

# FEDERAL OPERATING PERMIT

A FEDERAL OPERATING PERMIT IS HEREBY ISSUED TO  
Topsoe, Inc.

AUTHORIZING THE OPERATION OF  
Topsoe Bayport  
All Other Basic Inorganic Chemical Manufacturing

LOCATED AT  
Harris County, Texas  
Latitude 29° 36' 38" Longitude 95° 3' 33"  
Regulated Entity Number: RN101211498

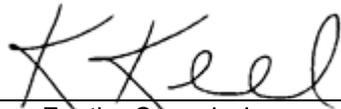
This permit is issued in accordance with and subject to the Texas Clean Air Act (TCAA), Chapter 382 of the Texas Health and Safety Code and Title 30 Texas Administrative Code Chapter 122 (30 TAC Chapter 122), Federal Operating Permits. Under 30 TAC Chapter 122, this permit constitutes the permit holder's 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: 01217 Issuance Date: July 2, 2025

  
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For the Commission

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## **General Terms and Conditions**

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

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

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

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

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

## **Special Terms and Conditions:**

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

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

- E. Emission units subject to 40 CFR Part 63, Subpart ZZZZ as identified in the attached Applicable Requirements Summary table are subject to 30 TAC Chapter 113, Subchapter C, § 113.1090 which incorporates the 40 CFR Part 63 Subpart by reference.
  - F. The permit holder shall comply with the following 30 TAC Chapter 101, Subchapter H, Division 3 (Mass Emission Cap and Trade Program) Requirements:
    - (i) Title 30 TAC § 101.352 (relating to General Provisions)
    - (ii) Title 30 TAC § 101.353 (relating to Allocation of Allowances)
    - (iii) Title 30 TAC § 101.354 (relating to Allowance Deductions)
    - (iv) Title 30 TAC § 101.356 (relating to Allowance Banking and Trading)
    - (v) Title 30 TAC § 101.359 (relating to Reporting)
    - (vi) Title 30 TAC § 101.360 (relating to Level of Activity Certification)
    - (vii) The terms and conditions by which the emission limits are established to meet or exceed the cap are applicable requirements of this permit
2. The permit holder shall comply with the following sections of 30 TAC Chapter 101 (General Air Quality Rules):
- A. Title 30 TAC § 101.1 (relating to Definitions), insofar as the terms defined in this section are used to define the terms used in other applicable requirements
  - B. Title 30 TAC § 101.3 (relating to Circumvention)
  - C. Title 30 TAC § 101.8 (relating to Sampling), if such action has been requested by the TCEQ
  - D. Title 30 TAC § 101.9 (relating to Sampling Ports), if such action has been requested by the TCEQ
  - E. Title 30 TAC § 101.10 (relating to Emissions Inventory Requirements)
  - F. Title 30 TAC § 101.201 (relating to Emission Event Reporting and Recordkeeping Requirements)
  - G. Title 30 TAC § 101.211 (relating to Scheduled Maintenance, Start-up, and Shutdown Reporting and Recordkeeping Requirements)
  - H. Title 30 TAC § 101.221 (relating to Operational Requirements)
  - I. Title 30 TAC § 101.222 (relating to Demonstrations)
  - J. Title 30 TAC § 101.223 (relating to Actions to Reduce Excessive Emissions)
3. Permit holder shall comply with the following requirements of 30 TAC Chapter 111:
- A. Visible emissions from stationary vents with a flow rate of less than 100,000 actual cubic feet per minute and constructed after January 31, 1972 that are not listed in the Applicable Requirements Summary attachment for 30 TAC Chapter 111, Subchapter A,

Division 1, shall not exceed 20% opacity averaged over a six-minute period. The permit holder shall comply with the following requirements for stationary vents at the site subject to this standard:

- (i) Title 30 TAC § 111.111(a)(1)(B) (relating to Requirements for Specified Sources)
- (ii) Title 30 TAC § 111.111(a)(1)(E)
- (iii) Title 30 TAC § 111.111(a)(1)(F)(i), (ii), (iii), or (iv)
- (iv) For emission units with vent emissions subject to 30 TAC § 111.111(a)(1)(B), complying with 30 TAC § 111.111(a)(1)(F)(ii), (iii), or (iv), and capable of producing visible emissions from, but not limited to, particulate matter, acid gases and NO<sub>x</sub>, the permit holder shall also comply with the following periodic monitoring requirements for the purpose of annual compliance certification under 30 TAC § 122.146. These periodic monitoring requirements do not apply to vents that are not capable of producing visible emissions such as vents that emit only colorless VOCs; vents from non-fuming liquids; vents that provide passive ventilation, such as plumbing vents; or vent emissions from any other source that does not obstruct the transmission of light. Vents, as specified in the “Applicable Requirements Summary” attachment, that are subject to the emission limitation of 30 TAC § 111.111(a)(1)(B) are not subject to the following periodic monitoring requirements:
  - (1) An observation of stationary vents from emission units in operation shall be conducted at least once during each calendar quarter unless the emission unit is not operating for the entire quarter.
  - (2) For stationary vents from a combustion source, if an alternative to the normally fired fuel is fired for a period greater than or equal to 24 consecutive hours, the permit holder shall conduct an observation of the stationary vent for each such period to determine if visible emissions are present. If such period is greater than 3 months, observations shall be conducted once during each quarter. Supplementing the normally fired fuel with natural gas or fuel gas to increase the net heating value to the minimum required value does not constitute creation of an alternative fuel.
  - (3) Records of all observations shall be maintained.
  - (4) Visible emissions observations of emission units operated during daylight hours shall be conducted no earlier than one hour after sunrise and no later than one hour before sunset. Visible emissions observations of emission units operated only at night must be made with additional lighting and the temporary installation of contrasting backgrounds. Visible emissions observations shall be made during times when the activities described in 30 TAC § 111.111(a)(1)(E) are not taking place. Visible emissions shall be determined with each stationary vent in clear view of the observer. The observer shall be at least 15 feet, but not more than 0.25 mile, away from each stationary vent during the observation. For outdoor locations, the observer shall select a position where the sun is not directly in the observer’s eyes. When condensed water vapor is present within the plume, as it emerges from the emissions outlet, observations must be made beyond the point in the plume at which condensed water vapor is no longer visible. When water vapor within the plume condenses and becomes visible at a distance

from the emissions outlet, the observation shall be evaluated at the outlet prior to condensation of water vapor. A certified opacity reader is not required for visible emissions observations.

- (5) Compliance Certification:
- (a) If visible emissions are not present during the observation, the RO may certify that the source is in compliance with the applicable opacity requirement in 30 TAC § 111.111(a)(1) and (a)(1)(B).
  - (b) However, if visible emissions are present during the observation, the permit holder shall either list this occurrence as a deviation on the next deviation report as required under 30 TAC § 122.145(2) or conduct the appropriate opacity test specified in 30 TAC § 111.111(a)(1)(F) as soon as practicable, but no later than 24 hours after observing visible emissions to determine if the source is in compliance with the opacity requirements. If an opacity test is performed and the source is determined to be in compliance, the RO may certify that the source is in compliance with the applicable opacity requirement. However, if an opacity test is performed and the source is determined to be out of compliance, the permit holder shall list this occurrence as a deviation on the next deviation report as required under 30 TAC § 122.145(2). The opacity test must be performed by a certified opacity reader.
  - (c) Some vents may be subject to multiple visible emission or monitoring requirements. All credible data must be considered when certifying compliance with this requirement even if the observation or monitoring was performed to demonstrate compliance with a different requirement.

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<sub>x</sub>, the permit holder shall also comply with the following periodic monitoring requirements for the purpose of annual compliance certification under 30 TAC § 122.146:
  - (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. For visible emissions from all other sources not specified in 30 TAC § 111.111(a)(1), (4), or (7); the permit holder shall comply with the following requirements:

- (i) Title 30 TAC § 111.111(a)(8)(A) (relating to Requirements for Specified Sources)
- (ii) Title 30 TAC § 111.111(a)(8)(B)(i) or (ii)
- (iii) For a source subject to 30 TAC § 111.111(a)(8)(A), complying with 30 TAC § 111.111(a)(8)(B)(i) or (ii), and capable of producing visible emissions from, but not limited to, particulate matter, acid gases and NO<sub>x</sub>, the permit holder shall also comply with the following periodic monitoring requirements for the purpose of annual compliance certification under 30 TAC § 122.146:

- (1) An observation of visible emissions from a source which is required to comply with 30 TAC § 111.111(a)(8)(A) shall be conducted at least once during each calendar quarter unless the source is not operating for the entire quarter.
  - (2) Records of all observations shall be maintained.
  - (3) Visible emissions observations of sources 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 sources operated only at night must be made with additional lighting and the temporary installation of contrasting backgrounds. Visible emissions shall be determined with each source in clear view of the observer. The observer shall be at least 15 feet, but not more than 0.25 mile, away from each source 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)(8) and (a)(8)(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)(8)(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.
- D. 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.
- E. For emission units with contributions from uncombined water, the permit holder shall comply with the requirements of 30 TAC § 111.111(b).

