.

A. Immediately, but no later than one hour upon detection of a leak, plant personnel shall take the following actions:

(15) Isolate the leak.

(16) Commence repair or replacement of the leaking component.

(17) Use a leak collection/containment system to prevent the leak until repair or replacement can be made if immediate repair is not possible.

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

Continuous Emissions Monitoring

17. The permit holder shall install, calibrate, and maintain a continuous emission monitoring system (CEMS) to measure and record the in-stack concentration of NOx, CO, and NH_3 from the reformer and the auxiliary boiler, FINs B-01001 and B-14001A

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.

The CEMS for NH_3 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 adapted Performance Specification No. 15 for Extractive Fourier Transform Infrared Spectroscopy or Performance Specification No. 18 for Gaseous Hydrogen Chloride, Title 40 Code of Federal Regulation Part 60 (40 CFR Part 60), Appendix B.

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:

(18) The permit holder shall assure that the CEMS meets the applicable quality-assurance requirements specified in 40 CFR Part 60, Appendix F, Procedure 1 for applicable gases or Procedure 6 adapted for NH_3 (or an equivalent Quality Assurance Plan (QAP) approved by the appropriate TCEQ Regional Manager.). 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.

(19) 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 Specifications, 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 and Procedure 6, Section 5.2.3 adapted for

NH_3, with the following exception: a relative accuracy test audit (RATA) is not required once every four quarters (i.e., four successive quarterly CGA may be conducted). An equivalent quality-assurance method approved by the TCEQ may also be used. Successive quarterly audits shall occur no closer than two months.

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

C. The monitoring data shall be reduced to one hour average concentrations at least once everyday, using a minimum of four equally-spaced data points from each one-hour period. The individual average concentrations shall be reduced to units of pounds per hour and lbs NOx/MMBtu at least once every week as follows:

The measured hourly average concentration from the CEMS shall be multiplied by the exhaust gas flow rate, calculated using the monitored fuel flow rate and the monitored O2 concentration, to determine the hourly emission rate.

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 FINs B-01001 and B-14001A 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 FINs B-01001 and B-14001A 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.

Initial Demonstration of Compliance

18. The permit holder shall perform stack sampling and other testing as required to establish the actual pattern and quantities of air contaminants being emitted into the atmosphere from the EPNs B-01001, B-14001, and D-04001 to demonstrate compliance with the MAERT. The testing shall also demonstrate compliance with the lb NOx/MMBtu and the ppm CO limits for EPNs B-01001 and B-14001 and the control efficiency requirements

for EPNs D-04001 established in these conditions. The permit holder is responsible for providing sampling and testing facilities and conducting the sampling and testing operations at his expense. Sampling shall be conducted in accordance with the appropriate procedures of the Texas Commission on Environmental Quality (TCEQ) Sampling Procedures Manual and the U.S. Environmental Protection Agency (EPA) Reference Methods.

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

A. The appropriate TCEQ Regional Office shall be notified not less than 45 days prior to sampling. The notice shall include:

2. Proposed date for pretest meeting.

3. Date sampling will occur.

4. Name of firm conducting sampling.

5. Type of sampling equipment to be used.

6. Method or procedure to be used in sampling.

7. Description of any proposed deviation from the sampling procedures specified in this permit or TCEQ/EPA sampling procedures.

8. Procedure/parameters to be used to determine worst case emissions during the sampling period.

B. The purpose of the pretest meeting is to review the necessary sampling and testing procedures, to provide the proper data forms for recording pertinent data, and to review the format procedures for the test reports. The TCEQ Regional Director must approve any deviation from specified sampling procedures. Air contaminants emitted to be tested for include (but are not limited to) the following:

9. NOx, CO, PM2.5 and NH3 from EPNs B-01001 and B-14001; and

10. VOC from EPNs D-04001.

C. Sampling shall occur within 60 days after achieving the maximum operating rate, but no later than 180 days after initial start-up of the facilities and at such other times as may be required by the TCEQ

Executive Director. Requests for additional time to perform sampling shall be submitted to the appropriate regional office.

D. The facility being sampled shall operate under conditions expected to result in maximum emissions during stack emission testing. These conditions/parameters and any other primary operating parameters that affect the emission rate shall be monitored and recorded during the stack test. Any additional parameters shall be determined at the pretest meeting and shall be stated in the sampling report. Permit conditions and parameter limits may be waived during stack testing performed under this condition if the proposed condition/parameter range is identified in the test notice specified in paragraph A and accepted by the TCEQ Regional Office. Permit allowable emissions and emission control requirements are not waived and still apply during stack testing periods.

During subsequent operations, if the operating conditions expected to generate maximum emissions are greater than that recorded during the test period, stack sampling shall be performed at the new operating conditions within 120 days. This sampling may be waived by the TCEQ Air Section Manager for the region.

E. Copies of the final sampling report shall be forwarded to the offices below within 60 days after sampling is completed. Sampling reports shall comply with the attached provisions entitled “Chapter 14, Contents of Sampling Reports” of the TCEQ Sampling Procedures Manual. The reports shall be distributed as follows:

11. One copy to the appropriate TCEQ Regional Office; and

12. One copy to each local air pollution control program.

F. Sample ports shall be incorporated into the design of EPNs B-01001, B-14001, and D-04001, according to the specifications set forth in the attachment entitled “Chapter 2, Stack Sampling Facilities” of the Texas Commission on Environmental Quality (TCEQ) Sampling Procedures Manual. Alternate sampling facility designs must be submitted for approval to the TCEQ Regional Director.

19. Testing of the boiler, EPN B-14001, under Special Condition 18 shall include one test when fueled by 100% natural gas and another test when fueled at the maximum percent of fuel gas that can be maintained during the test period.

20. Testing of the reformer, EPN B-01001, under Special Condition 18, shall include one test when fueled at the maximum percent of fuel gas that can be maintained during the test period and another test when fueled at the maximum percent of natural gas expected to be used during normal operations.

Planned Maintenance, Startup and Shutdown

21. Planned startup and shutdown emissions due to the activities identified in Attachment A are authorized from facilities and emission points identified in Attachment A provided the facility and emissions are compliant with the MAERT and special conditions of this permit.

22. This permit authorizes the emissions from the facilities identified in Attachment A for the planned maintenance, startup, and shutdown (MSS) activities summarized in the MSS Activity Summary (Attachment A) attached to this permit.

23. The performance of each planned MSS activity identified in Attachment A and the emissions associated with it shall be recorded and include at least the following information:

    A. the process unit at which emissions from the MSS activity occurred, including the emission point number and common name of the process unit;

    B. the type of planned MSS activity and the reason for the planned activity;

    C. the common name and the facility identification number, if applicable, of the facilities at which the MSS activity and emissions occurred;

    D. the date and time of the MSS activity and its duration;

    E. the estimated quantity of each air contaminant, or mixture of air contaminants, emitted with the data and methods used to determine it. The emissions shall be estimated using the methods identified in the permit application, consistent with good engineering practice.

    All MSS emissions shall be summed monthly and the rolling 12-month emissions shall be updated on a monthly basis.

