

FEDERAL OPERATING PERMIT

A FEDERAL OPERATING PERMIT IS HEREBY ISSUED TO
Arkema Inc.

AUTHORIZING THE OPERATION OF
Beaumont Facility
Arkema Beaumont Plant
All Other Basic Organic Chemical Manufacturing

LOCATED AT
Jefferson County, Texas
Latitude 30° 3' 29" Longitude 94° 3' 25"
Regulated Entity Number: RN100216373

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: 01636 Issuance Date: June 9, 2021



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, Subparts ZZZZ and VVVVV as identified in the attached Applicable Requirements Summary table are subject to 30 TAC Chapter

113, Subchapter C, § 113.1090 and § 113.1495, respectively, which incorporate the 40 CFR Part 63 Subparts by reference.

2. The permit holder shall comply with the following sections of 30 TAC Chapter 101 (General Air Quality Rules):
 - A. Title 30 TAC § 101.1 (relating to Definitions), insofar as the terms defined in this section are used to define the terms used in other applicable requirements
 - B. Title 30 TAC § 101.3 (relating to Circumvention)
 - C. Title 30 TAC § 101.8 (relating to Sampling), if such action has been requested by the TCEQ
 - D. Title 30 TAC § 101.9 (relating to Sampling Ports), if such action has been requested by the TCEQ
 - E. Title 30 TAC § 101.10 (relating to Emissions Inventory Requirements)
 - F. Title 30 TAC § 101.201 (relating to Emission Event Reporting and Recordkeeping Requirements)
 - G. Title 30 TAC § 101.211 (relating to Scheduled Maintenance, Start-up, and Shutdown Reporting and Recordkeeping Requirements)
 - H. Title 30 TAC § 101.221 (relating to Operational Requirements)
 - I. Title 30 TAC § 101.222 (relating to Demonstrations)
 - J. Title 30 TAC § 101.223 (relating to Actions to Reduce Excessive Emissions)
3. Permit holder shall comply with the following requirements of 30 TAC Chapter 111:
 - A. Visible emissions from stationary vents with a flow rate of less than 100,000 actual cubic feet per minute and constructed after January 31, 1972 that are not listed in the Applicable Requirements Summary attachment for 30 TAC Chapter 111, Subchapter A, Division 1, shall not exceed 20% opacity averaged over a six-minute period. The permit holder shall comply with the following requirements for stationary vents at the site subject to this standard:
 - (i) Title 30 TAC § 111.111(a)(1)(B) (relating to Requirements for Specified Sources)
 - (ii) Title 30 TAC § 111.111(a)(1)(E)
 - (iii) Title 30 TAC § 111.111(a)(1)(F)(i), (ii), (iii), or (iv)
 - (iv) For emission units with vent emissions subject to 30 TAC § 111.111(a)(1)(B), complying with 30 TAC § 111.111(a)(1)(F)(ii), (iii), or (iv), and capable of producing visible emissions from, but not limited to, particulate matter, acid gases and NO_x, the permit holder shall also comply with the following periodic monitoring requirements for the purpose of annual compliance certification under 30 TAC § 122.146. These periodic monitoring requirements do not apply to vents that are not capable of producing visible emissions such as vents that emit only colorless VOCs; vents from non-fuming liquids; vents that provide passive ventilation, such as plumbing vents; or vent emissions from any other source that

does not obstruct the transmission of light. Vents, as specified in the “Applicable Requirements Summary” attachment, that are subject to the emission limitation of 30 TAC § 111.111(a)(1)(B) are not subject to the following periodic monitoring requirements:

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

determined to be in compliance, the RO may certify that the source is in compliance with the applicable opacity requirement. However, if an opacity test is performed and the source is determined to be out of compliance, the permit holder shall list this occurrence as a deviation on the next deviation report as required under 30 TAC § 122.145(2). The opacity test must be performed by a certified opacity reader.

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

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

- (i) Title 30 TAC § 111.111(a)(7)(A) (relating to Requirements for Specified Sources)
- (ii) Title 30 TAC § 111.111(a)(7)(B)(i) or (ii)
- (iii) For a building containing an air emission source, enclosed facility, or other structure containing or associated with an air emission source subject to 30 TAC § 111.111(a)(7)(A), complying with 30 TAC § 111.111(a)(7)(B)(i) or (ii), and capable of producing visible emissions from, but not limited to, particulate matter, acid gases and NO_x, the permit holder shall also comply with the following periodic monitoring requirements for the purpose of annual compliance certification under 30 TAC § 122.146:
 - (1) An observation of visible emissions from a building containing an air emission source, enclosed facility, or other structure containing or associated with an air emission source which is required to comply with 30 TAC § 111.111(a)(7)(A) shall be conducted at least once during each calendar quarter unless the air emission source or enclosed facility is not operating for the entire quarter.
 - (2) Records of all observations shall be maintained.
 - (3) Visible emissions observations of air emission sources or enclosed facilities operated during daylight hours shall be conducted no earlier than one hour after sunrise and no later than one hour before sunset. Visible emissions observations of air emission sources or enclosed facilities operated only at night must be made with additional lighting and the temporary installation of contrasting backgrounds. Visible emissions shall be determined with each emissions outlet in clear view of the observer. The observer shall be at least 15 feet, but not more than 0.25 mile, away from each emissions outlet during the observation. For outdoor locations, the observer shall select a position where the sun is not directly in the observer's eyes. When condensed water vapor is present within the plume, as it emerges from the emissions outlet, observations must be made beyond the point in the plume at which condensed water vapor is no longer visible. When water vapor within the plume condenses and becomes visible at a distance from the emissions outlet, the observation shall be evaluated at the outlet prior to condensation of water vapor. A certified opacity reader is not required for visible emissions observations.

- (4) Compliance Certification:
- (a) If visible emissions are not present during the observation, the RO may certify that the source is in compliance with the applicable opacity requirement in 30 TAC § 111.111(a)(7) and (a)(7)(A).
 - (b) However, if visible emissions are present during the observation, the permit holder shall either list this occurrence as a deviation on the next deviation report as required under 30 TAC § 122.145(2) or conduct the appropriate opacity test specified in 30 TAC § 111.111(a)(7)(B) as soon as practicable, but no later than 24 hours after observing visible emissions to determine if the source is in compliance with the opacity requirements. If an opacity test is performed and the source is determined to be in compliance, the RO may certify that the source is in compliance with the applicable opacity requirement. However, if an opacity test is performed and the source is determined to be out of compliance, the permit holder shall list this occurrence as a deviation on the next deviation report as required under 30 TAC § 122.145(2). The opacity test must be performed by a certified opacity reader.
- C. Certification of opacity readers determining opacities under Method 9 (as outlined in 40 CFR Part 60, Appendix A) to comply with opacity monitoring requirements shall be accomplished by completing the Visible Emissions Evaluators Course, or approved agency equivalent, no more than 180 days before the opacity reading.
- D. Emission limits on nonagricultural processes, except for the steam generators specified in 30 TAC § 111.153, shall comply with the following requirements:
- (i) Emissions of PM from any source may not exceed the allowable rates as required in 30 TAC § 111.151(a) (relating to Allowable Emissions Limits)
 - (ii) Sources with an effective stack height (h_e) less than the standard effective stack height (H_e), must reduce the allowable emission level by multiplying it by $[h_e/H_e]^2$ as required in 30 TAC § 111.151(b)
 - (iii) Effective stack height shall be calculated by the equation specified in 30 TAC § 111.151(c)
4. For storage vessels maintaining working pressure as specified in 30 TAC Chapter 115, Subchapter B, Division 1: "Storage of Volatile Organic Compounds," the permit holder shall comply with the requirements of 30 TAC § 115.112(a)(1).
5. For industrial wastewater specified in 30 TAC Chapter 115, Subchapter B, the permit holder shall comply with the following requirements for wastewater drains, junction boxes, lift stations and weirs:
- A. Title 30 TAC § 115.142 (relating to Control Requirements)
 - B. Title 30 TAC § 115.142(1)(A) - (D) (relating to Control Requirements)
 - C. Title 30 TAC § 115.142(1)(E) and (F) (relating to Control Requirements)