- F. 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)
- G. Outdoor burning, as stated in 30 TAC § 111.201, shall not be authorized unless the following requirements are satisfied:
  - (i) Title 30 TAC § 111.205 (relating to Exception for Fire Training)
  - (ii) Title 30 TAC § 111.207 (relating to Exception for Recreation, Ceremony, Cooking, and Warmth)
  - (iii) Title 30 TAC § 111.219 (relating to General Requirements for Allowable Outdoor Burning)
  - (iv) Title 30 TAC § 111.221 (relating to Responsibility for Consequences of Outdoor Burning)
- 4. For storage vessels maintaining working pressure as specified in 30 TAC Chapter 115, Subchapter B, Division 1: Storage of Volatile Organic Compounds, the permit holder shall comply with the requirements of 30 TAC § 115.112(e)(1).
- 5. Permit holder shall comply with the following 30 TAC Chapter 115, Subchapter C requirements:
  - A. When filling stationary gasoline storage vessels (Stage I) for motor vehicle fuel dispensing facilities, constructed prior to November 15, 1992, with transfers to stationary storage tanks located at a facility which has dispensed no more than 10,000 gallons of gasoline in any calendar month after January 1, 1991, the permit holder shall comply with the following requirements specified in 30 TAC Chapter 115, Subchapter C:
    - (i) Title 30 TAC § 115.222(3) (relating to Control Requirements), as it applies to liquid gasoline leaks, visible vapors, or significant odors
    - (ii) Title 30 TAC § 115.222(6) (relating to Control Requirements)
    - (iii) Title 30 TAC § 115.224(1) (relating to Inspection Requirements), as it applies to liquid gasoline leaks, visible vapors, or significant odors
    - (iv) Title 30 TAC § 115.226(2)(B) (relating to Recordkeeping Requirements)
- 6. The permit holder shall comply with the following 30 TAC Chapter 115, Subchapter F requirements (relating to Cutback Asphalt Requirements):
  - A. Title 30 TAC § 115.512(2) (relating to Control Requirements)

7. 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)
8. 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)
9. For facilities where total annual benzene quantity from waste is less than 1 megagram per year and subject to emission standards in 40 CFR Part 61, Subpart FF, the permit holder shall comply with the following requirements:
  - A. Title 40 CFR § 61.355(a)(1)(iii), (a)(2), (a)(5)(i) - (ii), (a)(6), (b), and (c)(1) - (3) (relating to Test Methods, Procedures, and Compliance Provisions), for calculation procedures
  - B. Title 40 CFR § 61.356(a) (relating to Recordkeeping Requirements)
  - C. Title 40 CFR § 61.356(b), and (b)(1) (relating to Recordkeeping Requirements)
  - D. Title 40 CFR § 61.357(a), and (b) (relating to Reporting Requirements)

10. 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.
11. For each gasoline dispensing facility, with a throughput of less than 10,000 gallons per month as specified in 40 CFR Part 63, Subpart CCCCC, the permit holder shall comply with the following requirements (Title 30 TAC, Subchapter C, § 113.1380 incorporated by reference):
  - A. Title 40 CFR § 63.11111(e), for records of monthly throughput
  - B. Title 40 CFR § 63.11111(i), for compliance due to increase of throughput
  - C. Title 40 CFR § 63.11111(j), for dispensing from fixed tank into portable tank for on-site delivery
  - D. Title 40 CFR § 63.11113(c), for compliance due to increase of throughput
  - E. Title 40 CFR § 63.11115(a), for operation of the source
  - F. Title 40 CFR § 63.11116(a) and (a)(1) - (4), for work practices
  - G. Title 40 CFR § 63.11116(b), for records availability
  - H. Title 40 CFR § 63.11116(d), for portable gasoline containers
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.

#### **Additional Monitoring Requirements**

13. Unless otherwise specified, the permit holder shall comply with the compliance assurance monitoring requirements as specified in the attached "CAM Summary" upon issuance of the permit. In addition, the permit holder shall comply with the following:
  - A. The permit holder shall comply with the terms and conditions contained in 30 TAC § 122.147 (General Terms and Conditions for Compliance Assurance Monitoring).
  - B. The permit holder shall report, consistent with the averaging time identified in the "CAM Summary," deviations as defined by the deviation limit in the "CAM Summary." Any monitoring data below a minimum limit or above a maximum limit, that is collected in accordance with the requirements specified in 40 CFR § 64.7(c), shall be reported as a deviation. Deviations shall be reported according to 30 TAC § 122.145 (Reporting Terms and Conditions).
  - C. The permit holder may elect to collect monitoring data on a more frequent basis and average the data, consistent with the averaging time or minimum frequency specified in

the “CAM Summary,” for purposes of determining whether a deviation has occurred. However, the additional data points must be collected on a regular basis. In no event shall data be collected and used in particular instances in order to avoid reporting deviations. All monitoring data shall be collected in accordance with the requirements specified in 40 CFR § 64.7(c).

- D. The permit holder shall operate the monitoring, identified in the attached “CAM Summary,” in accordance with the provisions of 40 CFR § 64.7.
  - E. The permit holder shall comply with 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.
14. 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**

15. 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 February 24, 2025 in the application for project 36880), 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
- 16. 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.
- 17. The permit holder shall maintain records to demonstrate compliance with any emission limitation or standard that is specified in a permit by rule (PBR) or Standard Permit listed in the New Source Review Authorizations attachment. The records shall yield reliable data from the relevant time period that are representative of the emission unit's compliance with the PBR or Standard Permit. These records may include, but are not limited to, production capacity and throughput, hours of operation, safety data sheets (SDS), chemical composition of raw materials, speciation of air contaminant data, engineering calculations, maintenance records, fugitive data, performance tests, capture/control device efficiencies, direct pollutant monitoring (CEMS, COMS, or PEMS), or control device parametric monitoring. These records shall be made readily accessible and available as required by 30 TAC § 122.144. Any monitoring or recordkeeping data indicating noncompliance with the PBR or Standard Permit shall be considered and reported as a deviation according to 30 TAC § 122.145 (Reporting Terms and Conditions).

### **Compliance Requirements**

- 18. 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.
- 19. Permit holder shall comply with the following 30 TAC Chapter 117 requirements:
  - A. The permit holder shall comply with the compliance schedules and submit written notification to the TCEQ Executive Director as required in 30 TAC Chapter 117, Subchapter H, Division 1:
    - (i) For sources in the Houston-Galveston-Brazoria Nonattainment area, 30 TAC § 117.9020:
      - (1) Title 30 TAC § 117.9020(2)(A), (C), and (D)
  - B. The permit holder shall comply with the Initial Control Plan unit listing requirement in 30 TAC § 117.350(c) and (c)(1).
  - C. The permit holder shall comply with the requirements of 30 TAC § 117.354 for Final Control Plan Procedures for Attainment Demonstration Emission Specifications and 30 TAC § 117.356 for Revision of Final Control Plan.
- 20. 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)

21. 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)

**Protection of Stratospheric Ozone**

22. Permit holders at a site subject to Title VI of the FCAA Amendments shall meet the following requirements for protection of stratospheric ozone:

- A. Any on site servicing, maintenance, and repair on refrigeration and nonmotor vehicle air-conditioning appliances using ozone-depleting refrigerants or non-exempt substitutes shall be conducted in accordance with 40 CFR Part 82, Subpart F. Permit holders shall ensure that repairs on or refrigerant removal from refrigeration and nonmotor vehicle air-conditioning appliances using ozone-depleting refrigerants are performed only by properly certified technicians using certified equipment. Records shall be maintained as required by 40 CFR Part 82, Subpart F.
- B. The permit holder shall comply with 40 CFR Part 82, Subpart F related to the disposal requirements for appliances using Class I or Class II (ozone-depleting) substances or non-exempt substitutes as specified in 40 CFR §§ 82.150 - 82.166 and the applicable Part 82 Appendices.
- C. The permit holder shall comply with 40 CFR Part 82, Subpart H related to Halon Emissions Reduction requirements as specified in 40 CFR § 82.250 - § 82.270 and the applicable Part 82 Appendices.

### **Alternative Requirements**

- 23. 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**

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

## **Attachments**

**Applicable Requirements Summary**

**Additional Monitoring Requirements**

**New Source Review Authorization References**

**Alternative Requirement**

### **Applicable Requirements Summary**

**Unit Summary** ..... 16

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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**

<b>Unit/Group/ Process ID No.</b>	<b>Unit Type</b>	<b>Group/Inclusive Units</b>	<b>SOP Index No.</b>	<b>Regulation</b>	<b>Requirement Driver</b>
CSC-1	SOLVENT DEGREASING MACHINES	N/A	R5412-01	30 TAC Chapter 115, Degreasing Processes	No changing attributes.
FWP-2	SRIC ENGINES	N/A	R7ICI-ENG	30 TAC Chapter 117, Subchapter B	No changing attributes.
FWP-2	SRIC ENGINES	N/A	63ZZZZ-ENG	40 CFR Part 63, Subpart ZZZZ	No changing attributes.
GEN-3	SRIC ENGINES	N/A	R7ICI-ENG	30 TAC Chapter 117, Subchapter B	No changing attributes.
GEN-3	SRIC ENGINES	N/A	60JJJJ-ENG	40 CFR Part 60, Subpart JJJJ	No changing attributes.
GEN-3	SRIC ENGINES	N/A	63ZZZZ-ENG	40 CFR Part 63, Subpart ZZZZ	No changing attributes.
GEN-4	SRIC ENGINES	N/A	R7ICI-ENG	30 TAC Chapter 117, Subchapter B	No changing attributes.
GEN-4	SRIC ENGINES	N/A	60JJJJ-ENG	40 CFR Part 60, Subpart JJJJ	No changing attributes.
GEN-4	SRIC ENGINES	N/A	63ZZZZ-ENG	40 CFR Part 63, Subpart ZZZZ	No changing attributes.
GRPSTGTNK	STORAGE TANKS/VESSELS	T-0750, T-0770, T-4800, T-4820	R5102-1	30 TAC Chapter 115, Storage of VOCs	No changing attributes.
GRPTKFURN	MINERAL PROCESSING PLANT	L-1200, L-1400, L-1600, L-2200, L-4300, L-4400, L-4410, L-4550, L-4580, X-2100	60UUU-FURN	40 CFR Part 60, Subpart UUU	No changing attributes.
H-2601	PROCESS HEATERS/FURNACES	N/A	R7301-HTR	30 TAC Chapter 117, Subchapter B	No changing attributes.
H-9310	PROCESS HEATERS/FURNACES	N/A	R7301-HTR	30 TAC Chapter 117, Subchapter B	No changing attributes.
PRE-ST-11	EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS	N/A	R5121-01	30 TAC Chapter 115, Vent Gas Controls	No changing attributes.
PRE-ST-19	EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS	N/A	R5121-01	30 TAC Chapter 115, Vent Gas Controls	No changing attributes.