24. Process units and facilities, with the exception of those identified in Special Condition 26 shall be depressurized, emptied, degassed, and placed in service in accordance with the following requirements.

    A. The process equipment shall be depressurized to a control device or a controlled recovery system prior to venting to atmosphere, degassing, or draining liquid. Equipment that only contains material that is liquid with VOC partial pressure less than 0.50 psi at the normal process temperature and 95°F may be opened to atmosphere and drained in accordance with paragraph C of this special condition. The vapor pressure at 95°F may be used if the actual temperature of the liquid is verified to be less than 95°F and the temperature is recorded.

B. If mixed phase materials must be removed from process equipment, the cleared material shall be routed to a knockout drum or equivalent to allow for managed initial phase separation. If the VOC partial pressure is greater than 0.50 psi at either the normal process temperature or 95°F, any vents in the system must be routed to a control device or a controlled recovery system. The vapor pressure at 95°F may be used if the actual temperature of the liquid is verified to be less than 95°F and the temperature is recorded. Control must remain in place until degassing has been completed or the system is no longer vented to atmosphere.

C. All liquids from process equipment or storage vessels must be removed to the maximum extent practical prior to opening equipment to commence degassing and/or maintenance. Liquids must be drained into a closed vessel or closed liquid recovery system unless prevented by the physical configuration of the equipment. If it is necessary to drain liquid into an open pan or sump, the liquid must be covered or transferred to a covered vessel within one hour of being drained.

D. If the VOC partial pressure is greater than 0.50 psi at the normal process temperature or 95°F, facilities shall be degassed using good engineering practice to ensure air contaminants are removed from the system through the control device or controlled recovery system to the extent allowed by process equipment or storage vessel design. The vapor pressure at 95°F may be used if the actual temperature of the liquid is verified to be less than 95°F and the temperature is recorded. The facilities to be degassed shall not be vented directly to atmosphere, except as necessary to establish isolation of the work area or to monitor VOC concentration following controlled depressurization. The venting shall be minimized to the maximum extent practicable and actions taken recorded. The control device or recovery system utilized shall be recorded with the estimated emissions from controlled and uncontrolled degassing calculated using the methods that were used to determine allowable emissions for the permit application.

The locations and/or identifiers where the purge gas or steam enters the process equipment or storage vessel and the exit points for the exhaust gases shall be recorded (process flow diagrams [PFDs] or piping and instrumentation diagrams [P&IDs] may be used to demonstrate compliance with the requirement). If the process equipment is purged with a gas, two system volumes of purge gas must have passed through the control device or controlled recovery system before the vent stream may be sampled to verify acceptable VOC concentration prior to uncontrolled venting. The VOC sampling and analysis shall be performed using an instrument meeting the requirements of Special Condition 25. The sampling point shall be upstream of the inlet to the control device or controlled recovery system. The sample ports and the collection system must be designed and operated such that there is no air leakage into the sample probe or the collection

system downstream of the process equipment or vessel being purged. If there is not a connection (such as a sample, vent, or drain valve) available from which a representative sample may be obtained, a sample may be taken upon entry into the system after degassing has been completed. The sample shall be taken from inside the vessel so as to minimize any air or dilution from the entry point. The facilities shall be degassed to a control device or controlled recovery system until the VOC concentration is less than 10,000 ppmv or 10 percent of the LEL. Documented site procedures used to de-inventory equipment to a control device for safety purposes (i.e., hot work or vessel entry procedures) that achieve at least the same level of purging may be used in lieu of the above.

25. Air contaminant concentration shall be measured using an instrument/detector meeting one set of requirements specified below.

A. VOC concentration shall be measured using an instrument meeting all the requirements specified in EPA Method 21 (40 CFR 60, Appendix A) with the following exceptions:

13. The instrument shall be calibrated within 24 hours of use with a calibration gas such that the response factor (RF) of the VOC (or mixture of VOCs) to be monitored shall be less than 2.0. The calibration gas and the gas to be measured, and its approximate (RF) shall be recorded. If the RF of the VOC (or mixture of VOCs) to be monitored is greater than 2.0, the VOC concentration shall be determined as follows:

VOC Concentration = Concentration as read from the instrument*RF

In no case should a calibration gas be used such that the RF of the VOC (or mixture of VOCs) to be monitored is greater than 5.0.

14. Sampling shall be performed as directed by this permit in lieu of section 8.3 of Method 21. During sampling, data recording shall not begin until after two times the instrument response time. The date and time shall be recorded, and VOC concentration shall be monitored for at least 5 minutes, recording VOC concentration each minute. As an alternative the VOC concentration may be monitored over a five-minute period with an instrument designed to continuously measure concentration and record the highest concentration read. The highest measured VOC concentration shall be recorded and shall not exceed the specified VOC concentration limit prior to uncontrolled venting.

B. Colorimetric gas detector tubes may be used to determine air contaminant concentrations if they are used in accordance with the following requirements.

15. The air contaminant concentration measured as defined in (3) is less than 80 percent of the range of the tube and is at least 20 percent of the maximum range of the tube.

16. The tube is used in accordance with the manufacturer's guidelines.

17. At least 2 samples taken at least 5 minutes apart must satisfy the following prior to uncontrolled venting:

measured contaminant concentration (ppmv) < release concentration.

Where the release concentration is:

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

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

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

C. Lower explosive limit measured with a lower explosive limit detector.

18. The detector shall be calibrated within 30 days of use with a certified pentane gas standard at 25% of the lower explosive limit (LEL) for pentane. Records of the calibration date/time and calibration result (pass/fail) shall be maintained.

19. A functionality test shall be performed on each detector within 24 hours of use with a certified gas standard at 25% of the LEL for pentane. The LEL monitor shall read no lower than 90% of the calibration gas certified value. Records, including the date/time and test results, shall be maintained.

20. A certified methane gas standard equivalent to 25% of the LEL for pentane may be used for calibration and functionality tests provided that the LEL response is within 95% of that for pentane.

26. This permit authorizes emissions from fixed-roof storage tanks (EPNs TEMP-MSS and FUG-MSS) identified in Attachment A during tank cleaning activities. These emissions are subject to the maximum allowable emission rates indicated on the MAERT.

A. Tank refilling or degassing of the vapor space under the fixed roof must begin within 24 hours after the tank has been drained unless the vapor under the fixed roof is routed to control or a controlled recovery system during this period. The tank shall not be opened except as necessary to set up for degassing and cleaning, Controlled degassing of the vapor space under landed roofs shall be completed as follows:

21. Any gas or vapor removed from the vapor space under the fixed roof must be routed to a control device or a controlled recovery system and controlled degassing must be maintained until the VOC concentration is less than 10,000 ppmv or 10 percent of the LEL.

22. The vapor space under the fixed roof shall be vented using good engineering practice to ensure air contaminants are flushed out of the tank through the control device or controlled recovery system to the extent allowed by the storage tank design.

23. A volume of purge gas equivalent to twice the volume of the vapor space under the fixed roof must have passed through the control device or into a controlled recovery system, before the vent stream may be sampled to verify acceptable VOC concentration. The measurement of purge gas volume shall not include any make-up air introduced into the control device or recovery system. The VOC sampling and analysis shall be performed as specified in Special Condition 25.