- D. Title 30 TAC § 115.142(1)(G) and (H) (relating to Control Requirements)
 - E. Title 30 TAC § 115.144(1), (5), and (6) (relating to Inspection and Monitoring Requirements)
 - F. Title 30 TAC § 115.145 (relating to Approved Test Methods)
 - G. Title 30 TAC § 115.146 (relating to Recordkeeping Requirements)
 - H. Title 30 TAC § 115.148 (relating to Determination of Wastewater Characteristics)
6. 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 specified in 30 TAC Chapter 115, Subchapter C, the permit holder shall comply with the following requirements:
 - (i) Title 30 TAC § 115.221 (relating to Emission Specifications)
 - (ii) Title 30 TAC § 115.222 (relating to Control Requirements)
 - (iii) Title 30 TAC § 115.223 (relating to Alternate Control Requirements)
 - (iv) Title 30 TAC § 115.224 (relating to Inspection Requirements)
 - (v) Title 30 TAC § 115.225 (relating to Testing Requirements)
 - (vi) Title 30 TAC § 115.226 (relating to Recordkeeping Requirements)
7. The permit holder shall comply with the following requirements of 30 TAC Chapter 115, Subchapter F, Division 3, Degassing of Storage Tanks, Transport Vessels and Marine Vessels:
- A. For the degassing of all transport vessels with a nominal capacity of 8,000 gallons or more, the permit holder shall comply with the following requirements:
 - (i) Title 30 TAC § 115.541(a) - (c) and (d) (relating to Emission Specifications)
 - (ii) Title 30 TAC § 115.542(a) and (a)(1), (a)(2), (a)(3) or (a)(4) (relating to Control Requirements). Where the requirements of 30 TAC Chapter 115, Subchapter F contain multiple compliance options, the permit holder shall keep records of when each compliance option was used.
 - (iii) Title 30 TAC § 115.542(b), (c) and (e) (relating to Control Requirements)
 - (iv) Title 30 TAC § 115.543 (relating to Alternate Control Requirements)
 - (v) Title 30 TAC § 115.544(a)(1) and (a)(2) (relating to Inspection, Monitoring, and Testing Requirements), for inspections
 - (vi) Title 30 TAC § 115.544(b) (relating to Inspection, Monitoring, and Testing Requirements), for monitoring
 - (vii) Title 30 TAC § 115.544(b)(1) and (b)(2) (relating to Inspection, Monitoring, and Testing Requirements), for monitoring of control devices

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

8. 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)

9. 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)
10. 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)
11. The permit holder shall comply with the requirements of 30 TAC Chapter 113, Subchapter C, § 113.100 for units subject to any subpart of 40 CFR Part 63, unless otherwise stated in the applicable subpart.

Additional Monitoring Requirements

12. 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.
- 13. 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

- 14. Permit holder shall comply with the requirements of New Source Review authorizations issued or claimed by the permit holder for the permitted area, including permits, permits by rule, standard permits, flexible permits, special permits, permits for existing facilities including Voluntary Emissions Reduction Permits and Electric Generating Facility Permits issued under 30 TAC Chapter 116, Subchapter I, or special exemptions referenced in the New Source Review Authorization References attachment. These requirements:
 - A. Are incorporated by reference into this permit as applicable requirements
 - B. Shall be located with this operating permit
 - C. Are not eligible for a permit shield
- 15. 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.
- 16. 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

17. 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.
18. 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 Beaumont-Port Arthur Nonattainment area, 30 TAC § 117.9000
19. 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)

20. Use of Discrete Emission Credits to comply with the applicable requirements:
- A. Unless otherwise prohibited, the permit holder may use discrete emission credits to comply with the following applicable requirements listed elsewhere in this permit:
 - (i) Title 30 TAC Chapter 115
 - (ii) Title 30 TAC Chapter 117
 - (iii) If applicable, offsets for Title 30 TAC Chapter 116
 - (iv) Temporarily exceed state NSR permit allowables
 - B. The permit holder shall comply with the following requirements in order to use the credit to comply with the applicable requirements:
 - (i) The permit holder must notify the TCEQ according to 30 TAC § 101.376(d)
 - (ii) The discrete emission credits to be used must meet all the geographic, timeliness, applicable pollutant type, and availability requirements listed in 30 TAC Chapter 101, Subchapter H, Division 4
 - (iii) The executive director has approved the use of the discrete emission credits according to 30 TAC § 101.376(d)(1)(A)
 - (iv) The permit holder keeps records of the use of credits towards compliance with the applicable requirements in accordance with 30 TAC § 101.372(h) and 30 TAC Chapter 122
 - (v) Title 30 TAC § 101.375 (relating to Emission Reductions Achieved Outside the United States)

Risk Management Plan

21. For processes subject to 40 CFR Part 68 and specified in 40 CFR § 68.10, the permit holder shall comply with the requirements of the Accidental Release Prevention Provisions in 40 CFR Part 68. The permit holder shall submit to the appropriate agency either a compliance schedule for meeting the requirements of 40 CFR Part 68 by the date provided in 40 CFR § 68.10(a), or as part of the compliance certification submitted under this permit, a certification statement that the source is in compliance with all requirements of 40 CFR Part 68, including the registration and submission of a risk management plan.

Protection of Stratospheric Ozone

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.

Permit Location

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

Permit Shield (30 TAC § 122.148)

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

Attachments

Applicable Requirements Summary

Additional Monitoring Requirements

Permit Shield

New Source Review Authorization References

Applicable Requirements Summary

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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

Unit/Group/ Process ID No.	Unit Type	Group/Inclusive Units	SOP Index No.	Regulation	Requirement Driver
D226	EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS	N/A	R-5121-2	30 TAC Chapter 115, Vent Gas Controls	Control Device Type = Direct flame incinerator in which the vent gas stream is burned at a temperature or at least 1300° F (704 C).
D226	EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS	N/A	R5121-1	30 TAC Chapter 115, Vent Gas Controls	Control Device Type = Smokeless flare
D226	EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS	N/A	R5121-3	30 TAC Chapter 115, Vent Gas Controls	Control Device Type = Vapor recovery system, as defined in 30 TAC § 115.10, other than an afterburner, blast furnace combustion device, boiler, catalytic or direct flame incinerator, carbon adsorption system, chiller, flare or vapor combustor.
D3023	EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS	N/A	R-5121-2	30 TAC Chapter 115, Vent Gas Controls	Control Device Type = Direct flame incinerator in which the vent gas stream is burned at a temperature or at least 1300° F (704 C).
D3023	EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS	N/A	R5121-1	30 TAC Chapter 115, Vent Gas Controls	Control Device Type = Smokeless flare
D3023	EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS	N/A	R5121-3	30 TAC Chapter 115, Vent Gas Controls	Control Device Type = Vapor recovery system, as defined in 30 TAC § 115.10, other than an afterburner, blast furnace combustion device, boiler, catalytic or direct flame incinerator, carbon adsorption system, chiller, flare or vapor combustor.
D310	STORAGE TANKS/VESSELS	N/A	R5112	30 TAC Chapter 115, Storage of VOCs	No changing attributes.

Unit Summary

Unit/Group/ Process ID No.	Unit Type	Group/Inclusive Units	SOP Index No.	Regulation	Requirement Driver
D310	STORAGE TANKS/VESSELS	N/A	60Kb	40 CFR Part 60, Subpart Kb	No changing attributes.
D9867	STORAGE TANKS/VESSELS	N/A	R5112	30 TAC Chapter 115, Storage of VOCs	No changing attributes.
D9868	STORAGE TANKS/VESSELS	N/A	R5112	30 TAC Chapter 115, Storage of VOCs	No changing attributes.
DMDS-TK	STORAGE TANKS/VESSELS	N/A	R5112-1	30 TAC Chapter 115, Storage of VOCs	No changing attributes.
DMDS-TK	STORAGE TANKS/VESSELS	N/A	60Kb-1	40 CFR Part 60, Subpart Kb	Storage Vessel Description = CVS and control device other than a flare (fixed roof)
DMDS-TK	STORAGE TANKS/VESSELS	N/A	60Kb-2	40 CFR Part 60, Subpart Kb	Storage Vessel Description = Closed vent system (CVS) with a flare used as the control device (fixed roof)
FLARE	FLARES	N/A	R-1111	30 TAC Chapter 111, Visible Emissions	No changing attributes.
GRP-DMDS-LOAD	LOADING/UNLOADING OPERATIONS	DMDS-LOADI, DMDS-LOADR, DMDS-LOADT	R5211-1	30 TAC Chapter 115, Loading and Unloading of VOC	No changing attributes.
GRP-EFR	STORAGE TANKS/VESSELS	D2307, D307	R5112	30 TAC Chapter 115, Storage of VOCs	No changing attributes.
GRP-EFR	STORAGE TANKS/VESSELS	D2307, D307	60KB	40 CFR Part 60, Subpart Kb	No changing attributes.
GRP-FUG1	FUGITIVE EMISSION UNITS	ACRO-FUG, F-1, MMP-FUG, STORAGE	R5352	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	No changing attributes.
GRP-FUG1	FUGITIVE EMISSION UNITS	ACRO-FUG, F-1, MMP-FUG,	60VV-01	40 CFR Part 60, Subpart VV	No changing attributes.