**Unit Summary**

<b>Unit/Group/ Process ID No.</b>	<b>Unit Type</b>	<b>Group/Inclusive Units</b>	<b>SOP Index No.</b>	<b>Regulation</b>	<b>Requirement Driver</b>
PRE-ST-28	EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS	N/A	R5121-01	30 TAC Chapter 115, Vent Gas Controls	No changing attributes.
R-2301	MINERAL PROCESSING PLANT	N/A	60UUU-FURN	40 CFR Part 60, Subpart UUU	No changing attributes.
ST-14	EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS	N/A	R5121-01	30 TAC Chapter 115, Vent Gas Controls	No changing attributes.
ST-19	MINERAL PROCESSING PLANT	N/A	60UUU-FURN	40 CFR Part 60, Subpart UUU	No changing attributes.
ST-24	EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS	N/A	R5121-01	30 TAC Chapter 115, Vent Gas Controls	No changing attributes.
ST-29	EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS	N/A	R1111-HIFLO	30 TAC Chapter 111, Visible Emissions	No changing attributes.

**Applicable Requirements Summary**

<b>Unit Group Process ID No.</b>	<b>Unit Group Process Type</b>	<b>SOP Index No.</b>	<b>Pollutant</b>	<b>State Rule or Federal Regulation Name</b>	<b>Emission Limitation, Standard or Equipment Specification Citation</b>	<b>Textual Description (See Special Term and Condition 1.B.)</b>	<b>Monitoring And Testing Requirements</b>	<b>Recordkeeping Requirements (30 TAC § 122.144)</b>	<b>Reporting Requirements (30 TAC § 122.145)</b>
CSC-1	EU	R5412-01	VOC	30 TAC Chapter 115, Degreasing Processes	§ 115.412(a)(1) § 115.411(a)(1) § 115.411(a)(2) [G]§ 115.412(a)(1)(A) § 115.412(a)(1)(C) § 115.412(a)(1)(D) [G]§ 115.412(a)(1)(F)	No person shall own or operate a system utilizing a VOC for the cold solvent cleaning of objects without the controls listed in §115.412(a)(1)(A)-(F), except as exempted in §115.411.	[G]§ 115.415(1) § 115.415(4)	None	None
FWP-2	EU	R71CI-ENG	Exempt	30 TAC Chapter 117, Subchapter B	§ 117.303(a)(6)(D) [G]§ 117.310(f)	Units exempted from the provisions of this division, except as specified in §§117.310(f), 117.340(j), 117.345(f)(6) and (10), 117.350(c)(1), and 117.354(a)(5), include stationary gas turbines and stationary internal combustion engines that are used exclusively in emergency situations, except that operation for testing or maintenance purposes is allowed for up to 52 hours per year, based on a rolling 12-month average.	§ 117.8140(a) § 117.8140(a)(3)	§ 117.340(j) § 117.345(f) [G]§ 117.345(f)(10) [G]§ 117.345(f)(6)	None

**Applicable Requirements Summary**

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
FWP-2	EU	63ZZZZ-ENG	112(B) HAPS	40 CFR Part 63, Subpart ZZZZ	§ 63.6603(a)-Table2d.4 § 63.6595(a)(1) § 63.6605(a) § 63.6605(b) § 63.6625(e) § 63.6625(h) § 63.6625(i) § 63.6640(f)(1) § 63.6640(f)(2) § 63.6640(f)(2)(i) § 63.6640(f)(4) § 63.6640(f)(4)(i)	For each existing emergency stationary CI RICE and black start stationary CI RICE, located at an area source, you must comply with the requirements as specified in Table 2d.4.a-c.	§ 63.6625(f) § 63.6625(i) § 63.6640(a)-Table6.9.a.i § 63.6640(a)-Table6.9.a.ii	§ 63.6625(i) § 63.6655(e) § 63.6655(f) § 63.6660(a) § 63.6660(b) § 63.6660(c)	§ 63.6640(e) § 63.6650(f)
GEN-3	EU	R7ICI-ENG	Exempt	30 TAC Chapter 117, Subchapter B	[G]§ 117.303(a)(11) [G]§ 117.310(f)	Units exempted from the provisions of this division except as specified in §§117.310(f), 117.340(j), 117.345(f)(6) and (10), 117.350(c)(1) and 117.354(a)(5) include new, modified, reconstructed, or relocated stationary diesel engine placed into service on or after October 1, 2001, that operates less than 100 hours per year, based on a rolling 12-month average, in other than emergency situations; and meets the requirements for non-road engines as specified. §117.303(a)(11)(A)-(B)	None	§ 117.340(j) § 117.345(f) [G]§ 117.345(f)(10) [G]§ 117.345(f)(6)	None

**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)
GEN-3	EU	60JJJJ-ENG	CO	40 CFR Part 60, Subpart JJJJ	§ 60.4233(e)-Table1 § 60.4234 § 60.4243(b) § 60.4243(b)(1) [G]§ 60.4243(d) § 60.4243(g) § 60.4246	Owners and operators of stationary emergency SI ICE with a maximum engine power greater than or equal to 130 HP and were manufactured on or after 01/01/2009 must comply with a CO emission limit of 4.0 g/HP-hr, as listed in Table 1 to this subpart.	§ 60.4237(a)	§ 60.4243(a)(1) § 60.4245(a)(1) § 60.4245(a)(2) § 60.4245(a)(3) § 60.4245(b)	[G]§ 60.4245(e)
GEN-3	EU	60JJJJ-ENG	NO <sub>x</sub>	40 CFR Part 60, Subpart JJJJ	§ 60.4233(e)-Table1 § 60.4234 § 60.4243(b) § 60.4243(b)(1) [G]§ 60.4243(d) § 60.4243(g) § 60.4246	Owners and operators of stationary emergency SI ICE with a maximum engine power greater than or equal to 130 HP and were manufactured on or after 01/01/2009 must comply with a NO <sub>x</sub> emission limit of 2.0 g/HP-hr, as listed in Table 1 to this subpart.	§ 60.4237(a)	§ 60.4243(a)(1) § 60.4245(a)(1) § 60.4245(a)(2) § 60.4245(a)(3) § 60.4245(b)	[G]§ 60.4245(e)
GEN-3	EU	60JJJJ-ENG	VOC	40 CFR Part 60, Subpart JJJJ	§ 60.4233(e)-Table1 § 60.4234 § 60.4243(b) § 60.4243(b)(1) [G]§ 60.4243(d) § 60.4243(g) § 60.4246	Owners and operators of stationary emergency SI ICE with a maximum engine power greater than or equal to 130 HP and were manufactured on or after 01/01/2009 must comply with a VOC emission limit of 1.0 g/HP-hr, as listed in Table 1 to this subpart.	§ 60.4237(a)	§ 60.4243(a)(1) § 60.4245(a)(1) § 60.4245(a)(2) § 60.4245(a)(3) § 60.4245(b)	[G]§ 60.4245(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)
GEN-3	EU	63ZZZZ-ENG	112(B) HAPS	40 CFR Part 63, Subpart ZZZZ	§ 63.6590(c)	Stationary RICE subject to Regulations under 40 CFR Part 60. An affected source that meets any of the criteria in paragraphs (c)(1) through (7) of this section must meet the requirements of this part by meeting the requirements of 40 CFR part 60 subpart IIII, for compression ignition engines or 40 CFR part 60 subpart JJJJ, for spark ignition engines as applicable. No further requirements apply for such engines under this part.	None	None	None

**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)
GEN-4	EU	R7ICI-ENG	Exempt	30 TAC Chapter 117, Subchapter B	[G]§ 117.303(a)(11) [G]§ 117.310(f)	Units exempted from the provisions of this division except as specified in §§117.310(f), 117.340(j), 117.345(f)(6) and (10), 117.350(c)(1) and 117.354(a)(5) include new, modified, reconstructed, or relocated stationary diesel engine placed into service on or after October 1, 2001, that operates less than 100 hours per year, based on a rolling 12-month average, in other than emergency situations; and meets the requirements for non-road engines as specified. §117.303(a)(11)(A)-(B)	None	§ 117.340(j) § 117.345(f) [G]§ 117.345(f)(10) [G]§ 117.345(f)(6)	None
GEN-4	EU	60JJJ-ENG	CO	40 CFR Part 60, Subpart JJJJ	§ 60.4233(e)-Table 1 § 60.4234 § 60.4243(b) § 60.4243(b)(1) [G]§ 60.4243(d) § 60.4243(g) § 60.4246	Owners and operators of stationary emergency SI ICE with a maximum engine power greater than or equal to 130 HP and were manufactured on or after 01/01/2009 must comply with a CO emission limit of 4.0 g/HP-hr, as listed in Table 1 to this subpart.	§ 60.4237(a)	§ 60.4243(a)(1) § 60.4245(a)(1) § 60.4245(a)(2) § 60.4245(a)(3) § 60.4245(b)	[G]§ 60.4245(e)