24. The sampling point shall be upstream of the inlet to the control device or controlled recovery system. The sample ports and the collection system must be designed and operated such that there is no air leakage into the sample probe or the collection system downstream of the process equipment or vessel being purged.

B. Records shall be maintained for each tank clearing event. The estimated quantity of each air contaminant, or mixture of air contaminants, emitted between tank clearing events with the data and methods used to determine it. The emissions associated with tank clearing activities shall be calculated using the methods described in Section 7.1.3 of AP-42 "Compilation of Air Pollution Emission Factors, Chapter 7 - Storage of Organic Liquids" dated June 2020 and the permit application.

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

28. Control devices required by this permit for emissions from planned MSS activities are limited to those types identified in this condition. Control devices shall be operated with no visible emissions except periods not to exceed a total of five minutes during any two consecutive hours. Each device used must meet all the requirements identified for that type of control device.

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

A. Thermal Oxidizer.

25. The thermal oxidizer firebox exit temperature shall be maintained at not less than 1400°F and waste gas flows shall be limited to assure at least a 0.5 second residence time in the fire box while waste gas is being fed into the oxidizer.

26. The thermal oxidizer exhaust temperature shall be continuously monitored and recorded when waste gas is directed to the oxidizer. The temperature measurements shall be made at intervals of six minutes or less and recorded at that frequency.

The temperature measurement device shall be installed, calibrated, and maintained according to accepted practice and the manufacturer's specifications. The device shall have an accuracy of the greater of ±0.75 percent of the temperature being measured expressed in degrees Celsius or ±2.5ºC.

27. As an alternative to complying with the minimum temperature above, the permit holder may establish a minimum operating temperature during testing demonstrating that 99% control is achieved. The stack test must have been performed within the past 12 month. Stack VOC concentrations and flow rates shall be determined using the appropriate EPA reference method. A copy of the test report shall be maintained with the thermal oxidizer and a summary of the testing results shall be included with the emissions calculations.

B. Internal Combustion Engine.

28. The internal combustion engine shall have a VOC destruction efficiency of at least 99 percent.

29. The engine must have been stack tested with butane or propane to confirm the required destruction efficiency within the period specified in part iii below. VOC shall be measured in accordance with the applicable United States Environmental Protection Agency (EPA) Reference Method during the stack test and the exhaust flow rate may be determined from measured fuel flow rate and measured oxygen concentration. A copy of the stack test report shall be maintained with the engine. There shall also be documentation of acceptable VOC emissions following each occurrence of engine maintenance that may reasonably be expected to increase emissions including oxygen sensor replacement and catalyst cleaning or replacement. Stain tube indicators specifically designed to measure VOC concentration shall be acceptable for this documentation, provided a hot air probe or equivalent device is used to prevent error due to high stack temperature, and three sets of concentration measurements are made and averaged. Portable VOC analyzers meeting the requirements of Special Condition 25.A are also acceptable for this documentation.

30. The engine shall be operated and monitored as specified below.

a. If the engine is operated with an oxygen sensor-based air-to-fuel ratio (AFR) controller, documentation for each AFR controller that the manufacturer's or supplier's recommended maintenance has

been performed, including replacement of the oxygen sensor as necessary for oxygen sensor-based controllers shall be maintained with the engine. The oxygen sensor shall be replaced at least quarterly in the absence of a specific written recommendation. The engine must have been stack tested within the past 12 months in accordance with part ii of this condition.

The test period may be extended to 24 months if the engine exhaust is sampled once an hour when waste gas is directed to the engine using a detector meeting the requirements of Special Condition 25.A. The sample ports and the collection system must be designed and operated such that there is no air leakage into the sample probe or the collection system downstream of the engine. The concentrations shall be recorded and the MSS activity shall be stopped as soon as possible if the VOC concentration exceeds 100 ppmv above background.

b. If an oxygen sensor-based AFR controller is not used, the engine exhaust to atmosphere shall be monitored continuously and the VOC concentration recorded at least once every 15 minutes when waste gas is directed to the engine. The sample ports and the collection system must be designed and operated such that there is no air leakage into the sample probe or the collection system downstream of the engine. The method of VOC sampling and analysis shall be by detector meeting the requirements of Special Condition 25.A An alarm shall be installed such that an operator is alerted when outlet VOC concentration exceeds 100 ppmv above background. The MSS activity shall be stopped as soon as possible if the VOC concentration exceeds 100 ppmv above background for more than one minute. The date and time of all alarms and the actions taken shall be recorded. The engine must have been stack tested within the past 24 months in accordance with part ii of this condition.

C. Temporary flare.

31. The heating value and velocity requirements in 40 CFR 60.18 shall be satisfied during operations authorized by this permit.

32. The flare shall be operated with a flame present at all times and/or have a constant pilot flame. The pilot flame shall be continuously monitored by a thermocouple or an infrared monitor. The time, date, and duration of any loss of pilot flame shall be recorded.

33. The permit holder shall continuously monitor the waste gas flow rate and the natural gas flow rate to the flare. The permit holder shall ensure that during all vessel clearing activities a minimum of one cubic foot of supplemental gas is supplied for every 4 cubic feet of waste gas. Readings shall be taken at least once every 15 minutes and the average hourly values of the flow rates shall be recorded each hour.

34. Each monitoring device shall be accurate to, and shall be calibrated at a frequency in accordance with, the manufacturer's specifications.

35. During the initial startup and the subsequent startup of the methanol unit the permit holder shall sample the BTU content to the flare to demonstrate that the heating value requirement of 40 CFR §60.18 is being satisfied without the use of supplemental fuel. The waste stream to the flare shall be sampled every two hours and at least once during each phase of startup. The sample for analysis shall not include any supplemental fuel. As an alternative to collecting samples, the permit holder may continuously monitor the synthesis gas composition during the entire period of startup using a gas analyzer instrument. If the monitoring data does not support compliance with the 40 CFR §60.18 requirement, the permit holder shall submit a permit alteration or amendment, as appropriate, to establish procedures for ensuring that the heating value requirement is satisfied before the next start-up of the unit.

D. No more than one temporary control device may be operated at any one time.

Dated: August 9, 2024

Permit Numbers 107764 and PSDTX1340

Attachment A

MSS ACTIVITY SUMMARY

Facilities	**Description**	**Emissions Activity**	**EPN**
fixed roof tanks FINs TK-04001, TK-04002A, TK-04002B	opening after degassing to 10,000 ppmv or 10% of LEL.	vent to atmosphere	FUG-MSS
fixed roof tanks FINs TK-04001, TK-04002A, TK-04002B	forced ventilation of drain dry tank	vent to atmosphere	FUG-MSS
fixed roof tanks FINs TK-04001, TK-04002A, TK-04002B	degassing to control	vent to temporary control – thermal oxidizer, flare, engine	TEMP-MSS

Vessels MeOH Unit	degassing to control	vent to plant flare	S-10001 MSS
Vessels MeOH Unit	opening after degassing to 10,000 ppmv or 10% of LEL.	vent to atmosphere	FUG-MSS
MeOH Unit	cold start-up, hot start-up, extended start-up, or planned shutdown	vent to plant flare	S-10001 MSS
D-04001 Methanol Scrubber	Route tank emissions to a temporary VCU during plant shutdown	Vent to temp VCU	TEMPVCUN TEMPVCUP

Dated: August 9, 2024

Natgasoline, LLC (GHGPSDTX54)
Prevention of Significant Deterioration Permit
for Greenhouse Gas Emissions
Permit Conditions

PROJECT DESCRIPTION

Pursuant to the provisions of this permit, Natgasoline operates a methanol facility that uses natural gas as feedstock in Beaumont, Texas. The Methanol (MeOH) Unit at the facility has a design capacity of 2,478,560 tpy (5,500 metric tons per day) of methanol from natural gas feedstock. The methanol produced in the MeOH Unit is sold as methanol product.