Unit Summary

Unit/Group/ Process ID No.	Unit Type	Group/Inclusive Units	SOP Index No.	Regulation	Requirement Driver
		STORAGE			
GRP-FUG3	FUGITIVE EMISSION UNITS	BMT-1E/T, BMT-1M, BMT-2M	R5352	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	No changing attributes.
GRP-FUG3	FUGITIVE EMISSION UNITS	BMT-1E/T, BMT-1M, BMT-2M	60VVa	40 CFR Part 60, Subpart VVa	No changing attributes.
GRP-FWPUMP	SRIC ENGINES	P-217, P-3192A, P-3192B	63ZZZZ-01	40 CFR Part 63, Subpart ZZZZ	No changing attributes.
GRP-GEN1	SRIC ENGINES	GENERATOR 1, GENERATOR 2	60IIII-02	40 CFR Part 60, Subpart IIII	No changing attributes.
GRP-GEN1	SRIC ENGINES	GENERATOR 1, GENERATOR 2	63ZZZZ-02	40 CFR Part 63, Subpart ZZZZ	No changing attributes.
GRP-GEN2	SRIC ENGINES	GENERATOR 3, GENERATOR 4	60IIII-03	40 CFR Part 60, Subpart IIII	No changing attributes.
GRP-GEN2	SRIC ENGINES	GENERATOR 3, GENERATOR 4	63ZZZZ-03	40 CFR Part 63, Subpart ZZZZ	No changing attributes.
GRP-HFR	STORAGE TANKS/VESSELS	D8501A, D8501B, D8501C	R5112	30 TAC Chapter 115, Storage of VOCs	No changing attributes.
GRP-HFR	STORAGE TANKS/VESSELS	D8501A, D8501B, D8501C	60Kb	40 CFR Part 60, Subpart Kb	No changing attributes.
GRP-LOAD	LOADING/UNLOADING OPERATIONS	METH RAIL, RAIL LOAD, TRUCK LOAD	R-5211	30 TAC Chapter 115, Loading and Unloading of VOC	No changing attributes.
PAINT-1	SURFACE COATING OPERATIONS	N/A	R5421	30 TAC Chapter 115, Surface Coating Operations	No changing attributes.
REACT ACRO	REACTOR	N/A	60III	40 CFR Part 60, Subpart III	No changing attributes.
REACT ACRO	REACTOR	N/A	63VVVVVV	40 CFR Part 63, Subpart VVVVVV	No changing attributes.

Unit Summary

Unit/Group/ Process ID No.	Unit Type	Group/Inclusive Units	SOP Index No.	Regulation	Requirement Driver
SULFOX-TO	BOILERS/STEAM GENERATORS/STEAM GENERATING UNITS	N/A	60Dc	40 CFR Part 60, Subpart Dc	No changing attributes.

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
D226	EP	R-5121-2	VOC	30 TAC Chapter 115, Vent Gas Controls	§ 115.122(a)(2) § 115.121(a)(2) § 115.122(a)(2)(B)	Vent gas affected by §115.121(a)(2) must be controlled properly with a control efficiency > 98% or to a VOC concentration of no more than 20 ppmv (dry, corrected to 3% O2 for combustion devices).	[G]§ 115.125 § 115.126(1) § 115.126(1)(A) § 115.126(1)(A)(i) § 115.126(2) ** See CAM Summary	§ 115.126 § 115.126(1) § 115.126(1)(A) § 115.126(1)(A)(i) § 115.126(2)	None
D226	EP	R5121-1	VOC	30 TAC Chapter 115, Vent Gas Controls	§ 115.122(a)(2) § 115.121(a)(2) § 115.122(a)(2)(A) § 60.18	Vent gas affected by §115.121(a)(2) must be controlled properly with a control efficiency > 98% or to a VOC concentration of no more than 20 ppmv (dry, corrected to 3% O2 for combustion devices).	[G]§ 115.125 § 115.126(1) § 115.126(1)(B) § 115.126(2) § 115.126(7) ** See CAM Summary	§ 115.126 § 115.126(1) § 115.126(1)(B) § 115.126(2)	None
D226	EP	R5121-3	VOC	30 TAC Chapter 115, Vent Gas Controls	§ 115.122(a)(2) § 115.121(a)(2) § 115.122(a)(2)(B)	Vent gas affected by §115.121(a)(2) must be controlled properly with a control efficiency > 98% or to a VOC concentration of no more than 20 ppmv (dry, corrected to 3% O2 for combustion devices).	[G]§ 115.125 § 115.126(1) § 115.126(1)(C) § 115.126(2) ** See CAM Summary	§ 115.126 § 115.126(1) § 115.126(1)(C) § 115.126(2)	None
D3023	EP	R-5121-2	VOC	30 TAC Chapter 115, Vent Gas Controls	§ 115.122(a)(2) § 115.121(a)(2) § 115.122(a)(2)(B)	Vent gas affected by §115.121(a)(2) must be controlled properly with a control efficiency > 98% or to a VOC concentration of no more than 20 ppmv (dry, corrected to 3% O2 for combustion devices).	[G]§ 115.125 § 115.126(1) § 115.126(1)(A) § 115.126(1)(A)(i) § 115.126(2) ** See CAM Summary	§ 115.126 § 115.126(1) § 115.126(1)(A) § 115.126(1)(A)(i) § 115.126(2)	None
D3023	EP	R5121-1	VOC	30 TAC Chapter 115, Vent Gas Controls	§ 115.122(a)(2) § 115.121(a)(2) § 115.122(a)(2)(A) § 60.18	Vent gas affected by §115.121(a)(2) must be controlled properly with a control efficiency > 98% or to a VOC concentration of	[G]§ 115.125 § 115.126(1) § 115.126(1)(B) § 115.126(2) § 115.126(7)	§ 115.126 § 115.126(1) § 115.126(1)(B) § 115.126(2)	None

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
						no more than 20 ppmv (dry, corrected to 3% O2 for combustion devices).	** See CAM Summary		
D3023	EP	R5121-3	VOC	30 TAC Chapter 115, Vent Gas Controls	§ 115.122(a)(2) § 115.121(a)(2) § 115.122(a)(2)(B)	Vent gas affected by §115.121(a)(2) must be controlled properly with a control efficiency > 98% or to a VOC concentration of no more than 20 ppmv (dry, corrected to 3% O2 for combustion devices).	[G]§ 115.125 § 115.126(1) § 115.126(1)(C) § 115.126(2) ** See CAM Summary	§ 115.126 § 115.126(1) § 115.126(1)(C) § 115.126(2)	None
D310	EU	R5112	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.112(a)(1) § 115.112(a)(2) § 115.112(a)(2)(A) § 115.112(a)(2)(B) § 115.112(a)(2)(C) § 115.112(a)(2)(D) § 115.112(a)(2)(E) § 115.114(a)(1)(A)	Tanks shall not store VOC unless the required pressure is maintained, or they are equipped with the appropriate control device specified in Table I(a) or Table II(a).	§ 115.114(a)(1) § 115.114(a)(1)(A) [G]§ 115.117	§ 115.118(a)(3) § 115.118(a)(5) § 115.118(a)(7)	§ 115.114(a)(1)(B)
D310	EU	60Kb	VOC	40 CFR Part 60, Subpart Kb	§ 60.112b(a)(1) § 60.112b(a)(1)(i) § 60.112b(a)(1)(ii)(B) § 60.112b(a)(1)(iii) § 60.112b(a)(1)(iv) § 60.112b(a)(1)(ix) § 60.112b(a)(1)(v) § 60.112b(a)(1)(vi) § 60.112b(a)(1)(vii) § 60.112b(a)(1)(viii)	Storage vessels specified in §60.112b(a) and equipped with a fixed roof in combination with an internal floating roof shall meet the specifications listed in §60.112b(a)(1)(i)-(ix).	§ 60.113b(a)(1) [G]§ 60.113b(a)(3) § 60.113b(a)(4) § 60.113b(a)(5) § 60.116b(a) § 60.116b(b) § 60.116b(c) § 60.116b(e) § 60.116b(e)(1) [G]§ 60.116b(e)(3)	§ 60.115b § 60.115b(a)(2) § 60.116b(a) § 60.116b(b) § 60.116b(c)	§ 60.113b(a)(5) § 60.115b § 60.115b(a)(1) § 60.115b(a)(4)
D9867	EU	R5112	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.111(a)(1)	Except as provided in § 115.118, a storage tank storing VOC with a true vapor pressure less than 1.5 psia is exempt from the requirements of this division.	[G]§ 115.117	§ 115.118(a)(1) § 115.118(a)(5) § 115.118(a)(7)	None

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)
D9868	EU	R5112	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.111(a)(1)	Except as provided in § 115.118, a storage tank storing VOC with a true vapor pressure less than 1.5 psia is exempt from the requirements of this division.	[G]§ 115.117	§ 115.118(a)(1) § 115.118(a)(5) § 115.118(a)(7)	None
DMDS-TK	EU	R5112-1	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
DMDS-TK	EU	60Kb-1	VOC	40 CFR Part 60, Subpart Kb	[G]§ 60.112b(a)(3)	Storage vessels specified in §60.112b(a) and equipped with a closed vent system/control device are to meet the specifications of §60.112b(a)(3)(i)-(ii).	[G]§ 60.113b(c)(1) § 60.113b(c)(2) § 60.116b(a) § 60.116b(b) § 60.116b(e) § 60.116b(e)(1) [G]§ 60.116b(e)(3) [G]§ 60.485(b) ** See Periodic Monitoring Summary	§ 60.115b [G]§ 60.115b(c) § 60.116b(a) § 60.116b(b)	[G]§ 60.113b(c)(1) § 60.115b
DMDS-TK	EU	60Kb-2	VOC	40 CFR Part 60, Subpart Kb	[G]§ 60.112b(a)(3) § 60.18	Storage vessels specified in §60.112b(a) and equipped with a closed vent system/control device are to meet the specifications of §60.112b(a)(3)(i)-(ii).	§ 60.113b(d) § 60.116b(a) § 60.116b(b) § 60.116b(e) § 60.116b(e)(1) [G]§ 60.116b(e)(3) [G]§ 60.485(b)	§ 60.115b § 60.115b(d)(2) § 60.116b(a) § 60.116b(b)	§ 60.115b § 60.115b(d)(1) § 60.115b(d)(3)
FLARE	EU	R-1111	Opacity	30 TAC Chapter 111, Visible Emissions	§ 111.111(a)(4)(A)	Visible emissions from a process gas flare shall not be permitted for more than five minutes in any two-hour period. Non-excessive	§ 111.111(a)(4)(A)(i) § 111.111(a)(4)(A)(ii)	§ 111.111(a)(4)(A)(ii)	None