**Applicable Requirements Summary**

<b>Unit Group Process ID No.</b>	<b>Unit Group Process Type</b>	<b>SOP Index No.</b>	<b>Pollutant</b>	<b>State Rule or Federal Regulation Name</b>	<b>Emission Limitation, Standard or Equipment Specification Citation</b>	<b>Textual Description (See Special Term and Condition 1.B.)</b>	<b>Monitoring And Testing Requirements</b>	<b>Recordkeeping Requirements (30 TAC § 122.144)</b>	<b>Reporting Requirements (30 TAC § 122.145)</b>
GEN-4	EU	60JJJJ-ENG	NO <sub>x</sub>	40 CFR Part 60, Subpart JJJJ	§ 60.4233(e)-Table1 § 60.4234 § 60.4243(b) § 60.4243(b)(1) [G]§ 60.4243(d) § 60.4243(g) § 60.4246	Owners and operators of stationary emergency SI ICE with a maximum engine power greater than or equal to 130 HP and were manufactured on or after 01/01/2009 must comply with a NO <sub>x</sub> emission limit of 2.0 g/HP-hr, as listed in Table 1 to this subpart.	§ 60.4237(a)	§ 60.4243(a)(1) § 60.4245(a)(1) § 60.4245(a)(2) § 60.4245(a)(3) § 60.4245(b)	[G]§ 60.4245(e)
GEN-4	EU	60JJJJ-ENG	VOC	40 CFR Part 60, Subpart JJJJ	§ 60.4233(e)-Table1 § 60.4234 § 60.4243(b) § 60.4243(b)(1) [G]§ 60.4243(d) § 60.4243(g) § 60.4246	Owners and operators of stationary emergency SI ICE with a maximum engine power greater than or equal to 130 HP and were manufactured on or after 01/01/2009 must comply with a VOC emission limit of 1.0 g/HP-hr, as listed in Table 1 to this subpart.	§ 60.4237(a)	§ 60.4243(a)(1) § 60.4245(a)(1) § 60.4245(a)(2) § 60.4245(a)(3) § 60.4245(b)	[G]§ 60.4245(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)
GEN-4	EU	63ZZZ-ENG	112(B) HAPS	40 CFR Part 63, Subpart ZZZZ	§ 63.6590(c)	Stationary RICE subject to Regulations under 40 CFR Part 60. An affected source that meets any of the criteria in paragraphs (c)(1) through (7) of this section must meet the requirements of this part by meeting the requirements of 40 CFR part 60 subpart IIII, for compression ignition engines or 40 CFR part 60 subpart JJJJ, for spark ignition engines as applicable. No further requirements apply for such engines under this part.	None	None	None
GRPSTGTNK	EU	R5102-1	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
GRPTKFURN	EU	60UUU-FURN	PM	40 CFR Part 60, Subpart UUU	§ 60.732(a)	No emissions to the atmosphere from affected facilities shall contain PM over 0.092 g/dscm for calciners and for calciners and dryers installed in series and in excess of 0.057 g/dscm for dryers.	§ 60.736(a) § 60.736(b)(1) ** See Periodic Monitoring Summary	None	§ 60.735(d)

**Applicable Requirements Summary**

<b>Unit Group Process ID No.</b>	<b>Unit Group Process Type</b>	<b>SOP Index No.</b>	<b>Pollutant</b>	<b>State Rule or Federal Regulation Name</b>	<b>Emission Limitation, Standard or Equipment Specification Citation</b>	<b>Textual Description (See Special Term and Condition 1.B.)</b>	<b>Monitoring And Testing Requirements</b>	<b>Recordkeeping Requirements (30 TAC § 122.144)</b>	<b>Reporting Requirements (30 TAC § 122.145)</b>
GRPTKFURN	EU	60UUU-FURN	PM (Opacity)	40 CFR Part 60, Subpart UUU	§ 60.732(b)	No emissions to the atmosphere from affected facilities shall exhibit over 10% opacity, unless the emissions are discharged from an affected facility using a wet scrubbing control device.	§ 60.736(a) § 60.736(b)(2) ** See Periodic Monitoring Summary	None	§ 60.735(d)
H-2601	EU	R7301-HTR	CO	30 TAC Chapter 117, Subchapter B	§ 117.310(c)(1) § 117.310(c)(1)(B) § 117.310(c)(3)	CO emissions must not exceed 400 ppmv at 3.0% O <sub>2</sub> , dry basis.	[G]§ 117.335(a)(1) § 117.335(a)(4) § 117.335(b) § 117.335(d) § 117.335(e) § 117.335(g) § 117.340(a) § 117.8000(b) § 117.8000(c) § 117.8000(c)(2) § 117.8000(c)(3) § 117.8000(c)(5) § 117.8000(c)(6) [G]§ 117.8000(d) ** See Periodic Monitoring Summary	§ 117.345(a) § 117.345(f) § 117.345(f)(1) § 117.345(f)(9)	§ 117.335(b) § 117.335(g) [G]§ 117.345(b) [G]§ 117.345(c) § 117.8010 [G]§ 117.8010(1) § 117.8010(2) § 117.8010(2)(A) § 117.8010(2)(B) [G]§ 117.8010(3) § 117.8010(4) [G]§ 117.8010(5) § 117.8010(6) [G]§ 117.8010(7)

**Applicable Requirements Summary**

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
H-2601	EU	R7301-HTR	NO <sub>x</sub>	30 TAC Chapter 117, Subchapter B	§ 117.310(d)(3) § 117.310(a) § 117.310(a)(8)(A)(ii) § 117.310(b) [G]§ 117.310(e)(1) § 117.310(e)(2) [G]§ 117.310(e)(3) § 117.310(e)(4) § 117.340(l)(2) § 117.340(p)(1) § 117.340(p)(2)(C) § 117.340(p)(3)	An owner or operator may not use the alternative methods specified in §§ 117.315, 117.323 and 117.9800 to comply with the NO <sub>x</sub> emission specifications but shall use the mass emissions cap and trade program in Chapter 101, Subchapter H, Division 3, except that electric generating facilities must also comply with the daily and 30-day system cap emission limitations of § 117.320. An owner or operator may use the alternative methods specified in § 117.9800 to comply with § 117.320.	[G]§ 117.335(a)(1) § 117.335(a)(4) § 117.335(b) § 117.335(d) § 117.335(e) § 117.335(g) § 117.340(a) § 117.340(l)(2) § 117.340(o)(1) § 117.340(p)(1) § 117.340(p)(2)(A) § 117.340(p)(2)(B) § 117.340(p)(2)(C) § 117.8000(b) § 117.8000(c) § 117.8000(c)(1) § 117.8000(c)(3) § 117.8000(c)(5) § 117.8000(c)(6) [G]§ 117.8000(d)	§ 117.345(a) § 117.345(f) § 117.345(f)(1) § 117.345(f)(9)	§ 117.335(b) § 117.335(g) § 117.340(p)(2)(D) [G]§ 117.345(b) [G]§ 117.345(c) § 117.8010 [G]§ 117.8010(1) § 117.8010(2) § 117.8010(2)(A) § 117.8010(2)(B) § 117.8010(2)(C) § 117.8010(2)(D) [G]§ 117.8010(3) § 117.8010(4) [G]§ 117.8010(5) § 117.8010(6) [G]§ 117.8010(7)

**Applicable Requirements Summary**

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
H-9310	EU	R7301-HTR	CO	30 TAC Chapter 117, Subchapter B	§ 117.310(c)(1) § 117.310(c)(1)(B) § 117.310(c)(3)	CO emissions must not exceed 400 ppmv at 3.0% O <sub>2</sub> , dry basis.	[G]§ 117.335(a)(1) § 117.335(a)(4) § 117.335(b) § 117.335(d) § 117.335(e) § 117.335(g) § 117.340(a)(2)(B) § 117.340(e) § 117.8000(b) § 117.8000(c) § 117.8000(c)(2) § 117.8000(c)(3) § 117.8000(c)(5) § 117.8000(c)(6) [G]§ 117.8000(d) § 117.8120 § 117.8120(2) [G]§ 117.8120(2)(A) § 117.8120(2)(B) ** See Periodic Monitoring Summary ** See Alternative Requirement	§ 117.345(a) § 117.345(f) § 117.345(f)(7) § 117.345(f)(9)	§ 117.335(b) § 117.335(g) [G]§ 117.345(b) [G]§ 117.345(c) § 117.8010 [G]§ 117.8010(1) § 117.8010(2) § 117.8010(2)(A) § 117.8010(2)(B) [G]§ 117.8010(3) § 117.8010(4) [G]§ 117.8010(5) § 117.8010(6) [G]§ 117.8010(7)