The methanol plant (MeOH) uses the combined reforming process to synthesize the natural gas (pipeline) feed. The natural gas is pretreated to remove sulfur compounds and mixed with steam and recycled process gas before entering the reformers. The reforming section consists of a gas-fired steam reformer and an auto-thermal reformer (ATR). The reformer feed is heated in catalyst filled tubes in the radiant section of the steam reformer to form a mixture of carbon monoxide (CO), carbon dioxide (CO_2) and hydrogen (H_2) known as synthesis gas (syngas). The ATR reformer completes the processing of natural gas to syngas using pure oxygen from an air separation unit (ASU). Heat recovery systems convert excess heat generated by the steam reformer and ATR into useful energy for steam generation and process heating.

Syngas is then compressed and sent to the methanol reactors that convert syngas to crude methanol and a water condensate product. The crude methanol from the distillation section is sent to a three-column distillation train. Overhead gases from the first column are routed to the fuel gas system, and remaining liquids are fed to the second column. The bottoms from the second column are fed to the third column for additional methanol purification. The process water stream from the bottom of the third column is recycled to the saturation system. The overhead gases from the second and third columns are condensed into intermediate methanol product, which is sent to intermediate methanol storage.

The water condensate and gases from the distillation process are recycled to be used in various sections of the methanol plant. The final methanol product is sent to storage.

Steam required for operating the MeOH Unit is supplied by heat recovery systems in the MeOH Unit and also by the gas-fired auxiliary boiler. These process units are also supported by a cooling tower. Associated with the project is an ASU that will supply oxygen, nitrogen and instrument air. The ASU will receive steam from the plant and does not emit any GHGs. A common plant flare controls emissions from compressor seals and in cases of upset or emergency and planned MSS activities. MSS emissions that cannot be routed to flare are emitted to atmosphere. A back-up diesel-fired emergency generator is used for back-up power. Two diesel-fired firewater pumps are used if emergency fire water is needed. Piping components from the process equipment described above are the primary source of GHG emissions.

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EQUIPMENT LIST

The following devices are subject to this GHG PSD permit.

FIN	EPN	Description
Phase I		
B-01001	B-01001	Reformer (Combustion Unit), 1,552 Million British Thermal Units per Hour (MMBtu/hr) is used to reform natural gas. The reformer is equipped with a Selective Catalytic Reduction (SCR) system for Oxides of Nitrogen (NO_x) control.
B-14001	B-14001	Auxiliary Boiler (Combustion Unit), 950 MMBtu/hr is used. to produce steam. The auxiliary boiler is equipped with a SCR system for NO_x control.
S-10001	S-10001	MeOH Flare (Combustion Unit) is used for pilot & normal operations in the methanol production unit.
S-10001 (MSS)	S-10001	MeOH. Flare (Combustion Unit) is used for MSS venting in the methanol production unit.
FUG-MEOH	FUG-MEOH	MeOH Fugitives, process fugitives in the methanol production unit.
H-EMG	H-EMG	Emergency Generator (Combustion Unit). The generator is not larger than 2,000 kilo-watt (kW).
H-FWP-1 H-FWP-2	H-FWP-1 H-FWP-2	Two Firewater Pump Engines (Combustion Unit). The engines are not larger than 1,000 kW.
T-06001	T-06001	MeOH Cooling Tower. Used to support cooling water needs of methanol and gasoline production units.

I. GENERAL PERMIT CONDITIONS

A. PERMIT EXPIRATION

1. Natgasoline completed the construction and started the operation of its methanol facility in June 2018.

B. PERMIT NOTIFICATION REQUIREMENTS

1. Natgasoline completed the construction and started the operation of its methanol facility in June 2018. All notifications have been submitted to TCEQ.

C. FACILITY OPERATION

At all times, including periods of MSS, Permittee shall, to the extent practicable, maintain and operate the facility including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to TCEQ, which may include, but is not limited to, monitoring results, review of operating and maintenance procedures and inspection of the facility.

D. MALFUNCTION REPORTING

1. Permittee shall notify TCEQ by mail within 48 hours following the discovery of any failure of air pollution control equipment, process equipment, or of a process to operate in a normal manner, which results in an increase in GHG emissions above the allowable emission limits stated in Section II and III of this permit.

2. Within 10 days of the restoration of normal operations after any failure described in I.D.1., Permittee shall provide a written supplement to the initial notification that includes a description of the malfunctioning equipment or abnormal operation, the date of the initial malfunction, the period of time over which emissions were increased due to the failure, the cause of the failure, the estimated resultant emissions in excess of those allowed in Section II and III, and the methods utilized to mitigate emissions and restore normal operations.

3. Compliance with this malfunction notification provision shall not excuse or otherwise constitute a defense to any violation of this permit or any law or regulation such malfunction may cause.

E. RIGHT OF ENTRY

TCEQ authorized representatives, upon the presentation of credentials, shall be permitted:

1. to enter the premises where the facility is located or where any records are required to be kept under the terms and conditions of this PSD permit;

2. during normal business hours, to have access to and to copy any records required to be kept under the terms and conditions of this PSD permit;

3. to inspect any equipment, operation, or method subject to requirements in this PSD permit; and,

4. to sample materials and emissions from the source(s).

F. TRANSFER OF OWNERSHIP

In the event of any changes in control or ownership of the facilities to be constructed, this PSD permit shall be binding on all subsequent owners and operators. Permittee shall notify the succeeding owner and operator of the existence of the PSD permit and its conditions by letter; a copy of the letter shall be forwarded to TCEQ within 30 days of the letter signature.

G. SEVERABILITY

The provisions of this PSD permit are severable, and, if any provision of the PSD permit is held invalid, the remainder of this PSD permit shall not be affected.

H. ADHERENCE TO APPLICATION AND COMPLIANCE WITH OTHER ENVIRONMENTAL LAWS

Permittee shall construct this project in compliance with this PSD permit, the application on which this permit is based, and all other applicable federal, state, and local air quality regulations. This PSD permit does not release the Permittee from any liability for compliance with other applicable federal, state, and local environmental laws and regulations, including the CAA.