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
						upset events are subject to the provisions under §101.222(b).			
GRP-DMDS-LOAD	EU	R5211-1	VOC	30 TAC Chapter 115, Loading and Unloading of VOC	§ 115.212(a)(1) § 115.212(a)(1)(B) § 115.212(a)(3)(A) § 115.212(a)(3)(A)(ii) § 115.212(a)(3)(B) [G]§ 115.212(a)(3)(C) § 115.212(a)(3)(E) § 115.214(a)(1)(B) § 115.214(a)(1)(C)	At operations other than gasoline terminals, gasoline bulk plants, and marine terminals, vapors from loading VOC with a true vapor pressure of 0.5 psia or greater must be controlled by one of the methods specified in § 115.212(a)(1)(A)-(C).	§ 115.212(a)(3)(B) § 115.214(a)(1)(A) § 115.214(a)(1)(A)(i) § 115.214(a)(1)(A)(ii) § 115.214(a)(1)(A)(iii) § 115.215 § 115.215(1) § 115.215(10) [G]§ 115.215(2) § 115.215(4) § 115.215(9)	§ 115.216 § 115.216(2) § 115.216(3)(A) § 115.216(3)(A)(i) § 115.216(3)(A)(ii) § 115.216(3)(A)(iii) § 115.216(3)(B)	None
GRP-EFR	EU	R5112	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.112(a)(1) § 115.112(a)(2) § 115.112(a)(2)(A) § 115.112(a)(2)(B) § 115.112(a)(2)(C) § 115.112(a)(2)(D) § 115.112(a)(2)(E) § 115.112(a)(2)(F) § 115.114(a)(2)(A) § 115.114(a)(4)(A)	Tanks shall not store VOC unless the required pressure is maintained, or they are equipped with the appropriate control device specified in Table I(a) or Table II(a).	§ 115.114(a)(2) § 115.114(a)(3) § 115.114(a)(4) § 115.114(a)(4)(A) [G]§ 115.117	§ 115.118(a)(3) § 115.118(a)(5) § 115.118(a)(7)	§ 115.114(a)(2)(B) § 115.114(a)(4)(B) § 115.118(a)(3)
GRP-EFR	EU	60KB	VOC	40 CFR Part 60, Subpart Kb	[G]§ 60.112b(a)(2)	Storage vessels specified in §60.112b(a) and equipped with an external floating roof (pontoon or double-deck type) are to meet the specifications of §60.112b(a)(2)(i)-(iii).	[G]§ 60.113b(b)(1) [G]§ 60.113b(b)(2) § 60.113b(b)(3) § 60.113b(b)(4) § 60.113b(b)(4)(i) § 60.113b(b)(4)(i)(A) § 60.113b(b)(4)(i)(B) [G]§ 60.113b(b)(4)(ii)	§ 60.115b [G]§ 60.115b(b)(3) § 60.116b(a) § 60.116b(b) § 60.116b(c)	§ 60.113b(b)(4)(iii) § 60.113b(b)(5) § 60.113b(b)(6)(ii) § 60.115b § 60.115b(b)(1) [G]§ 60.115b(b)(2) § 60.115b(b)(4)

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
							§ 60.113b(b)(4)(iii) § 60.113b(b)(5) § 60.113b(b)(6) § 60.113b(b)(6)(i) § 60.113b(b)(6)(ii) § 60.116b(a) § 60.116b(b) § 60.116b(c) § 60.116b(e) § 60.116b(e)(1) [G]§ 60.116b(e)(3)		
GRP-FUG1	EU	R5352	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.357(10)	Instrumentation systems, as defined in 40 CFR §63.161 (January 17, 1997), that meet 40 CFR §63.169 (June 20, 1996) are exempt from the requirements of this division except §115.356(3)(C) of this title.	None	§ 115.356 § 115.356(3) [G]§ 115.356(3)(C)	None
GRP-FUG1	EU	R5352	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.357(11)	Sampling connection systems, as defined in 40 CFR §63.161 (January 17, 1997), that meet the requirements of 40 CFR §63.166(a) and (b) (June 20, 1996) are exempt from the requirements of this division except §115.356(3)(C) of this title.	None	§ 115.356 § 115.356(3) [G]§ 115.356(3)(C)	None
GRP-FUG1	EU	R5352	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.352(1)(B) § 115.352(1) § 115.352(10) § 115.352(2) § 115.352(2)(A) § 115.352(2)(C) § 115.352(2)(C)(i) § 115.352(2)(C)(ii) § 115.352(2)(C)(iii)	No pump seals shall be allowed to have a VOC leak, for more than 15 days after discovery which exceeds a screening concentration greater than 10,000 parts per million by volume above background as methane, or the dripping	§ 115.354(1) § 115.354(10) § 115.354(2) § 115.354(5) § 115.354(6) § 115.354(9) [G]§ 115.355	§ 115.352(7) § 115.354(10) § 115.356 [G]§ 115.356(1) [G]§ 115.356(2) § 115.356(3) § 115.356(3)(A) § 115.356(3)(B) [G]§ 115.356(3)(C)	None

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
					§ 115.352(3) § 115.352(5) § 115.352(7) § 115.357(12) § 115.357(8)	or exuding of process fluid based on sight, smell, or sound.		§ 115.356(5)	
GRP-FUG1	EU	R5352	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.352(1)(B) § 115.352(1) § 115.352(10) § 115.352(2) § 115.352(2)(A) § 115.352(2)(C) § 115.352(2)(C)(i) § 115.352(2)(C)(ii) § 115.352(2)(C)(iii) § 115.352(3) § 115.352(5) § 115.352(7) § 115.357(12) § 115.357(8)	No compressor seals shall be allowed to have a VOC leak, for more than 15 days after discovery which exceeds a screening concentration greater than 10,000 parts per million by volume above background as methane, or the dripping or exuding of process fluid based on sight, smell, or sound.	§ 115.354(1) § 115.354(10) § 115.354(2) § 115.354(5) § 115.354(6) § 115.354(9) [G]§ 115.355	§ 115.352(7) § 115.354(10) § 115.356 [G]§ 115.356(1) [G]§ 115.356(2) § 115.356(3) § 115.356(3)(A) § 115.356(3)(B) [G]§ 115.356(3)(C) § 115.356(5)	None
GRP-FUG1	EU	R5352	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.352(1)(A) § 115.352(1) § 115.352(10) § 115.352(2) § 115.352(2)(A) § 115.352(3) § 115.352(5) § 115.352(7) § 115.352(8) § 115.357(12) § 115.357(8)	No flanges or other connectors shall be allowed to have a VOC leak, for more than 15 days after discovery which exceeds a screening concentration greater than 500 parts per million by volume above background as methane, or the dripping or exuding of process fluid based on sight, smell, or sound.	§ 115.354(1) § 115.354(10) § 115.354(11) § 115.354(3) § 115.354(5) § 115.354(6) § 115.354(9) [G]§ 115.355 § 115.357(1)	§ 115.352(7) § 115.354(10) § 115.356 [G]§ 115.356(1) [G]§ 115.356(2) § 115.356(3) § 115.356(3)(A) § 115.356(3)(B) [G]§ 115.356(3)(C) § 115.356(5)	None
GRP-FUG1	EU	R5352	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.357(2) § 115.352(9)	Each pressure relief valve equipped with a rupture disk must comply with §115.352(9) and §115.356(3)(C).	None	§ 115.356 § 115.356(3) [G]§ 115.356(3)(C)	None
GRP-FUG1	EU	60VV-01	VOC	40 CFR Part 60,	§ 60.482-3(a)	Each compressor shall be	§ 60.482-3(e)(1)	§ 60.482-1(g)	§ 60.487(a)