**Applicable Requirements Summary**

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
H-9310	EU	R7301-HTR	NH <sub>3</sub>	30 TAC Chapter 117, Subchapter B	§ 117.310(c)(2) § 117.310(c)(2)(B) § 117.340(f)(1)	For process heaters that inject urea or ammonia into the exhaust stream for NO <sub>x</sub> control, ammonia emissions must not exceed 10 ppmv at 3.0% O <sub>2</sub> , dry.	§ 117.335(a)(2) § 117.335(a)(4) § 117.335(b) § 117.335(c) § 117.335(d) § 117.335(g) § 117.340(d) [G]§ 117.340(f)(2) § 117.8100(a) § 117.8100(a)(1) § 117.8100(a)(1)(A) § 117.8100(a)(1)(B) § 117.8100(a)(1)(B)(ii) § 117.8100(a)(1)(C) § 117.8100(a)(2) [G]§ 117.8100(a)(3) § 117.8100(a)(4) § 117.8100(a)(5) § 117.8100(a)(5)(A) § 117.8100(a)(5)(B) [G]§ 117.8100(a)(5)(D) [G]§ 117.8100(a)(5)(E) § 117.8100(a)(6) § 117.8130 § 117.8130(4) ** See Alternative Requirement	§ 117.345(a) § 117.345(f) § 117.345(f)(11) [G]§ 117.345(f)(2) § 117.345(f)(8) § 117.345(f)(9) § 117.8100(a)(5)(C)	§ 117.335(b) § 117.335(g) [G]§ 117.345(b) [G]§ 117.345(c) § 117.345(d) § 117.345(d)(2) § 117.345(d)(3) § 117.345(d)(4) § 117.345(d)(5) § 117.8010 [G]§ 117.8010(1) § 117.8010(2) § 117.8010(2)(A) § 117.8010(2)(B) [G]§ 117.8010(3) § 117.8010(4) [G]§ 117.8010(5) § 117.8010(6) [G]§ 117.8010(7) § 117.8010(8) § 117.8100(c)

**Applicable Requirements Summary**

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
H-9310	EU	R7301-HTR	NO <sub>x</sub>	30 TAC Chapter 117, Subchapter B	§ 117.310(d)(3) § 117.310(a) § 117.310(a)(8)(A)(ii) § 117.310(b) [G]§ 117.310(e)(1) § 117.310(e)(2) [G]§ 117.310(e)(3) § 117.310(e)(4) § 117.340(f)(1) § 117.340(l)(2) § 117.340(p)(1) § 117.340(p)(3)	An owner or operator may not use the alternative methods specified in §§ 117.315, 117.323 and 117.9800 to comply with the NO <sub>x</sub> emission specifications but shall use the mass emissions cap and trade program in Chapter 101, Subchapter H, Division 3, except that electric generating facilities must also comply with the daily and 30-day system cap emission limitations of § 117.320. An owner or operator may use the alternative methods specified in § 117.9800 to comply with § 117.320.	[G]§ 117.335(a)(1) § 117.335(a)(4) § 117.335(b) § 117.335(c) § 117.335(d) § 117.335(f) § 117.335(f)(2) § 117.335(g) § 117.340(a)(2)(B) § 117.340(c)(1) [G]§ 117.340(c)(3) [G]§ 117.340(f)(2) § 117.340(l)(2) § 117.340(o)(1) § 117.340(p)(1) § 117.8100(a) § 117.8100(a)(1) § 117.8100(a)(1)(A) § 117.8100(a)(1)(B) § 117.8100(a)(1)(B)(i) § 117.8100(a)(1)(B)(ii) § 117.8100(a)(1)(C) § 117.8100(a)(2) [G]§ 117.8100(a)(3) § 117.8100(a)(4) § 117.8100(a)(5) § 117.8100(a)(5)(A) § 117.8100(a)(5)(B) [G]§ 117.8100(a)(5)(D) [G]§ 117.8100(a)(5)(E) § 117.8100(a)(6) ** See Alternative Requirement	§ 117.345(a) § 117.345(f) [G]§ 117.345(f)(2) § 117.345(f)(8) § 117.345(f)(9) § 117.8100(a)(5)(C)	§ 117.335(b) § 117.335(g) [G]§ 117.345(b) [G]§ 117.345(c) § 117.345(d) § 117.345(d)(3) § 117.8010 [G]§ 117.8010(1) § 117.8010(2) § 117.8010(2)(A) § 117.8010(2)(B) § 117.8010(2)(C) § 117.8010(2)(D) [G]§ 117.8010(3) § 117.8010(4) [G]§ 117.8010(5) § 117.8010(6) [G]§ 117.8010(7) [G]§ 117.8010(8) § 117.8100(c)

**Applicable Requirements Summary**

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
PRE-ST-11	EP	R5121-01	VOC	30 TAC Chapter 115, Vent Gas Controls	§ 115.127(a)(2)(B) [G]§ 115.122(a)(4) § 115.127(a)(2)	A vent gas stream specified in § 115.121(a)(1) of this title with a concentration of VOC < 612 ppmv is exempt from § 115.121(a)(1).	[G]§ 115.125 § 115.126(2)	§ 115.126 § 115.126(2) § 115.126(4)	None
PRE-ST-19	EP	R5121-01	VOC	30 TAC Chapter 115, Vent Gas Controls	§ 115.127(a)(2)(A) [G]§ 115.122(a)(4) § 115.127(a)(2)	A vent gas stream having a combined weight of volatile organic compounds (VOC) < 100 lbs (45.4 kg) in any continuous 24-hour period is exempt from the requirements of § 115.121(a)(1).	[G]§ 115.125 § 115.126(2)	§ 115.126 § 115.126(2) § 115.126(4)	None
PRE-ST-28	EP	R5121-01	VOC	30 TAC Chapter 115, Vent Gas Controls	§ 115.122(a)(1) § 115.121(a)(1) § 115.122(a)(1)(C)	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)(A) § 115.126(1)(A)(ii) § 115.126(2) ** See CAM Summary	§ 115.126 § 115.126(1) § 115.126(1)(A) § 115.126(1)(A)(ii) § 115.126(2)	None
R-2301	EU	60UUU-FURN	PM	40 CFR Part 60, Subpart UUU	§ 60.732(a)	No emissions to the atmosphere from affected facilities shall contain PM over 0.092 g/dscm for calciners and for calciners and dryers installed in series and in excess of 0.057 g/dscm for dryers.	§ 60.736(a) § 60.736(b)(1) ** See Periodic Monitoring Summary	None	§ 60.735(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)
R-2301	EU	60UUU-FURN	PM (Opacity)	40 CFR Part 60, Subpart UUU	§ 60.732(b)	No emissions to the atmosphere from affected facilities shall exhibit over 10% opacity, unless the emissions are discharged from an affected facility using a wet scrubbing control device.	§ 60.736(a) § 60.736(b)(2) ** See Periodic Monitoring Summary	None	§ 60.735(d)
ST-14	EP	R5121-01	VOC	30 TAC Chapter 115, Vent Gas Controls	§ 115.127(a)(2)(A) [G]§ 115.122(a)(4) § 115.127(a)(2)	A vent gas stream having a combined weight of volatile organic compounds (VOC) equal to or less than 100 pounds in any continuous 24-hour period is exempt from §115.121(a)(1) of this title.	[G]§ 115.125 § 115.126(2)	§ 115.126 § 115.126(2) § 115.126(4)	None
ST-19	EU	60UUU-FURN	PM	40 CFR Part 60, Subpart UUU	§ 60.732(a)	No emissions to the atmosphere from affected facilities shall contain PM over 0.092 g/dscm for calciners and for calciners and dryers installed in series and in excess of 0.057 g/dscm for dryers.	§ 60.734(d) § 60.735(b) § 60.736(a) § 60.736(b)(1) § 60.736(c)	§ 60.734(d) § 60.735(a) § 60.735(b)	§ 60.735(c) § 60.735(c)(2) § 60.735(c)(3) § 60.735(d)
ST-24	EP	R5121-01	VOC	30 TAC Chapter 115, Vent Gas Controls	§ 115.127(a)(2)(A) [G]§ 115.122(a)(4) § 115.127(a)(2)	A vent gas stream having a combined weight of volatile organic compounds (VOC) equal to or less than 100 pounds in any continuous 24-hour period is exempt from §115.121(a)(1) of this title.	[G]§ 115.125 § 115.126(2)	§ 115.126 § 115.126(2) § 115.126(4)	None

### 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)
ST-29	EP	R1111-HIFLO	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

**Additional Monitoring Requirements**

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### CAM Summary

<b>Unit/Group/Process Information</b>	
ID No.: PRE-ST-28	
Control Device ID No.: ST-28	Control Device Type: Catalytic incinerator
<b>Applicable Regulatory Requirement</b>	
Name: 30 TAC Chapter 115, Vent Gas Controls	SOP Index No.: R5121-01
Pollutant: VOC	Main Standard: § 115.122(a)(1)
<b>Monitoring Information</b>	
Indicator: Catalyst Bed Inlet and Outlet Gas Temperature	
Minimum Frequency: once per day	
Averaging Period: N/A	
Deviation Limit: Minimum temperature difference across the inlet and outlet of the catalyst bed shall be established using the most appropriate of: most recent performance test data, manufacturer's recommendations, engineering calculations, and/or historical data.	
<p>CAM Text: The monitoring devices should be installed in the inlet to and exit of the catalyst bed. Each monitoring device shall be calibrated at a frequency in accordance with the manufacturer's specifications, other written procedures that provide an adequate assurance that the device is calibrated accurately, or at least annually, whichever is more frequent, and shall be accurate to within one of the following:</p> <ul style="list-style-type: none"> <li>± 0.75% of the temperature being measured expressed in degrees Celsius; or</li> <li>± 2.5 degrees Celsius.</li> </ul>	