I. ACRONYMS AND ABBREVIATIONS

%	Percent
ATR	Auto-thermal Reformer
AVO	Auditory, Visual, and Olfactory
BACT	Best Available Control Technology
CAA	Clean Air Act
CEMS	Continuous Emissions Monitoring System
CGAs	Cylinder Gas Audits
CFR	Code of Federal Regulations
CH_4	Methane
CO_2	Carbon Dioxide
CO_2e	Carbon Dioxide Equivalent
dscf	Dry Standard Cubic Foot
EPN	Emission Point Number
FIN	Facility Identification Number
FR	Federal Registry
ft^3	Cubic Feet
GVC	Gross Calorific Value
GHG	Greenhouse Gas
gr	Grains
GWP	Global Warming Potential
HAP	Hazardous Air Pollutant
HHV	High Heating Value

hr	Hour
HRSG	Heat Recovery Steam Generating
kW	Kilo-watt
lb	Pound
LDAR	Leak Detection and Repair
LPG	Liquefied Petroleum Gas
MeOH	Methanol
MMBtu/hr	Million British Thermal Units per Hour
MSS	Maintenance, Start-up, and Shutdown
NSR	New Source Review
NNSR	Nonattainment New Source Review
N_2O	Nitrous Oxide
NO_x	Oxides of Nitrogen
NSPS	New Source Performance Standards
O_2	Oxygen
PSD	Prevention of Significant Deterioration
PTE	Potential to Emit
RATA	Relative Accuracy Test Audit
QA/QC	Quality Assurance and/or Quality Control
SCFH	Standard Cubic Feet per Hour
SC	Special Condition
SCR	Selective Catalytic Reduction
TAC	Texas Administrative Code
TCEQ	Texas Commission on Environmental Quality
TOC	Total Organic Carbon
TPY	Tons per Year (Short Tons)
USC	United States Code
US EPA	United States Environmental Protection Agency
VOCs	Volatile Organic Compounds

II. Annual Emission Limits

Annual emissions, in TPY on a 12-month rolling basis, shall not exceed the following:

Table 1. Annual Emission Limits[1]

EPN	FIN	Description	GHG Mass Basis		TPY CO_2e[2,3]	BACT Requirements
			Pollutant	TPY[2]		
B-01001	B-01001	Reformer	CO_2	718,860	718,874	Minimum 90%Thermal Efficiency, Maximum 350°F in stack gas (normal operation). See permit condition III.A.1
			CH_4	12.94		
			N_2O	1.29		
B-14001	B-14001	Auxiliary Boiler	CO_2	357,527	357,534	Minimum 77% Thermal Efficiency. See permit condition III.A.2
			CH_4	6.74		
			N_2O	0.67		
S-10001	S-10001	Flare Pilot & Normal Operation	CO_2	22,688.88	23,655.77	Good Design and Combustion Practices, Minimize Flaring events. See permit condition III.A.4
			CH_4	38.22		
			N_2O	0.04		
S-10001 (MSS)	S-10001	Flare MSS Vents	CO_2	36,788.81	37,656.27	Good Operational Practices. See permit condition III.A.5
			CH_4	30.39		
			N_2O	0.06		
FUG-MEOH	FUG-MEOH	MeOH Fugitives	CH_4	No Numerical limit is established[4]		Implementation of Leak Detection and Repair (LDAR) Program. See permit condition III.A.7
H-EMG	H-EMG	Emergency Generator	CO_2	139	140	Proper Operating Techniques, Limited Operating Hours. See permit condition III.A.9
			CH_4	0.01		
			N_2O	<0.01		
H-FWP1 H-FWP2	H-FWP1 H-FWP2	Firewater Pump Engines	CO_2	139	140	Proper Operating Techniques, Limited Operating Hours. See permit condition III.A.9
			CH_4	0.01		
			N_2O	<0.01		
T-06001	T-06001	Cooling Tower	CO_2	-	866	Implementation of Heat Exchanger Leak Monitoring and Repair Program. See permit condition III.A.10
			CH_4	34.65		
			N_2O	-		
Totals[5]			CO_2	1,136,281.69	1,139,006.04	
			CH_4	122.97		
			N_2O	2.09		

(8/17)

1. Compliance with the annual emission limits (TPY) is based on a 12-month rolling basis.
2. The TPY emission limits specified in this table are not to be exceeded for this facility and include emissions from the facility during all operations, including MSS activities.
3. Global Warming Potentials (GWP): Methane (CH_4) = 25, Nitrous Oxide (N_2O) = 298
4. Fugitive process emissions from EPN FUG-MEOH are estimated to be 10.91 TPY of CH_4 and 273 TPY CO2e. In lieu of an emission limit, the emissions will be limited by implementing an LDAR monitoring program.
5. The total emissions for CH_4 and Carbon dioxide equivalent (CO_2e) include the Potential to Emit (PTE) for process fugitive emissions of CH_4. These totals are given for informational purposes only and do not constitute emission limits.

III. SPECIAL PERMIT CONDITIONS

A. Emission Unit Work Practice Standards, Operational Requirements, and Monitoring

1. Reformer (EPN: B-01001)

a. The reformer furnace shall combust pipeline quality natural gas and/or plant produced high hydrogen fuel gas (process fuel gas).
b. The reformer furnace shall have fuel metering for each fuel, and Permittee shall:
   i. Measure and record the fuel flow rate using an operational non-resettable elapsed flow meter or by recording the flow rate data in an electronic format with individual flow measurements being taken no less frequently than once every 15 minutes. Electronic data may be reduced to hourly averages for recordkeeping purposes.
   ii. Record the total fuel combusted for each fuel monthly.
   iii. Analyze process gas composition in accordance with 40 CFR § 98.34(b)(3)(ii)(E).
   iv. The fuel gross calorific value (GCV), high heat value (HHV), carbon content and, if applicable, molecular weight, shall be determined, at a minimum, monthly by the procedures contained in 40 CFR § 98.34(b)(3). Records of the fuel GCV shall be maintained for a minimum period of five years. Upon request, Permittee shall provide a sample and/or analysis of the fuel that is fired in any unit covered by this permit at the time of the request, or shall allow a sample to be taken by TCEQ for analysis.
   v. Pipeline quality natural gas shall be exempt from section III.A.1.b.iii. of this permit provided Permittee receives and maintains quarterly records of the vendor's analysis, and the data is of sufficient quality to yield further analysis as required above.
c. Permittee shall calibrate and perform preventative maintenance checks of the fuel flow meters and document at the minimum frequency established per the manufacturer's recommendation, or at the interval specified per 40 CFR § 98.34(b)(1)(ii).
d. Permittee shall install, operate, and maintain an O_2 analyzer on the furnace flue gas in the stack of the furnace.
e. The O_2 analyzer shall continuously monitor and record the excess O_2 concentration in the combustion gases. The monitoring data shall be reduced to hourly average concentrations at least once every day using a minimum of four equally spaced data points over each one-hour period.
f. Permittee shall perform preventative maintenance check of the O_2 analyzer and document quarterly.
g. A relative accuracy test audit (RATA) is required once every four quarters in accordance with 40 CFR Part 60, Appendix F, Procedure 1, § 5.1.1.