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
				Subpart VV	§ 60.482-1(a) § 60.482-1(b) § 60.482-1(g) [G]§ 60.482-3(b) § 60.482-3(c) § 60.482-3(d) § 60.482-3(e)(1) § 60.482-3(e)(2) § 60.482-3(f) § 60.482-3(g)(1) § 60.482-3(g)(2) § 60.482-3(h) [G]§ 60.482-3(i) § 60.482-3(j) § 60.482-9(a) § 60.482-9(b) § 60.486(k)	equipped with a seal system that includes a barrier fluid system and that prevents leakage of VOC to the atmosphere, except as provided in §60.482-1(c) and paragraphs (h), (i), and (j) of this section.	§ 60.485(a) [G]§ 60.485(b) [G]§ 60.485(c) [G]§ 60.485(d) § 60.485(f)	[G]§ 60.486(a) [G]§ 60.486(b) [G]§ 60.486(c) § 60.486(e) § 60.486(e)(1) [G]§ 60.486(e)(2) [G]§ 60.486(e)(4) [G]§ 60.486(h) § 60.486(j)	[G]§ 60.487(b) [G]§ 60.487(c) § 60.487(e)
GRP-FUG1	EU	60VV-01	VOC	40 CFR Part 60, Subpart VV	§ 60.482-2(b)(1) § 60.482-1(a) § 60.482-1(b) § 60.482-1(g) [G]§ 60.482-2(b)(2) § 60.482-2(c)(1) [G]§ 60.482-2(c)(2) § 60.482-2(d) [G]§ 60.482-2(d)(1) § 60.482-2(d)(2) § 60.482-2(d)(3) [G]§ 60.482-2(d)(4) [G]§ 60.482-2(d)(5) [G]§ 60.482-2(d)(6) [G]§ 60.482-2(e) § 60.482-2(f) [G]§ 60.482-2(g) § 60.482-2(h) § 60.482-9(a) § 60.482-9(b) [G]§ 60.482-9(d) § 60.482-9(f)	If an instrument reading of 10,000 ppm or greater is measured for pumps in light liquid service, a leak is detected.	§ 60.482-1(f)(1) § 60.482-1(f)(2) [G]§ 60.482-1(f)(3) [G]§ 60.482-2(a) [G]§ 60.482-2(b)(2) [G]§ 60.482-2(d)(4) § 60.485(a) [G]§ 60.485(b) [G]§ 60.485(c) [G]§ 60.485(d) [G]§ 60.485(e) § 60.485(f)	§ 60.482-1(g) [G]§ 60.486(a) [G]§ 60.486(b) [G]§ 60.486(c) § 60.486(e) § 60.486(e)(1) [G]§ 60.486(e)(2) [G]§ 60.486(f) [G]§ 60.486(h) § 60.486(j)	§ 60.487(a) [G]§ 60.487(b) [G]§ 60.487(c) § 60.487(e)

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Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
					§ 60.486(k)				
GRP-FUG1	EU	60VV-01	VOC	40 CFR Part 60, Subpart VV	§ 60.482-8(b) § 60.482-1(a) § 60.482-1(b) § 60.482-1(g) § 60.482-8(a) § 60.482-8(a)(2) § 60.482-8(c)(1) § 60.482-8(c)(2) § 60.482-8(d) § 60.482-9(a) § 60.482-9(b) [G]§ 60.482-9(c) § 60.482-9(e) § 60.482-9(f) § 60.486(k)	For valves in heavy liquid service, if an instrument reading of 10,000 ppm or greater is measured, a leak is detected.	§ 60.482-8(a)(1) § 60.485(a) [G]§ 60.485(b) [G]§ 60.485(d) [G]§ 60.485(e) § 60.485(f)	§ 60.482-1(g) [G]§ 60.486(a) [G]§ 60.486(b) [G]§ 60.486(c) § 60.486(e) § 60.486(e)(1) § 60.486(j)	§ 60.487(a) [G]§ 60.487(b) [G]§ 60.487(c) § 60.487(e)
GRP-FUG1	EU	60VV-01	VOC	40 CFR Part 60, Subpart VV	§ 60.482-10(d) § 60.18 § 60.482-1(a) § 60.482-1(b) § 60.482-1(g) § 60.482-10(m) § 60.486(k)	Flares used to comply with this subpart shall comply with the requirements of §60.18.	§ 60.482-10(e) § 60.485(a) [G]§ 60.485(b) [G]§ 60.485(c) [G]§ 60.485(d) § 60.485(f) [G]§ 60.485(g)	§ 60.482-1(g) [G]§ 60.486(a) [G]§ 60.486(d) § 60.486(e) § 60.486(e)(1) § 60.486(j)	§ 60.487(a) [G]§ 60.487(b) [G]§ 60.487(c) § 60.487(e)
GRP-FUG1	EU	60VV-01	VOC	40 CFR Part 60, Subpart VV	§ 60.482-8(b) § 60.482-1(a) § 60.482-1(b) § 60.482-1(g) § 60.482-8(a) § 60.482-8(a)(2) § 60.482-8(c)(1) § 60.482-8(c)(2) § 60.482-8(d) § 60.482-9(a) § 60.482-9(b) § 60.486(k)	For flanges and other connectors, if an instrument reading of 10,000 ppm or greater is measured, a leak is detected.	§ 60.482-8(a)(1) § 60.485(a) [G]§ 60.485(b) [G]§ 60.485(d) § 60.485(f)	§ 60.482-1(g) [G]§ 60.486(a) [G]§ 60.486(b) [G]§ 60.486(c) § 60.486(e) § 60.486(e)(1) § 60.486(j)	§ 60.487(a) [G]§ 60.487(b) [G]§ 60.487(c) § 60.487(e)
GRP-FUG1	EU	60VV-01	VOC	40 CFR Part 60, Subpart VV	§ 60.482-8(b) § 60.482-1(a)	For pressure relief devices in light liquid or in heavy	§ 60.482-8(a)(1) § 60.485(a)	§ 60.482-1(g) [G]§ 60.486(a)	§ 60.487(a) [G]§ 60.487(b)

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Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
					§ 60.482-1(b) § 60.482-1(g) § 60.482-8(a) § 60.482-8(a)(2) § 60.482-8(c)(1) § 60.482-8(c)(2) § 60.482-8(d) § 60.482-9(a) § 60.482-9(b) § 60.486(k)	liquid service, if an instrument reading of 10,000 ppm or greater is measured, a leak is detected.	[G]§ 60.485(b) [G]§ 60.485(d) [G]§ 60.485(e) § 60.485(f)	[G]§ 60.486(b) [G]§ 60.486(c) § 60.486(e) § 60.486(e)(1) § 60.486(j)	[G]§ 60.487(c) § 60.487(e)
GRP-FUG1	EU	60VV-01	VOC	40 CFR Part 60, Subpart VV	§ 60.482-7(b) § 60.482-1(a) § 60.482-1(b) § 60.482-1(g) § 60.482-7(d)(1) § 60.482-7(d)(2) [G]§ 60.482-7(e) [G]§ 60.482-7(f) [G]§ 60.482-7(g) [G]§ 60.482-7(h) § 60.482-9(a) § 60.482-9(b) [G]§ 60.482-9(c) § 60.482-9(e) § 60.482-9(f) § 60.486(k)	If an instrument reading of 10,000 ppm or greater is measured for valves in gas/vapor service and in light liquid service, a leak is detected.	§ 60.482-1(f)(1) § 60.482-1(f)(2) [G]§ 60.482-1(f)(3) § 60.482-7(a)(1) [G]§ 60.482-7(a)(2) § 60.482-7(c)(1)(i) § 60.482-7(c)(1)(ii) § 60.482-7(c)(2) § 60.485(a) [G]§ 60.485(b) [G]§ 60.485(c) [G]§ 60.485(d) [G]§ 60.485(e) § 60.485(f)	§ 60.482-1(g) [G]§ 60.486(a) [G]§ 60.486(b) [G]§ 60.486(c) § 60.486(e) § 60.486(e)(1) [G]§ 60.486(e)(2) [G]§ 60.486(e)(4) [G]§ 60.486(f) § 60.486(j)	§ 60.487(a) [G]§ 60.487(b) [G]§ 60.487(c) § 60.487(e)
GRP-FUG1	EU	60VV-01	VOC	40 CFR Part 60, Subpart VV	§ 60.482-4(a) § 60.482-1(a) § 60.482-1(b) § 60.482-1(g) § 60.482-4(b)(1) § 60.482-4(c) § 60.482-4(d)(1) § 60.482-4(d)(2) § 60.482-9(a) § 60.482-9(b) § 60.486(k)	Except during pressure releases, each pressure relief device in gas/vapor service shall be operated with no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, as determined by the methods specified in § 60.485(c).	§ 60.482-4(b)(2) § 60.485(a) [G]§ 60.485(b) [G]§ 60.485(c) [G]§ 60.485(d) § 60.485(f)	§ 60.482-1(g) [G]§ 60.486(a) § 60.486(e) § 60.486(e)(1) § 60.486(e)(3) [G]§ 60.486(e)(4) § 60.486(j)	§ 60.487(a) [G]§ 60.487(b) [G]§ 60.487(c) § 60.487(e)
GRP-FUG1	EU	60VV-01	VOC	40 CFR Part 60,	§ 60.482-5(a)	Each sampling connection	§ 60.485(a)	§ 60.482-1(g)	§ 60.487(a)