### Periodic Monitoring Summary

<b>Unit/Group/Process Information</b>	
ID No.: GRPTKFURN	
Control Device ID No.: A-4730	Control Device Type: Fabric filter
Control Device ID No.: A-9010	Control Device Type: Fabric filter
<b>Applicable Regulatory Requirement</b>	
Name: 40 CFR Part 60, Subpart UUU	SOP Index No.: 60UUU-FURN
Pollutant: PM	Main Standard: § 60.732(a)
<b>Monitoring Information</b>	
Indicator: Visible Emissions	
Minimum Frequency: Once per week	
Averaging Period: N/A	
Deviation Limit: It is a deviation if visible emissions are observed above 10% opacity per § 60.732(b).	
<p>Periodic Monitoring Text: Visible emissions observations shall be made and recorded. Note that to properly determine the presence of visible emissions, all sources must be in clear view of the observer. The observer shall be at least 15 feet, but not more than 0.25 miles, away from the emission source during the observation. The observer shall select a position where the sun is not directly in the observer's eyes. If the observations cannot be conducted due to weather conditions, the date, time, and specific weather conditions shall be recorded. When condensed water vapor is present within the plume, as it emerges from the emissions outlet, observations must be made beyond the point in the plume at which condensed water vapor is no longer visible. When water vapor within the plume condenses and becomes visible at a distance from the emissions outlet, the observation shall be evaluated at the outlet prior to condensation of water vapor.</p> <p>If visible emissions are observed, the permit holder shall report a deviation. As an alternative, the permit holder may determine the opacity consistent with Test Method 9, as soon as practicable, but no later than 24 hours after observing visible emissions. If a Test Method 9 is performed, the opacity limit is the corresponding opacity limit associated with the particulate matter standard in the underlying applicable requirement. If there is no corresponding opacity limit in the underlying applicable requirement, the maximum opacity will be established using the most recent performance test. If the result of the Test Method 9 is opacity above the corresponding opacity limit (associated with the particulate matter standard in the underlying applicable requirement or as identified as a result of a previous performance test to establish the maximum opacity limit), the permit holder shall report a deviation.</p>	

### Periodic Monitoring Summary

<b>Unit/Group/Process Information</b>	
ID No.: GRPTKFURN	
Control Device ID No.: A-4730	Control Device Type: Fabric filter
Control Device ID No.: A-9010	Control Device Type: Fabric filter
<b>Applicable Regulatory Requirement</b>	
Name: 40 CFR Part 60, Subpart UUU	SOP Index No.: 60UUU-FURN
Pollutant: PM (Opacity)	Main Standard: § 60.732(b)
<b>Monitoring Information</b>	
Indicator: Visible Emissions	
Minimum Frequency: once per week	
Averaging Period: N/A	
Deviation Limit: It is a deviation if visible emissions are observed above 10% opacity per § 60.732(b).	
<p>Periodic Monitoring Text: Visible emissions observations shall be made and recorded. Note that to properly determine the presence of visible emissions, all sources must be in clear view of the observer. The observer shall be at least 15 feet, but not more than 0.25 miles, away from the emission source during the observation. The observer shall select a position where the sun is not directly in the observer's eyes. If the observations cannot be conducted due to weather conditions, the date, time, and specific weather conditions shall be recorded. When condensed water vapor is present within the plume, as it emerges from the emissions outlet, observations must be made beyond the point in the plume at which condensed water vapor is no longer visible. When water vapor within the plume condenses and becomes visible at a distance from the emissions outlet, the observation shall be evaluated at the outlet prior to condensation of water vapor.</p> <p>If visible emissions are observed, the permit holder shall report a deviation. As an alternative, the permit holder may determine the opacity consistent with Test Method 9, as soon as practicable, but no later than 24 hours after observing visible emissions. If the result of the Test Method 9 is opacity above the opacity limit in the applicable requirement, the permit holder shall report a deviation.</p>	

### Periodic Monitoring Summary

<b>Unit/Group/Process Information</b>	
ID No.: H-2601	
Control Device ID No.: N/A	Control Device Type: N/A
<b>Applicable Regulatory Requirement</b>	
Name: 30 TAC Chapter 117, Subchapter B	SOP Index No.: R7301-HTR
Pollutant: CO	Main Standard: § 117.310(c)(1)
<b>Monitoring Information</b>	
Indicator: CO Concentration	
Minimum Frequency: Quarterly, when the unit operates within that quarter.	
Averaging Period: N/A	
Deviation Limit: 400 ppmv at 3%, dry basis, hourly average.	
<p>Periodic Monitoring Text: The CO concentration shall be measured and recorded using a sorbent or stain tube device specific for CO measurement in the appropriate range. If a reading is 400 ppm or greater, 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 additional monitoring to determine an hourly average in accordance with the Environmental Protection Agency's Office of Air Quality Planning &amp; Standards, Emission Measurement Center Conditional Test Method - Determination of Oxygen, Carbon Monoxide, and Oxides of Nitrogen from Stationary Sources for Periodic Monitoring (Portable Electrochemical Analyzer Procedure) [CTM-034] (September 8, 1999). If additional monitoring is performed and the source is determined to be in compliance, the RO may certify that the source is in compliance with the applicable rule requirement. However, if additional CO monitoring 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). As an alternative to the use of stain tubes, the permit holder may use an analytical monitor that satisfies the EPA's CTM-034 for the initial monitoring event. However, in this case, there is no additional monitoring that can be performed to avoid reporting a deviation if CO levels above 400 ppm are measured.</p>	

### Periodic Monitoring Summary

<b>Unit/Group/Process Information</b>	
ID No.: H-9310	
Control Device ID No.: N/A	Control Device Type: N/A
<b>Applicable Regulatory Requirement</b>	
Name: 30 TAC Chapter 117, Subchapter B	SOP Index No.: R7301-HTR
Pollutant: CO	Main Standard: § 117.310(c)(1)
<b>Monitoring Information</b>	
Indicator: CO Concentration	
Minimum Frequency: Quarterly when the unit operates within that quarter.	
Averaging Period: N/A	
Deviation Limit: 400 ppmv at 3% dry basis, hourly average.	
<p>Periodic Monitoring Text: The CO concentration shall be measured and recorded using a sorbent or stain tube device specific for CO measurement in the appropriate range. If a reading is 400 ppm or greater, 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 additional monitoring to determine an hourly average in accordance with the Environmental Protection Agency's Office of Air Quality Planning &amp; Standards, Emission Measurement Center Conditional Test Method - Determination of Oxygen, Carbon Monoxide, and Oxides of Nitrogen from Stationary Sources for Periodic Monitoring (Portable Electrochemical Analyzer Procedure) [CTM-034] (September 8, 1999). If additional monitoring is performed and the source is determined to be in compliance, the RO may certify that the source is in compliance with the applicable rule requirement. However, if additional CO monitoring 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). As an alternative to the use of stain tubes, the permit holder may use an analytical monitor that satisfies the EPA's CTM-034 for the initial monitoring event. However, in this case, there is no additional monitoring that can be performed to avoid reporting a deviation if CO levels above 400 ppm are measured.</p>	

### Periodic Monitoring Summary

<b>Unit/Group/Process Information</b>	
ID No.: R-2301	
Control Device ID No.: N/A	Control Device Type: N/A
<b>Applicable Regulatory Requirement</b>	
Name: 40 CFR Part 60, Subpart UUU	SOP Index No.: 60UUU-FURN
Pollutant: PM	Main Standard: § 60.732(a)
<b>Monitoring Information</b>	
Indicator: Visible Emissions	
Minimum Frequency: Once per week	
Averaging Period: N/A	
Deviation Limit: It is a deviation if visible emissions are observed above 10% opacity per § 60.732(b).	
<p>Periodic Monitoring Text: Visible emissions observations shall be made and recorded. Note that to properly determine the presence of visible emissions, all sources must be in clear view of the observer. The observer shall be at least 15 feet, but not more than 0.25 miles, away from the emission source during the observation. The observer shall select a position where the sun is not directly in the observer's eyes. If the observations cannot be conducted due to weather conditions, the date, time, and specific weather conditions shall be recorded. When condensed water vapor is present within the plume, as it emerges from the emissions outlet, observations must be made beyond the point in the plume at which condensed water vapor is no longer visible. When water vapor within the plume condenses and becomes visible at a distance from the emissions outlet, the observation shall be evaluated at the outlet prior to condensation of water vapor.</p> <p>If visible emissions are observed, the permit holder shall report a deviation. As an alternative, the permit holder may determine the opacity consistent with Test Method 9, as soon as practicable, but no later than 24 hours after observing visible emissions. If a Test Method 9 is performed, the opacity limit is the corresponding opacity limit associated with the particulate matter standard in the underlying applicable requirement. If there is no corresponding opacity limit in the underlying applicable requirement, the maximum opacity will be established using the most recent performance test. If the result of the Test Method 9 is opacity above the corresponding opacity limit (associated with the particulate matter standard in the underlying applicable requirement or as identified as a result of a previous performance test to establish the maximum opacity limit), the permit holder shall report a deviation.</p>	