h. The O_2 analyzers shall be quality-assured at least quarterly using cylinder gas audits (CGAs) in accordance with 40 CFR Part 60, Appendix F, Procedure 1, § 5.1.2.
i. Permittee will validate the O_2 analyzer with zero and span gas at least weekly to maintain 1% accuracy based on full scale.
j. All analyzers identified in this section III.A.1. shall achieve 95% on-stream time or greater when the reformer is operational.
k. Permittee shall utilize insulation materials where feasible to reduce heat loss.
l. The reformer furnace shall not exceed the one-hour maximum firing rate of 1,552 MMBtu/hr.
m. The one-hour maximum firing rates shall be determined daily to demonstrate compliance with the firing rate condition in III.A.1.l.
n. Permittee shall continuously monitor and record the furnace gas exhaust temperature hourly and limit the temperature to less than or equal to 350°F on a 12-month rolling average basis. This stack temperature is for normal operations and does not include commissioning, startup, and shutdown.
o. Permittee shall maintain a minimum overall thermal efficiency of 90% LHV on a 12-month rolling average basis, calculated monthly, for the furnace (B-01001) excluding periods of MSS.
p. The reformer furnace will be continuously monitored for exhaust temperature, input fuel temperature, and stack oxygen. Thermal efficiency for the furnace will be calculated monthly from these parameters on a LHV basis using equation G-1 from American Petroleum Institute methods 560 (4^{th} ed.) Annex G.
q. The furnace shall be tuned annually consisting of a flame pattern inspection and adjustment for CO_2 concentration.
r. Permittee shall calculate, on a monthly basis, the amount of CO_2 emitted from combustion of process gas in tons/yr using equation C-5 in 40 CFR Part 98 Subpart C, converted to short tons. CO_2 emitted from the combustion of natural gas in tons/yr shall be calculated using equation C-2a in 40 CFR Part 98 Subpart C, converted to short tons. Compliance shall be based on a 12-month rolling basis to be updated by the last day of the following month.
s. Permittee shall calculate the CH_4 and N_2O emissions on a 12-month rolling basis to be updated by the last day of the following month. Permittee shall determine compliance with the CH_4 and N_2O emissions limits contained in this section using the default CH_4 and N_2O emission factors contained in Table C-2 and equation C-8 (for process gas) and C-9a (for natural gas) of 40 CFR § 98.33 and the measured HHV (for process gas), converted to short tons.
t. Permittee shall calculate the CO_{2e} emissions on a 12-month rolling basis, based on the procedures and GWP contained in Greenhouse Gas (GHG) Regulations, 40 CFR Part 98, Subpart A, Table A-1. The record shall be updated by the last day of the following month.

2. Auxiliary Boiler (EPN: B-14001)

a. The boiler shall combust pipeline quality natural gas and/or plant produced high hydrogen fuel gas (process gas).
b. The boiler shall have fuel metering for each fuel, and Permittee shall:

i. Measure and record the fuel flow rate using an operational non-resettable elapsed flow meter or by recording the flow rate data in an electronic format with individual flow measurements being taken no less frequently than once every 15 minutes. Electronic data may be reduced to hourly averages for recordkeeping purposes.
ii. Record the total fuel combusted for each fuel monthly.
iii. Analyze process gas composition in accordance with 40 CFR § 98.34(b)(3)(ii)(E).
iv. The fuel gross calorific value GCV (HHV), carbon content and, if applicable, molecular weight, shall be determined, at a minimum, monthly by the procedures contained in 40 CFR § 98.34(b)(3). Records of the fuel GCV shall be maintained for a minimum period of five years. Upon request, Permittee shall provide a sample and/or analysis of the fuel that is fired in any unit covered by this permit at the time of the request, or shall allow a sample to be taken by TCEQ for analysis.
v. Pipeline quality natural gas shall be exempt from section III.A.2.b.iii. of this permit provided Permittee receives and maintains quarterly records of the vendor's analysis, and the data is of sufficient quality to yield further analysis as required above.

c. Permittee shall calibrate and perform preventative maintenance checks of the fuel flow meters and document at least annually.
d. Permittee shall install, operate, and maintain an O_2 analyzer on the boiler.
e. The O_2 analyzer shall continuously monitor and record O_2 concentration in the boiler and shall record the O_2 readings to an averaging period of 15 minutes. The required zero and span calibrations will take place weekly.
f. The O_2 analyzer shall be quality-assured at least quarterly using CGAs in accordance with 40 CFR Part 60, Appendix F, Procedure 1, § 5.1.2, with the following exception: a relative accuracy test audit is not required once every four quarters (i.e., two successive semiannual CGAs may be conducted).
g. Permittee shall perform a preventative maintenance check on O_2 control analyzers and document quarterly.
h. The maximum firing rate for the boiler shall not exceed 950 MMBtu/hr.
i. Permittee shall maintain a minimum overall thermal efficiency of 77% on a 12-month rolling average basis, calculated monthly using equation G-1 from American Petroleum Institute (API) methods 560 (4^{th} ed.) Annex G, or an equivalent method approved by TCEQ.
j. Permittee shall calculate, on a monthly basis, the amount of CO_2 emitted from combustion of process gas in tons/yr using equation C-5 in 40 CFR § 98.33, converted to short tons. CO_2 emitted from the combustion of natural gas in tons/yr shall be calculated using equation C-2a in 40 CFR § 98.33, converted to short tons. Compliance shall be based on a 12-month rolling basis to be updated by the last day of the following month.
k. Permittee shall calculate the CH_4 and N_2O emissions on a 12-month rolling basis to be updated by the last day of the following month. Permittee shall determine compliance with the CH_4 and N_2O emissions limits contained in this section using the default CH_4 and N_2O emission factors contained in Table C-2

and equation C-8 (for process gas) and C-9a (for natural gas) of 40 CFR § 98.33 and the measured HHV (for process gas), converted to short tons.

l. Permittee shall calculate the CO_2e emissions on-a 12-month rolling basis, based on the procedures and GWP contained in GHG Regulations, 40 CFR Part 98, Subpart A, Table A-1. The record shall be updated by the last day of the following month.

m. Perform boiler inspection every 5 years per manufacturer's recommendations.

3. MeOH Flare (EPN: S-10001)

a. The flare shall have a minimum destruction and methane removal efficiency (DRE) of 99% (98% for VOC) based on flow rate and gas composition measurements as specified in 40 CFR § 98.253(b).

b. Emissions including CH_4 from compressor seals shall be vented to the flare during normal operations.

c. The flare shall only combust pipeline natural gas as pilot fuel. The only emissions authorized from the flare are from combustion of supplemental natural gas, compressor seal gas, and waste gases from process activities.

d. Permittee shall record the time, date, and duration of emissions event and each MSS event as described in condition III.A.4.a. These records must be kept for five years following the date of each event.

e. The flare shall be equipped with a flare gas flow meter and a temperature monitor. The flow measurement device and temperature monitor shall be calibrated, at a minimum, on a biannual basis.

f. CO_2 emissions shall be calculated using equation Y-1a or Y-1b in 40 CFR § 98.253(b)(1)(ii)(A). CH_4 and N_2O emissions shall be calculated using equations Y-4 and Y-5 in 40 CFR § 98.253. As an alternative to the carbon content monitored required in § 98.253(b)(1)(ii)(A), carbon content determined by engineering estimates, as allowed in paragraph (iii)(A) may be used with equation Y-3.

g. The flare shall be designed and operated in accordance with 40 CFR § 60.18 including specifications of minimum heating value of the waste gas, maximum tip velocity, and pilot flame monitoring or an approved alternate. An infrared monitor is considered equivalent to a thermocouple for flame monitoring purposes.