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Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
				Subpart VV	§ 60.482-1(a) § 60.482-1(b) § 60.482-1(g) [G]§ 60.482-5(b) § 60.482-5(c) § 60.486(k)	system shall be equipped with a closed-purge, closed-loop, or closed-vent system, except as provided in §60.482-1(c) and paragraph (c) of this section.	[G]§ 60.485(b) [G]§ 60.485(d) § 60.485(f)	[G]§ 60.486(a) § 60.486(e) § 60.486(e)(1) § 60.486(j)	[G]§ 60.487(b) [G]§ 60.487(c) § 60.487(e)
GRP-FUG1	EU	60VV-01	VOC	40 CFR Part 60, Subpart VV	§ 60.482-6(a)(1) § 60.482-1(a) § 60.482-1(b) § 60.482-1(g) § 60.482-6(a)(2) § 60.482-6(b) § 60.482-6(c) § 60.482-6(d) § 60.482-6(e) § 60.486(k)	Each open-ended valve or line shall be equipped with a cap, blind flange, plug, or a second valve, except as provided in §60.482-1(c) and paragraphs (d) and (e) of this section.	§ 60.485(a) [G]§ 60.485(b) [G]§ 60.485(d) § 60.485(f)	§ 60.482-1(g) [G]§ 60.486(a) § 60.486(e) § 60.486(e)(1) § 60.486(j)	§ 60.487(a) [G]§ 60.487(b) [G]§ 60.487(c) § 60.487(e)
GRP-FUG3	EU	R5352	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.357(2) § 115.352(9)	Each pressure relief valve equipped with a rupture disk must comply with §115.352(9) and §115.356(3)(C).	None	§ 115.356 § 115.356(3) [G]§ 115.356(3)(C)	None
GRP-FUG3	EU	R5352	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.352(1)(B) § 115.352(1) § 115.352(10) § 115.352(2) § 115.352(2)(A) § 115.352(2)(C) § 115.352(2)(C)(i) § 115.352(2)(C)(ii) § 115.352(2)(C)(iii) § 115.352(3) § 115.352(5) § 115.352(7) § 115.357(12) § 115.357(8)	No compressor seals shall be allowed to have a VOC leak, for more than 15 days after discovery which exceeds a screening concentration greater than 10,000 parts per million by volume above background as methane, or the dripping or exuding of process fluid based on sight, smell, or sound.	§ 115.354(1) § 115.354(10) § 115.354(2) § 115.354(5) § 115.354(6) § 115.354(9) [G]§ 115.355	§ 115.352(7) § 115.354(10) § 115.356 [G]§ 115.356(1) [G]§ 115.356(2) § 115.356(3) § 115.356(3)(A) § 115.356(3)(B) [G]§ 115.356(3)(C) § 115.356(5)	None
GRP-FUG3	EU	R5352	VOC	30 TAC Chapter 115, Pet. Refinery	§ 115.357(11)	Sampling connection systems, as defined in 40	None	§ 115.356 § 115.356(3)	None

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				& Petrochemicals		CFR §63.161 (January 17, 1997), that meet the requirements of 40 CFR §63.166(a) and (b) (June 20, 1996) are exempt from the requirements of this division except §115.356(3)(C) of this title.		[G]§ 115.356(3)(C)	
GRP-FUG3	EU	R5352	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.352(1)(B) § 115.352(1) § 115.352(10) § 115.352(2) § 115.352(2)(A) § 115.352(2)(C) § 115.352(2)(C)(i) § 115.352(2)(C)(ii) § 115.352(2)(C)(iii) § 115.352(3) § 115.352(5) § 115.352(7) § 115.357(12) § 115.357(8)	No pump seals shall be allowed to have a VOC leak, for more than 15 days after discovery which exceeds a screening concentration greater than 10,000 parts per million by volume above background as methane, or the dripping or exuding of process fluid based on sight, smell, or sound.	§ 115.354(1) § 115.354(10) § 115.354(2) § 115.354(5) § 115.354(6) § 115.354(9) [G]§ 115.355	§ 115.352(7) § 115.354(10) § 115.356 [G]§ 115.356(1) [G]§ 115.356(2) § 115.356(3) § 115.356(3)(A) § 115.356(3)(B) [G]§ 115.356(3)(C) § 115.356(5)	None
GRP-FUG3	EU	R5352	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.357(10)	Instrumentation systems, as defined in 40 CFR §63.161 (January 17, 1997), that meet 40 CFR §63.169 (June 20, 1996) are exempt from the requirements of this division except §115.356(3)(C) of this title.	None	§ 115.356 § 115.356(3) [G]§ 115.356(3)(C)	None
GRP-FUG3	EU	R5352	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.352(1)(A) § 115.352(1) § 115.352(10) § 115.352(2) § 115.352(2)(A) § 115.352(3) § 115.352(5) § 115.352(7)	No flanges or other connectors shall be allowed to have a VOC leak, for more than 15 days after discovery which exceeds a screening concentration greater than 500 parts per million by volume above	§ 115.354(1) § 115.354(10) § 115.354(11) § 115.354(3) § 115.354(5) § 115.354(6) § 115.354(9) [G]§ 115.355	§ 115.352(7) § 115.354(10) § 115.356 [G]§ 115.356(1) [G]§ 115.356(2) § 115.356(3) § 115.356(3)(A) § 115.356(3)(B)	None

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					§ 115.352(8) § 115.357(12) § 115.357(8)	background as methane, or the dripping or exuding of process fluid based on sight, smell, or sound.	§ 115.357(1)	[G]§ 115.356(3)(C) § 115.356(5)	
GRP-FUG3	EU	60VVa	VOC	40 CFR Part 60, Subpart VVa	§ 60.482-10a(d) § 60.18 § 60.482-10a(a) § 60.482-10a(m) § 60.482-1a(a) § 60.482-1a(b) § 60.482-1a(g) § 60.485a(b) § 60.485a(c) § 60.485a(c)(1) § 60.485a(f) § 60.486a(a)(1) § 60.486a(a)(2) § 60.486a(k)	Flares used to comply with this subpart shall comply with the requirements of §60.18.	§ 60.482-10a(e) § 60.482-1a(g) § 60.485a(a) [G]§ 60.485a(b)(1) § 60.485a(b)(2) § 60.485a(c)(2) [G]§ 60.485a(d) [G]§ 60.485a(g)	§ 60.482-1a(g) § 60.485a(b)(2) § 60.486a(e) § 60.486a(e)(1) [G]§ 60.486a(e)(8)	§ 60.487a(a) § 60.487a(b) § 60.487a(b)(1) § 60.487a(c) § 60.487a(c)(1) § 60.487a(c)(2) § 60.487a(c)(2)(xi) § 60.487a(c)(3) § 60.487a(c)(4) § 60.487a(e)
GRP-FUG3	EU	60VVa	VOC	40 CFR Part 60, Subpart VVa	§ 60.482-8a(b) § 60.482-1a(a) § 60.482-1a(b) § 60.482-1a(g) [G]§ 60.482-2a(c)(2) [G]§ 60.482-7a(e) § 60.482-8a(a) § 60.482-8a(a)(2) [G]§ 60.482-8a(c) § 60.482-8a(d) § 60.482-9a(a) § 60.482-9a(b) [G]§ 60.482-9a(c) § 60.482-9a(f) § 60.485a(b) § 60.485a(f) § 60.486a(a)(1) § 60.486a(a)(2) § 60.486a(k)	At a connector in heavy liquid service, if an instrument reading of 10,000 ppm or greater is measured, a leak is detected.	§ 60.482-1a(g) § 60.482-8a(a)(1) § 60.482-9a(a) § 60.485a(a) [G]§ 60.485a(b)(1) § 60.485a(b)(2) [G]§ 60.485a(d) [G]§ 60.485a(e)	§ 60.482-1a(g) § 60.485a(b)(2) [G]§ 60.486a(a)(3) [G]§ 60.486a(b) [G]§ 60.486a(c) § 60.486a(e) § 60.486a(e)(1) [G]§ 60.486a(e)(8)	§ 60.487a(a) § 60.487a(b) § 60.487a(b)(1) § 60.487a(c) § 60.487a(c)(1) § 60.487a(c)(2) § 60.487a(c)(2)(xi) § 60.487a(c)(3) § 60.487a(c)(4) § 60.487a(e)