### Periodic Monitoring Summary

<b>Unit/Group/Process Information</b>	
ID No.: R-2301	
Control Device ID No.: N/A	Control Device Type: N/A
<b>Applicable Regulatory Requirement</b>	
Name: 40 CFR Part 60, Subpart UUU	SOP Index No.: 60UUU-FURN
Pollutant: PM (Opacity)	Main Standard: § 60.732(b)
<b>Monitoring Information</b>	
Indicator: Visible Emissions	
Minimum Frequency: once per week	
Averaging Period: N/A	
Deviation Limit: It is a deviation if visible emissions are observed above 10% opacity per § 60.732(b).	
<p>Periodic Monitoring Text: Visible emissions observations shall be made and recorded. Note that to properly determine the presence of visible emissions, all sources must be in clear view of the observer. The observer shall be at least 15 feet, but not more than 0.25 miles, away from the emission source during the observation. The observer shall select a position where the sun is not directly in the observer's eyes. If the observations cannot be conducted due to weather conditions, the date, time, and specific weather conditions shall be recorded. When condensed water vapor is present within the plume, as it emerges from the emissions outlet, observations must be made beyond the point in the plume at which condensed water vapor is no longer visible. When water vapor within the plume condenses and becomes visible at a distance from the emissions outlet, the observation shall be evaluated at the outlet prior to condensation of water vapor.</p> <p>If visible emissions are observed, the permit holder shall report a deviation. As an alternative, the permit holder may determine the opacity consistent with Test Method 9, as soon as practicable, but no later than 24 hours after observing visible emissions. If the result of the Test Method 9 is opacity above the opacity limit in the applicable requirement, the permit holder shall report a deviation.</p>	

## Periodic Monitoring Summary

<b>Unit/Group/Process Information</b>	
ID No.: ST-29	
Control Device ID No.: A-9910	Control Device Type: Fabric filter
<b>Applicable Regulatory Requirement</b>	
Name: 30 TAC Chapter 111, Visible Emissions	SOP Index No.: R1111-HIFLO
Pollutant: Opacity	Main Standard: § 111.111(a)(1)(C)
<b>Monitoring Information</b>	
Indicator: Visible Emissions	
Minimum Frequency: Once per week	
Averaging Period: N/A	
Deviation Limit: 15% Opacity.	
<p>Periodic Monitoring Text: Visible emissions observations shall be made and recorded. Note that to properly determine the presence of visible emissions, all sources must be in clear view of the observer. The observer shall be at least 15 feet, but not more than 0.25 miles, away from the emission source during the observation. The observer shall select a position where the sun is not directly in the observer's eyes. If the observations cannot be conducted due to weather conditions, the date, time, and specific weather conditions shall be recorded. When condensed water vapor is present within the plume, as it emerges from the emissions outlet, observations must be made beyond the point in the plume at which condensed water vapor is no longer visible. When water vapor within the plume condenses and becomes visible at a distance from the emissions outlet, the observation shall be evaluated at the outlet prior to condensation of water vapor.</p> <p>If visible emissions are observed, the permit holder shall report a deviation. As an alternative, the permit holder may determine the opacity consistent with Test Method 9, as soon as practicable, but no later than 24 hours after observing visible emissions. If a Test Method 9 is performed, the opacity limit is the corresponding opacity limit associated with the particulate matter standard in the underlying applicable requirement. If there is no corresponding opacity limit in the underlying applicable requirement, the maximum opacity will be established using the most recent performance test. If the result of the Test Method 9 is opacity above the corresponding opacity limit (associated with the particulate matter standard in the underlying applicable requirement or as identified as a result of a previous performance test to establish the maximum opacity limit), the permit holder shall report a deviation.</p>	

**New Source Review Authorization References**

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### New Source Review Authorization References

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

<b>Title 30 TAC Chapter 116 Permits, Special Permits, and Other Authorizations (Other Than Permits By Rule, PSD Permits, or NA Permits) for the Application Area.</b>	
Authorization No.: 9203	Issuance Date: 11/07/2025
Authorization No.: 21178	Issuance Date: 04/19/2023
<b>Permits By Rule (30 TAC Chapter 106) for the Application Area</b>	
Number: 106.144	Version No./Date: 09/04/2000
Number: 106.227	Version No./Date: 09/04/2000
Number: 106.261	Version No./Date: 11/01/2003
Number: 106.262	Version No./Date: 11/01/2003
Number: 106.263	Version No./Date: 11/01/2001
Number: 106.265	Version No./Date: 09/04/2000
Number: 106.371	Version No./Date: 09/04/2000
Number: 106.412	Version No./Date: 09/04/2000
Number: 106.454	Version No./Date: 11/01/2001
Number: 106.472	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**
CSC-1	COLD SOLVENT CLEANER NO. 1	106.454/11/01/2001
FWP-2	FIRE WATER PUMP DRIVER	106.511/09/04/2000
GEN-3	NEW VK PLANT GENERATOR	106.511/09/04/2000
GEN-4	TK1 EMERGENCY GENERATOR	106.511/09/04/2000
H-2601	SNK WATER HEATER	21178
H-9310	TK3 HOT WATER SYSTEM BURNER	9203
L-1200	TK3 DRYING BELT FURNACE	9203
L-1400	TK3 FIRST CALCINATION FURNACE	9203
L-1600	TK3 SECOND CALCINATION FURNACE	9203
L-2200	TK3 DECOMPOSITION FURNACE	9203
L-4300	TK1 DRYING FURNACE	9203
L-4400	TK1 CALCINATION FURNACE	9203
L-4410	TK1 CALCINATION FURNACE	9203
L-4550	TK1 DECOMPOSITION FURNACE	9203
L-4580	TK1 DECOMPOSITION FURNACE	9203
PRE-ST-11	VENT TO TK1 DENOX UNIT	9203
PRE-ST-19	NEW VK STACK	9203
PRE-ST-28	VENT TO TK3 DENOX UNIT	9203
R-2301	SNK REACTOR	21178
ST-14	TK1 DUST FILTRATION	9203
ST-19	VK STACK	9203, 106.261/11/01/2003 [167120]

**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**
ST-24	TOPFRAX CATALYTIC FILTER PLANT	9203
ST-29	TK3 DUST FILTRATION	9203
T-0750	TK3 ETHYLENEDIAMINE STORAGE TANK	9203
T-0770	TK3 LACTIC ACID STORAGE TANK	9203
T-4800	TK1 ETHYLENEDIAMINE STORAGE TANK	9203
T-4820	TK1 LACTIC ACID STORAGE TANK	9203
X-2100	TK3 IMPREGNATION DRUM BURNER	9203

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

**Alternative Requirement**

**Alternative Requirement..... 47**

Brooke T. Paup, *Chairwoman*  
Bobby Janecka, *Commissioner*  
Catarina R. Gonzales, *Commissioner*  
Kelly Keel, *Executive Director*



## TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

*Protecting Texas by Reducing and Preventing Pollution*

April 2, 2025

MR MICHAEL MAYO  
SR MANAGER EHS  
TOPSOE INC  
10010 BAYPORT BLVD  
PASADENA TX 77507-1412

Re: Alternative Method of Compliance (AMOC) No. 232  
TK3 Catalyst Manufacturing Plant  
Hot Water System §117 Alternative Compliance Demonstration  
Regulated Entity Number: RN101211498  
Customer Reference Number: CN600132435  
Associated Permit Numbers: 9203 and O1217

Dear Mr. Mayo:

This correspondence is to correct a typographical error on AMOC Plan Conditions page 2 header as originally attached to the approval letter dated March 19, 2025. The updated and corrected AMOC Plan Conditions are attached to this correspondence. Please replace these Conditions with those previously sent and include with all appropriate documentation at the site.

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,

A handwritten signature in black ink, appearing to read "Samuel Short", with a long horizontal line extending to the right.

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

cc: Stuart Kiel, P.E., Primary, Keil Environmental Inc, Austin  
Chief Health Inspector, Health Department, City of Pasadena, Pasadena  
Director, Harris County, Pollution Control Services, Pasadena  
Air Section Manager, Region 12 - Houston  
Jesse E. Chacon, P.E., Manager, Operating Permits Section, Air Permits Division, OA: MC-163  
Becky Tsuchiya, Manager, Chemical New Source Review Permits Section, Air Permits Division,  
OA: MC-163

Project Number: 388573

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Brooks T. Paup, *Chairwoman*  
Bobby Janocka, *Commissioner*  
Catarina R. Gonzales, *Commissioner*  
Kelly Keel, *Executive Director*



## TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

*Protecting Texas by Reducing and Preventing Pollution*

March 19, 2025

MR MICHAEL MAYO  
SR MANAGER EHS  
TOPSOE INC  
10010 BAYPORT BLVD  
PASADENA TX 77507-1412

Re: Alternative Method of Compliance (AMOC) No. 232  
TK3 Catalyst Manufacturing Plant  
Hot Water System §117 Alternative Compliance Demonstration  
Regulated Entity Number: RN101211498  
Customer Reference Number: CN600132435  
Associated Permit Numbers: 9203 and O1217

Dear Mr. Mayo:

This correspondence is in response to Topsoe, Inc.'s (Topsoe's) January 30, 2025 follow-up to the February 21, 2024 Alternate Method of Compliance (AMOC) approval and required performance testing for the Hot Water System Heater in the TK3 Catalyst Manufacturing Plant. This AMOC provides an alternative compliance method for NO<sub>x</sub>, CO, and NH<sub>3</sub> to comply with 30 TAC 117 Control of NO<sub>x</sub>, Subchapter B Combustion control at major industrial, commercial, and institutional sources in ozone nonattainment areas, Division 3 Houston-Galveston-Brazoria Ozone Nonattainment Areas and Subchapter G, General Monitoring and Testing Requirements, Division 1 Compliance Stack Testing and Report Requirements as well as 30 TAC 101, Subchapter H Emissions Banking and Trading Program, Division 3 Mass Emissions Cap and Trade Program.