4. Maintenance, Startup, and Shutdown (EPN: S-10001 MSS)

a. Permittee shall depressure sections of pipe and equipment to the flare or other parts of the process prior to performing MSS activities.

b. MSS emissions that cannot be controlled by the flare are vented to the atmosphere.

c. Start-up emissions shall be vented to the flare. No more than 122,000 ft^3 of waste gas from equipment clearing shall be routed to the flare each year per methanol tank.

d. Permittee will plan maintenance activities in a manner to minimize the venting of emissions to the atmosphere.

e. Records of MSS activities shall be maintained to include the date, time, and estimated volume of each MSS event.

5. Process Fugitives (EPNs: FUG-MEOH)

a. Permittee shall implement the TCEQ 28VHP LDAR program for fugitive emissions of CH_4.
b. Permittee shall implement an as-observed Auditory, Visual, and Olfactory (AVO) program to monitor for fugitive emissions between instrumented monitoring as required in III.A.5 .a above.
c. Permittee shall use high quality components and materials of construction that are compatible with the service in which they are employed.

6. Emergency Generator (EPN: H-EMG) and Firewater Pump Engines (EPN: H-FWP-1, H-FWP-2)

a. The generator engines purchased will be certified to meet the applicable emission standards of 40 CFR § 60.4205(b).
b. The engine may be operated for the purpose of maintenance checks and readiness testing for up to 100 hours per year on a 365-day rolling total.
c. Permittee shall install a non-resettable hour meter prior to start-up of the engine.
d. Permittee shall implement good combustion practices, including preventative maintenance per manufacturer's recommendations.
e. Permittee shall maintain records of engine maintenance/tune-ups, as well as run times.
f. On or after initial startup, Permittee shall not discharge or cause the discharge of emissions in excess of 280 tons CO_2e/year total from non-emergency use of all three engines, based on a 12-month rolling total.
g. Permittee shall demonstrate compliance with the 12-month rolling total emission limit by using the calculations at 40 CFR Part 98, Subpart C.

7. Cooling Tower (EPN: T-06001)

a. The Permittee shall implement a leak detection program for the cooling tower consistent with 40 CFR Part 63 Subpart F. Volatile Organic Compounds (VOCs) will be substituted for HAP to determine if a GHG leak is present. VOCs will be measured utilizing TCEQ Sampling Procedures Manual, Appendix P (dated January 2003 or a later edition) or an approved equivalent sampling method. It will be assumed that any hydrocarbon detected utilizing this method will be CH_4.
b. Leak detection monitoring shall occur monthly for the first 6 months of operation, then on a quarterly basis thereafter pursuant to 40 CFR § 63.104(b).
c. The Permittee shall maintain records of cooling tower monitoring and corrective actions taken consistent with 40 CFR § 63.104(f).

B. Continuous Emissions Monitoring Systems (CEMS)

1. As an alternative to Special Conditions III.A.1.r. through III.A.1.t., Permittee may install a CO_2 CEMS and volumetric stack gas flow monitoring system with an automated data acquisition and handling system for measuring and recording CO_2 emissions discharged to the atmosphere, and use these values to show compliance with the annual emission limit in Table 1.
2. Permittee shall ensure that all required CO_2 monitoring system and equipment are installed and all certification tests are completed on or before the earlier of 90 unit operating days or 180 calendar days after the date the unit commences operation.
3. Permittee shall ensure compliance with the specifications and test procedures for CO_2 emission monitoring system at stationary sources, 40 CFR Part 75, or 40 CFR Part 60, Appendix B, Performance Specification numbers 1 through 9, as applicable.
4. The Permittee shall meet the appropriate quality assurance requirements specified in 40 CFR Part 60, Appendix F for the CO_2 emission monitoring system.

IV. Recordkeeping and Reporting

A. Records

1. In order to demonstrate compliance with the GHG emission limits in Table 1, the Permittee will monitor the following parameters and summarize the data on a calendar month basis.
   a. Operating hours for all air emission sources;
   b. The fuel usage for all combustion sources, using continuous fuel flow monitors (a group of equipment can utilize a common fuel flow meter, as long as actual fuel usage is allocated to the individual equipment based upon actual operating hours and maximum firing rate); records of the fuel consumed by each source (except H-EMG, H-FWP-1&2 and flare pilot gas); and
   c. Semi-annual fuel sampling for natural gas, daily fuel sampling of plant fuel gas, or other frequencies as allowed by 40 CFR § 98.34(b)(3).
2. Permittee shall maintain a file of all records, data, measurements, reports, and documents related to the operation of the facility, including, but not limited to, the following: all records or reports pertaining to significant maintenance performed on any system or device at the facility; duration of startup and shutdown; the initial startup period for the emission units; pollution control units; malfunctions; all records relating to performance tests, calibrations, checks, and monitoring of combustion equipment; duration of an inoperative monitoring device and emission units with the required corresponding emission data; and all other information required by this permit recorded in a permanent form suitable for inspection. The file must be retained for not less than five years following the date of such measurements, maintenance, reports, and/or records.

3. Permittee shall maintain records and submit a written report of all excess emissions to TCEQ semi-annually, except when: more frequent reporting is specifically required by an applicable subpart; or the Administrator or authorized representative, on a case-by-case basis, determines that more frequent reporting is necessary to accurately assess the compliance status of the source. The report is due on the 30th day following the end of each semi-annual period and shall include the following:
    a. Time intervals, data and magnitude of the excess emissions, the nature and cause (if known), corrective actions taken and preventive measures adopted;
    b. Applicable time and date of each period during which the monitoring equipment was inoperative (monitoring down-time);
    c. A statement in the report of a negative declaration; that is; a statement when no excess emissions occurred or when the monitoring equipment has not been inoperative, repaired or adjusted;
    d. Any failure to conduct any required source testing, monitoring, or other compliance activities; and
    e. Any violation of limitations on operation.
4. Excess emissions shall be defined as any period in which the facility emissions exceed a maximum emission limit set forth in this permit, or a malfunction occurs causing an emissions expedience.
5. Excess emissions indicated by GHG emission performance testing or compliance monitoring shall be considered violations of the applicable emission limit for the purpose of this permit.
6. Instruments and monitoring systems required by this PSD permit shall have a 95% on-stream time on an annual basis.
7. All records required by this PSD permit shall be retained for not less than five years following the date of such measurements, maintenance, and reporting.
8. Continuously means individual measurement no less frequent than once every 15 minutes. Electronic data may be reduced to hourly averages for recordkeeping purposes.
9. Permit holders must keep records sufficient to demonstrate compliance with 30 Texas Administrative Code § 116.164. If construction, a physical change or a change in method of operation results in Prevention of Significant Deterioration (PSD) review for criteria pollutants, records shall be sufficient to demonstrate the amount of emissions of GHGs from the source as a result of construction, a physical change or a change in method of operation does not require authorization under 30 TAC §116.164(a). If there is construction, a physical change or change in the method of operation that will result in a net emissions increase of 75,000 tpy or more CO_2e and PSD review is triggered for criteria pollutants, greenhouse gas emissions are subject to PSD review.