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GRP-FUG3	EU	60VVa	VOC	40 CFR Part 60, Subpart VVa	§ 60.482-8a(b) § 60.482-1a(a) § 60.482-1a(b) § 60.482-1a(g) [G]§ 60.482-2a(c)(2) [G]§ 60.482-7a(e) § 60.482-8a(a) § 60.482-8a(a)(2) [G]§ 60.482-8a(c) § 60.482-8a(d) § 60.482-9a(a) § 60.482-9a(b) [G]§ 60.482-9a(c) § 60.482-9a(e) § 60.482-9a(f) § 60.485a(b) § 60.485a(f) § 60.486a(a)(1) § 60.486a(a)(2) § 60.486a(k)	At a valve in heavy liquid service, if an instrument reading of 10,000 ppm or greater is measured, a leak is detected.	§ 60.482-1a(g) § 60.482-8a(a)(1) § 60.482-9a(a) § 60.485a(a) [G]§ 60.485a(b)(1) § 60.485a(b)(2) [G]§ 60.485a(d) [G]§ 60.485a(e)	§ 60.482-1a(g) § 60.485a(b)(2) [G]§ 60.486a(a)(3) [G]§ 60.486a(b) [G]§ 60.486a(c) § 60.486a(e) § 60.486a(e)(1) [G]§ 60.486a(e)(8)	§ 60.487a(a) § 60.487a(b) § 60.487a(b)(1) § 60.487a(c) § 60.487a(c)(1) § 60.487a(c)(2) § 60.487a(c)(2)(xi) § 60.487a(c)(3) § 60.487a(c)(4) § 60.487a(e)
GRP-FUG3	EU	60VVa	VOC	40 CFR Part 60, Subpart VVa	§ 60.482-7a(b) § 60.482-1a(a) § 60.482-1a(b) § 60.482-1a(g) § 60.482-7a(a)(1) [G]§ 60.482-7a(d) [G]§ 60.482-7a(e) [G]§ 60.482-7a(f) [G]§ 60.482-7a(g) [G]§ 60.482-7a(h) § 60.482-9a(a) § 60.482-9a(b) [G]§ 60.482-9a(c) § 60.482-9a(e) § 60.482-9a(f) § 60.485a(b) § 60.485a(c) § 60.485a(c)(1)	At a valve in gas vapor service if an instrument reading of 500 ppm or greater is measured, a leak is detected.	§ 60.482-1a(f)(1) § 60.482-1a(f)(2) [G]§ 60.482-1a(f)(3) § 60.482-1a(g) § 60.482-7a(a)(1) [G]§ 60.482-7a(a)(2) [G]§ 60.482-7a(c) § 60.482-9a(a) § 60.485a(a) [G]§ 60.485a(b)(1) § 60.485a(b)(2) § 60.485a(c)(2) [G]§ 60.485a(d) [G]§ 60.485a(e)	§ 60.482-1a(g) § 60.485a(b)(2) [G]§ 60.486a(a)(3) [G]§ 60.486a(b) [G]§ 60.486a(c) § 60.486a(e) § 60.486a(e)(1) [G]§ 60.486a(e)(2) [G]§ 60.486a(e)(4) [G]§ 60.486a(e)(8) § 60.486a(f) § 60.486a(f)(1) § 60.486a(f)(2)	§ 60.487a(a) § 60.487a(b) § 60.487a(b)(1) § 60.487a(b)(2) § 60.487a(c) § 60.487a(c)(1) § 60.487a(c)(2) § 60.487a(c)(2)(i) § 60.487a(c)(2)(ii) § 60.487a(c)(2)(xi) § 60.487a(c)(3) § 60.487a(c)(4) § 60.487a(e)

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Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
					§ 60.485a(f) § 60.486a(a)(1) § 60.486a(a)(2) § 60.486a(k)				
GRP-FUG3	EU	60VVa	VOC	40 CFR Part 60, Subpart VVa	§ 60.482-6a(a)(1) § 60.482-1a(a) § 60.482-1a(b) § 60.482-1a(g) § 60.482-6a(a)(2) § 60.482-6a(b) § 60.482-6a(c) § 60.482-6a(d) § 60.482-6a(e) § 60.485a(b) § 60.485a(f) § 60.486a(a)(1) § 60.486a(a)(2) § 60.486a(k)	Each open-ended valve or line shall be equipped with a cap, blind flange, plug, or a second valve, except as provided in §60.482-1a(c) and paragraphs (d) and (e) of this section.	§ 60.482-1a(g) § 60.485a(a) [G]§ 60.485a(b)(1) § 60.485a(b)(2) [G]§ 60.485a(d)	§ 60.482-1a(g) § 60.485a(b)(2) § 60.486a(e) § 60.486a(e)(1) [G]§ 60.486a(e)(8)	§ 60.487a(a) § 60.487a(b) § 60.487a(b)(1) § 60.487a(c) § 60.487a(c)(1) § 60.487a(c)(2) § 60.487a(c)(2)(xi) § 60.487a(c)(3) § 60.487a(c)(4) § 60.487a(e)
GRP-FUG3	EU	60VVa	VOC	40 CFR Part 60, Subpart VVa	§ 60.482-5a(a) § 60.482-1a(a) § 60.482-1a(b) § 60.482-1a(g) [G]§ 60.482-5a(b) § 60.482-5a(c) § 60.485a(b) § 60.485a(f) § 60.486a(a)(1) § 60.486a(a)(2) § 60.486a(k)	Each sampling connection system shall be equipped with a closed-purge, closed-loop, or closed-vent system, except as provided in §60.482-1a(c) and paragraph (c) of this section.	§ 60.482-1a(g) § 60.485a(a) [G]§ 60.485a(b)(1) § 60.485a(b)(2) [G]§ 60.485a(d)	§ 60.482-1a(g) § 60.485a(b)(2) § 60.486a(e) § 60.486a(e)(1) [G]§ 60.486a(e)(8)	§ 60.487a(a) § 60.487a(b) § 60.487a(b)(1) § 60.487a(c) § 60.487a(c)(1) § 60.487a(c)(2) § 60.487a(c)(2)(xi) § 60.487a(c)(3) § 60.487a(c)(4) § 60.487a(e)
GRP-FUG3	EU	60VVa	VOC	40 CFR Part 60, Subpart VVa	§ 60.482-4a(a) § 60.482-1a(a) § 60.482-1a(b) § 60.482-1a(g) § 60.482-4a(b)(1) § 60.482-4a(b)(2) § 60.482-4a(c) § 60.482-4a(d)(1) § 60.482-4a(d)(2)	Except during pressure releases, each pressure relief device in gas/vapor service shall be operated with no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, as determined	§ 60.482-1a(g) § 60.482-4a(b)(2) § 60.482-9a(a) § 60.485a(a) [G]§ 60.485a(b)(1) § 60.485a(b)(2) § 60.485a(c)(2) [G]§ 60.485a(d)	§ 60.482-1a(g) § 60.485a(b)(2) § 60.486a(e) § 60.486a(e)(1) § 60.486a(e)(10) § 60.486a(e)(3) [G]§ 60.486a(e)(4) [G]§ 60.486a(e)(8)	§ 60.487a(a) § 60.487a(b) § 60.487a(b)(1) § 60.487a(c) § 60.487a(c)(1) § 60.487a(c)(2) § 60.487a(c)(2)(xi) § 60.487a(c)(3) § 60.487a(c)(4)

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
					§ 60.482-9a(a) § 60.482-9a(b) § 60.485a(b) § 60.485a(c) § 60.485a(c)(1) § 60.485a(f) § 60.486a(a)(1) § 60.486a(a)(2) § 60.486a(k)	by the methods specified in §60.485a(c).			§ 60.487a(e)
GRP-FUG3	EU	60VVa	VOC	40 CFR Part 60, Subpart VVa	[G]§ 60.482-2a(b)(1) § 60.482-1a(a) § 60.482-1a(b) § 60.482-1a(g) § 60.482-2a(b)(2) § 60.482-2a(b)(2)(ii) § 60.482-2a(c)(1) [G]§ 60.482-2a(c)(2) § 60.482-2a(d) [G]§ 60.482-2a(d)(1) § 60.482-2a(d)(2) § 60.482-2a(d)(3) [G]§ 60.482-2a(d)(6) [G]§ 60.482-2a(e) § 60.482-2a(f) [G]§ 60.482-2a(g) § 60.482-2a(h) § 60.482-9a(a) § 60.482-9a(b) [G]§ 60.482-9a(d) § 60.482-9a(f) § 60.485a(b) § 60.485a(c) § 60.485a(c)(1) § 60.485a(f)	The instrument reading that defines a leak in a pump in light liquid service is 5,000 parts per million (ppm) or greater for pumps handling polymerizing monomers or 2,000 ppm or greater for all other pumps, as specified in paragraphs (b)(1)(i) and (ii) of this section. §60.482-2a(b)(1)(i)-(ii)	§ 60.482-1a(f)(1) § 60.482-1a(f)(2) [G]§ 60.482-1a(f)(3) § 60.482-1a(g) § 60.482-2a(a)(1) § 60.482-2a(a)(2) § 60.482-2a(b)(2)(i) [G]§ 60.482-2a(d)(4) [G]§ 60.482-2a(d)(5) § 60.482-9a(a) § 60.485a(a) [G]§ 60.485a(b)(1) § 60.485a(b)(2) § 60.485a(c)(2) [G]§ 60.485a(d) [G]§ 60.485a(e)	§ 60.482-1a(g) § 60.485a(b)(2) [G]§ 60.486a(a)(3) [G]§ 60.486a(b) [G]§ 60.486a(c) § 60.486a(e) § 60.486a(e)(1) [G]§ 60.486a(e)(2) [G]§ 60.486a(e)(4) § 60.486a(e)(7) [G]§ 60.486a(e)(8) § 60.486a(f) § 60.486a(f)(1) [G]§ 60.486a(h)	§ 60.487a(a) § 60.487a(b) § 60.487a(b)(1) § 60.487a(b)(3) § 60.487a(c) § 60.487a(c)(1) § 60.487a(c)(2) § 60.487a(c)(2)(iii) § 60.487a(c)(2)(iv) § 60.487a(c)(2)(xi) § 60.487a(c)(3) § 60.487a(c)(4) § 60.487a(e)