The performance testing report dated December 27, 2024 demonstrated initial compliance with NO<sub>x</sub>, CO, and NH<sub>3</sub> state regulatory requirements applicable to the Hot Water Heater System (FIN HWSB-1).

The Texas Commission on Environmental Quality (TCEQ) Executive Director has made a decision to approve the compliance demonstration alternatives for NO<sub>x</sub>, CO, and NH<sub>3</sub>. Based on the results of the testing, the alternative methods to monitor on-going compliance of air contaminants are included in the attached AMOC Plan Conditions.

The AMOC approval may supersede certain requirements or representations in Permit Nos. 9203. To ensure effective and consistent enforceability, Topsoe is required to incorporate any completed and approved AMOC into the permit through submittal of an Alteration no later than 90 days after this action. This approval may also change applicable requirements for the site, which are identified in the site operating permit (SOP) O1217 and at that time, a submittal of a SOP Revision will be needed. Additionally, if approved, this AMOC is required to be attached to each annual MECT report.

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March 19, 2025  
Page 2  
Mr. Michael Mayo

Re: Permit Number: 9203

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,

A handwritten signature in black ink, appearing to read 'Samuel Short', with a long horizontal line extending to the right.

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

cc: Stuart Kiel, P.E., Primary, Keil Environmental Inc, Austin  
Chief Health Inspector, Health Department, City of Pasadena, Pasadena  
Director, Harris County, Pollution Control Services, Pasadena  
Air Section Manager, Region 12 - Houston  
Jesse E. Chacon, P.E., Manager, Operating Permits Section, Air Permits Division, OA: MC-163  
Becky Tsuchiya, Manager, Chemical New Source Review Permits Section, Air Permits Division,  
OA: MC-163

Project Number: 388573

# TEXAS COMMISSION ON ENVIRONMENTAL QUALITY



**Alternative Method of Control (AMOC) Plan, AMOC No.: AMOC232**  
**Topsoe, Inc.**  
**TK3 Catalyst Plant**  
**Pasadena, Harris County**  
**Regulated Entity Number: RN101211498**

## **A. General Requirements**

1. This AMOC Plan Authorization shall apply at the Topsoe, Inc., TK3 Catalyst Plant located in Pasadena, Harris County and identified by Regulated Entity Number RN101211498. Under Title 30 Texas Administrative Code (TAC) Section 117.325 (§ 117.325) this plan authorizes the alternate compliance demonstrations for the Hot Water Heater System.
2. A copy of the AMOC application, Test Report, and AMOC Plan provisions must be kept on-site or at a centralized location and made available at the request of personnel from the TCEQ or any pollution control agency with jurisdiction. The AMOC application is defined by the application initially received November 30, 2023, and supporting documentation submitted through January 31, 2025.
3. This authorization is granted under § 117.325 for emissions sources regulated by:
  - 30 TAC Chapter 117, Control of NO<sub>x</sub>, Subchapter B Combustion Control at Major Industrial, Commercial, and Institutional Sources in Ozone Nonattainment Areas, Division 3 Houston-Galveston-Brazoria Ozone Nonattainment Areas;
  - 30 TAC Chapter 117, Control of NO<sub>x</sub>, Subchapter G, General Monitoring and Testing Requirements, Division 1 Compliance Stack Testing and Report Requirements; and
  - 30 TAC Chapter 101 General Air Quality Rules, Subchapter H Emissions Banking and Trading, Division 3 Mass Emissions Cap and Trade Program.

This AMOC shall apply in lieu of the requirements in these state regulations, as applicable. Compliance with this AMOC is independent of Topsoe's obligation to comply with all other applicable requirements of 30 TAC Chapters 101 and 117, TCEQ permits, and applicable state and federal laws.

4. All representations submitted for this AMOC, as well as the provisions listed here, become conditions upon which this AMOC Plan is issued. It is unlawful to vary from the emission limits, control requirements, monitoring, testing, reporting or recordkeeping requirements of this Plan.

## **B. Specific Requirements**

1. **NO<sub>x</sub> Performance Testing & MECT Annual Demonstration**
  - a. Following the procedures of NSR Permit No. 9203, Special Condition No. 21, an initial NO<sub>x</sub> and O<sub>2</sub> performance test was performed with an alternative sample-port location of the Hot Water Heater exhaust prior to comingling with the other process streams or any control portion of the DeNO<sub>x</sub> Unit on October 31-November 1, 2024. This testing was in addition to the DeNO<sub>x</sub> exhaust stack testing required by NSR Permit No. 9203, Special Condition No. 21 [§§ 117.325(a) and 117.335(b)].
  - b. The average measured NO<sub>x</sub> concentration (ppmv) at this alternative sample location demonstrated that the Hot Water Heater uncontrolled exhaust concentration was 47.5 ppmvd @ 3% O<sub>2</sub> and is less than or equal to the NSR Permit No. 9203 Hot Water Heater burner representation of 70 ppmv (@ 3% O<sub>2</sub>).

- c. The measured NO<sub>x</sub> concentration (ppmv) from the initial stack testing at the DeNO<sub>x</sub> outlet as required by NSR Permit No. 9203, Special Condition No. 21 and all associated operating parameters of the Hot Water Heater and DeNO<sub>x</sub> system are sufficient and demonstrate initial compliance [§ 117.355(b)].
- d. The heater's combustion settings determined during the initial tuning and performance testing shall be maintained at all times and any adjustments shall be documented. If any combustion parameter is adjusted greater than 10%, testing shall be repeated.
- e. The measured NO<sub>x</sub> outlet (47.5 ppmvd @ 3% O<sub>2</sub> or 0.0577 lb/MM Btu) shall be used in conjunction with actual annual fuel usage of the Hot Water Heater to meet the annual MECT allowance (0.3 tpy) [§§ 117.340(l)(2) and 117.340(a)]. A copy of the AMOC Approval and Plan shall be attached to each annual MECT report [§§ 101.352(b) and 101.354(b)(1)].

## 2. CO Performance Testing

- a. Following the procedures of NSR Permit No. 9203, Special Condition No. 21, an initial CO performance test was performed at an alternative sample-port location of the Hot Water Heater exhaust prior to comingling with the other process streams or any control portion of the DeNO<sub>x</sub> Unit. This testing was in addition to the CO testing at the exhaust of the DeNO<sub>x</sub> co-mingled exhaust stack as required by NSR Permit No. 9203, Special Condition No. 21 [§§ 117.325(a) and 117.335(b)].
- b. The measured CO concentration (ppmv) at the alternative sample location demonstrates that the Hot Water Heater uncontrolled exhaust concentration was 12.6 ppmvd @ 3% O<sub>2</sub> and is less than or equal to 400 ppmv corrected to 3% O<sub>2</sub> [§§ 117.335(b) and 117.310(c)(1)].
- c. The measured CO concentration (ppmv) from the initial stack testing at the DeNO<sub>x</sub> outlet as required by NSR Permit No. 9203, Special Condition No. 21 and all associated operating parameters of the Hot Water Heater and DeNO<sub>x</sub> system demonstrated initial compliance [§§ 117.335(b) and 117.310(c)(1)].
- d. On-going compliance requirements will be met by rechecking the CO concentrations when any DeNO<sub>x</sub> system exhaust NO<sub>x</sub> CEMS RATA are subsequently performed [§ 117.8120(2)(B)].

## 3. NH<sub>3</sub> Initial Performance Testing and Monitoring

- a. The NO<sub>x</sub> concentrations from the alternate location performance testing demonstrates compliance with § 117.310(c)(2) without reliance on any ammonia-based control system, therefore NH<sub>3</sub> monitoring under §117 is not required.

**Appendix A**

**Acronym List ..... 53**

## 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 <sub>2</sub> S	hydrogen sulfide
ID No.	identification number
lb/hr	pound(s) per hour
MACT	Maximum Achievable Control Technology (40 CFR Part 63)
MMBtu/hr	Million British thermal units per hour
NA	nonattainment
N/A	not applicable
NADB	National Allowance Data Base
NESHAP	National Emission Standards for Hazardous Air Pollutants (40 CFR Part 61)
NO <sub>x</sub>	nitrogen oxides
NSPS	New Source Performance Standard (40 CFR Part 60)
NSR	New Source Review
ORIS	Office of Regulatory Information Systems
Pb	lead
PBR	Permit By Rule
PEMS	predictive emissions monitoring system
PM	particulate matter
ppmv	parts per million by volume
PRO	process unit
PSD	prevention of significant deterioration
psia	pounds per square inch absolute
RO	Responsible Official
SIP	state implementation plan
SO <sub>2</sub>	sulfur dioxide
TCEQ	Texas Commission on Environmental Quality
TSP	total suspended particulate
TVP	true vapor pressure
U.S.C.	United States Code
VOC	volatile organic compound