    Allowable emission rates and special conditions are updated to be consistent with records required by 30 TAC §116.164.

V. Initial Performance Testing Requirements:

A. The Permittee shall perform stack sampling and other testing to establish the actual pattern, and quantities of air contaminants being emitted into the atmosphere from the stack of the following:

- Reformer (B-01001) Initial and every five years.
- Auxiliary Boiler (B-14001) Initial and every three years.

Permittee is to determine the initial compliance with the CO_2 emission limits established in this permit. Sampling shall be conducted in accordance with 40 CFR § 60.8 and EPA Method 3a or 3b for the concentration of CO_2.

1. Multiply the CO_2 hourly average emission rate determined under maximum operating test conditions by 8,760 hours.
2. If the above calculated CO_2 emission total does not exceed the tons per year (TPY) specified on Table 1, no compliance strategy needs to be developed.
3. If the above calculated CO_2 emission total exceeds the tons per year (TPY) specified in Table 1, the facility shall:
   a. Document the potential to exceed in the test report; and
   b. Explain within the report how the facility will assure compliance with the CO_2 emission limit listed in Table 1.

B. No later than 180 days after initial start-up, or restart after modification of the facility, performance test(s) must be conducted and a written report of the performance testing results furnished to TCEQ with 60 days after the testing is completed. During subsequent operations, stack sampling shall be performed within 120 days if current production rates exceed the production rate during stack testing by 10 percent or greater, additional sampling may be required by TCEQ or EPA.

C. Permittee shall submit a performance test protocol to TCEQ no later than 30 days prior to the test to allow review of the test plan and to arrange for an observer to be present at the test. The performance test shall be conducted in accordance with the submitted protocol, and any changes required by EPA.

D. Performance tests must be conducted under such conditions to ensure representative performance of the affected facility for all units. The owner or operator must make available to the TCEQ such records as may be necessary to determine the conditions of the performance tests. Boiler test must be conducted under maximum production rates. Heaters tests must be conducted under maximum firing rates.

E. The owner or operator must provide the TCEQ at least 30 days prior notice of any performance test, except as specified under other subparts, to afford the TCEQ the opportunity to have an observer present and/or to attend a pre-test meeting. If there is a delay in the original test date, the facility must provide at least 7 days prior notice of the rescheduled date of the performance test.

F. The owner or operator shall provide, or cause to be provided, performance testing facilities as follows:

1. Sampling ports adequate for test methods applicable to this facility,
2. Safe sampling platform(s),
3. Safe access to sampling platform(s), and
4. Utilities for sampling and testing equipment.

G. Unless otherwise specified, each performance test shall consist of three separate runs using the applicable test method. Each run shall be conducted for the time and under the conditions specified in the applicable standard. For purposes of determining compliance with an applicable standard, the arithmetic mean of the results of the three runs shall apply.

H. Emissions testing, as outlined above, shall be performed every five years, plus or minus 6 months, after the previous performance test is performed, or within 180 days after the issuance of a permit renewal, whichever comes later to verify continued performance at permitted emission limits.

VI. Agency Notifications

Permittee shall submit GHG permit applications, permit amendments, and other applicable permit information to:

Texas Commission on Environmental Quality
Air Permit Division
Mail Code 163
PO Box 13087
Austin, TX 78711-3087

Date: August 9, 2024

Emission Sources - Maximum Allowable Emission Rates

Permit Numbers 107764 and PSDTX1340

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

Air Contaminants Data

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates	
			lbs/hour	TPY (4)
B-01001	Reformer	NOx	23.28	58.69
		NOx (6)	62.08	6.83
		NH_3	5.71	21.57
		CO	93.84	124.18
		VOC	8.37	10.16
		SO_2	1.52	5.75
		PM	6.29	23.77
		PM_{10}	6.29	23.77
		$PM_{2.5}$	5.53	20.92
		$PM_{2.5}$ (7)	6.64	0.4
B-14001	Auxiliary Boiler	NOx	14.25	30.57
		NOx (6)	38.00	3.42
		NH_3	3.64	11.71
		CO	59.96	38.57
		VOC	5.12	16.479
		SO_2	0.53	1.71
		PM	4.49	14.44
		PM_{10}	4.49	14.44
		$PM_{2.5}$	3.95	12.71
S-10001	MeOH Flare	NOx	2.28	10.01
		CO	15.39	67.57

Emission Sources - Maximum Allowable Emission Rates

		VOC	0.84	3.68
		MeOH	0.42	1.83
		SO_2	0.043	0.19
S-10001 MSS	MeOH Flare MSS	NOx	425.11	19.70
		CO	3644.98	300.31
		VOC	158.59	1.12
		MeOH	151.04	0.85
		SO_2	12.55	0.6
D-04001	MeOH Water Scrubber 1	VOC	7.24	1.65
		MeOH	7.24	1.65
FUG-MeOH	MeOH Fugitives (5)	VOC	9.73	7.44
		MeOH	9.63	6.94
		NH_3	0.01	0.01
T-06001	MeOH Cooling Tower	VOC	7.54	10.41
		MeOH	7.54	10.41
		PM	37.70	82.57
		PM_{10}	0.58	1.27
		$PM_{2.5}$	0.01	0.03
TEMP-MSS	Controlled Tank MSS Emissions	NOx	0.59	0.01
		CO	1.17	0.02
		VOC	6.74	0.12
		MeOH	6.73	0.12
		SO_2	<0.01	<0.01
		PM	0.03	<0.01
		PM_{10}	0.03	<0.01
		$PM_{2.5}$	0.03	<0.01

Emission Sources - Maximum Allowable Emission Rates

FUG-MSS	Atmosphere MSS Emissions	VOC	29.00	0.09
		MeOH	29.00	0.09

(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) NH_3 - ammonia
VOC - volatile organic compounds as defined in Title 30 Texas Administrative Code § 101.1
NO_x - total oxides of nitrogen
SO_2 - sulfur dioxide
PM - total particulate matter, suspended in the atmosphere, including PM_{10} and $PM_{2.5}$, as represented
PM_{10} - total particulate matter equal to or less than 10 microns in diameter, including $PM_{2.5}$, as represented
$PM_{2.5}$ - particulate matter equal to or less than 2.5 microns in diameter
CO - carbon monoxide
MeOH - methanol
(4) Compliance with annual emission limits (tons per year) is based on a 12 month rolling period.
(5) Emission rate is an estimate and is enforceable through compliance with the applicable special condition(s) and permit application representations.
(6) The emission limit applies only during startup as defined in Special Condition 7.
(7) This emission limit applies only during start-up of the methanol unit (Reformer) for a maximum of 220 hours per year.

Date: August 9, 2024