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
					§ 60.486a(a)(1) § 60.486a(a)(2) § 60.486a(k)				
GRP-FUG3	EU	60VVa	VOC	40 CFR Part 60, Subpart VVa	§ 60.482-3a(a) § 60.482-1a(a) § 60.482-1a(b) § 60.482-1a(g) [G]§ 60.482-3a(b) § 60.482-3a(c) § 60.482-3a(d) § 60.482-3a(e)(2) § 60.482-3a(f) [G]§ 60.482-3a(g) § 60.482-3a(h) [G]§ 60.482-3a(i) § 60.482-3a(j) § 60.482-9a(a) § 60.482-9a(b) § 60.485a(b) § 60.485a(c) § 60.485a(c)(1) § 60.485a(f) § 60.486a(a)(1) § 60.486a(a)(2) § 60.486a(k)	Each compressor shall be equipped with a seal system that includes a barrier fluid system and that prevents leakage of VOC to the atmosphere, except as provided in §60.482-3a(c) and paragraphs (h), (i), and (j) of this section.	§ 60.482-1a(g) § 60.482-3a(e)(1) § 60.482-9a(a) § 60.485a(a) [G]§ 60.485a(b)(1) § 60.485a(b)(2) § 60.485a(c)(2) [G]§ 60.485a(d)	§ 60.482-1a(g) § 60.485a(b)(2) [G]§ 60.486a(a)(3) [G]§ 60.486a(b) [G]§ 60.486a(c) § 60.486a(e) § 60.486a(e)(1) [G]§ 60.486a(e)(2) [G]§ 60.486a(e)(4) [G]§ 60.486a(e)(8) [G]§ 60.486a(h)	§ 60.487a(a) § 60.487a(b) § 60.487a(b)(1) § 60.487a(b)(4) § 60.487a(c) § 60.487a(c)(1) § 60.487a(c)(2) § 60.487a(c)(2)(v) § 60.487a(c)(2)(vi) § 60.487a(c)(2)(xi) § 60.487a(c)(3) § 60.487a(c)(4) § 60.487a(e)
GRP-FWPUMP	EU	63ZZZZ-01	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) § 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)

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
GRP-GEN1	EU	60IIII-02	CO	40 CFR Part 60, Subpart IIII	§ 60.4205(b) § 60.4202(a)(2) § 60.4206 § 60.4207(b) [G]§ 60.4211(a) § 60.4211(c) [G]§ 60.4211(f) § 60.4218 § 89.112(a)	Owners and operators of emergency stationary CI ICE, that are not fire pump engines, with a maximum engine power greater than or equal to 37 KW and less than 130 KW and a displacement of less than 10 liters per cylinder and is a 2007 model year and later must comply with a CO emission limit of 5.0 g/KW-hr, as stated in 40 CFR 60.4202(a)(2) and 40 CFR 89.112(a).	None	None	[G]§ 60.4214(d)
GRP-GEN1	EU	60IIII-02	NMHC and NO _x	40 CFR Part 60, Subpart IIII	§ 60.4205(b) § 60.4202(a)(2) § 60.4206 § 60.4207(b) [G]§ 60.4211(a) § 60.4211(c) [G]§ 60.4211(f) § 60.4218 § 89.112(a)	Owners and operators of emergency stationary CI ICE, that are not fire pump engines, with a maximum engine power greater than or equal to 75 KW and less than or equal to 560 KW and a displacement of less than 10 liters per cylinder and is a 2007 model year and later must comply with an NMHC+NO _x emission limit of 4.0 g/KW-hr, as stated in 40 CFR 60.4202(a)(2) and 40 CFR 89.112(a).	None	None	[G]§ 60.4214(d)
GRP-GEN1	EU	60IIII-02	PM	40 CFR Part 60, Subpart IIII	§ 60.4205(b) § 60.4202(a)(2) § 60.4206 § 60.4207(b) [G]§ 60.4211(a) § 60.4211(c) [G]§ 60.4211(f)	Owners and operators of emergency stationary CI ICE, that are not fire pump engines, with a maximum engine power greater than or equal to 75 KW and less than 130 KW and a	None	None	[G]§ 60.4214(d)

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
					§ 60.4218 § 89.112(a)	displacement of less than 10 liters per cylinder and is a 2007 model year and later must comply with a PM emission limit of 0.30 g/KW-hr, as stated in 40 CFR 60.4202(a)(2) and 40 CFR 89.112(a).			
GRP-GEN1	EU	60III-02	PM (Opacity)	40 CFR Part 60, Subpart IIII	§ 60.4205(b) § 60.4202(a)(2) § 60.4206 § 60.4207(b) [G]§ 60.4211(a) § 60.4211(c) [G]§ 60.4211(f) § 60.4218 § 89.113(a)(1) § 89.113(a)(2) § 89.113(a)(3)	Emergency stationary CI ICE, that are not fire pump engines, with displacement < 10 lpc and not constant-speed engines, with max engine power < 2237 KW and a 2007 model year and later or max engine power > 2237 KW and a 2011 model year and later, must comply with following opacity emission limits: 20% during acceleration, 15% during lugging, 50% during peaks in either acceleration or lugging modes as stated in §60.4202(a)(1)-(2), (b)(2) and §89.113(a)(1)-(3) and §1039.105(b)(1)-(3).	None	None	[G]§ 60.4214(d)
GRP-GEN1	EU	63ZZZZ-02	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	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)
						engines or 40 CFR part 60 subpart JJJJ, for spark ignition engines as applicable. No further requirements apply for such engines under this part.			
GRP-GEN2	EU	60III-03	CO	40 CFR Part 60, Subpart IIII	§ 60.4205(b) § 60.4202(e)(1) § 60.4206 § 60.4207(b) [G]§ 60.4211(a) § 60.4211(c) [G]§ 60.4211(f) § 60.4218 § 94.8(a)(2)	Owners and operators of emergency stationary CI ICE, that are not fire pump engines, with a displacement of greater than or equal to 10 liters per cylinder and less than 30 liters per cylinder and is a 2007 model year and later must comply with a CO emission limit of 5.0 g/KW-hr, as stated in 40 CFR 60.4202(e)-(f) and 40 CFR 94.8(a)(2) and 40 CFR 1042.101.	None	None	[G]§ 60.4214(d)
GRP-GEN2	EU	60III-03	PM	40 CFR Part 60, Subpart IIII	§ 60.4205(b) § 60.4202(e)(1) § 60.4206 § 60.4207(b) [G]§ 60.4211(a) § 60.4211(c) [G]§ 60.4211(f) § 60.4218 § 94.8(a)(2)	Owners and operators of emergency stationary CI ICE, that are not fire pump engines, with a displacement of greater than or equal to 15 liters per cylinder and less than 30 liters per cylinder and is a 2007 - 2013 model year must comply with a PM emission limit of 0.50 g/KW-hr, as stated in 40 CFR 60.4202(e)(1), (e)(3) and 40 CFR 94.8(a)(2).	None	None	[G]§ 60.4214(d)
GRP-GEN2	EU	60III-03	Total Hydrocarbons/NO _x	40 CFR Part 60, Subpart IIII	§ 60.4205(b) § 60.4202(e)(1) § 60.4206	Owners and operators of emergency stationary CI ICE, that are not fire pump	None	None	[G]§ 60.4214(d)

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
					§ 60.4207(b) [G]§ 60.4211(a) § 60.4211(c) [G]§ 60.4211(f) § 60.4218 § 94.8(a)(2)	engines, with a displacement of greater than or equal to 20 liters per cylinder and less than 25 liters per cylinder and is a 2007 - 2013 model year must comply with a THC+NOx emission limit of 9.8 g/KW-hr, as stated in 40 CFR 60.4202(e)(1), (e)(3) and 40 CFR 94.8(a)(2).			
GRP-GEN2	EU	63ZZZZ-03	112(B) HAPS	40 CFR Part 63, Subpart ZZZZ	§ 63.6590(c)	Stationary RICE subject to Regulations under 40 CFR Part 60. An affected source that meets any of the criteria in paragraphs (c)(1) through (7) of this section must meet the requirements of this part by meeting the requirements of 40 CFR part 60 subpart IIII, for compression ignition engines or 40 CFR part 60 subpart JJJJ, for spark ignition engines as applicable. No further requirements apply for such engines under this part.	None	None	None
GRP-HFR	EU	R5112	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.112(a)(1) § 115.112(a)(3)	Tanks shall not store VOC unless the required pressure is maintained, or they are equipped with the appropriate control device specified in Table I(a) or Table II(a).	§ 115.115(a) § 115.115(a)(6) § 115.116(a)(1) [G]§ 115.117 ** See CAM Summary	§ 115.118(a)(4) § 115.118(a)(4)(F) § 115.118(a)(5) § 115.118(a)(7)	None
GRP-HFR	EU	60Kb	VOC	40 CFR Part 60, Subpart Kb	[G]§ 60.112b(a)(3)	Storage vessels specified in §60.112b(a) and equipped with a closed vent	[G]§ 60.113b(c)(1) § 60.113b(c)(2) § 60.116b(a)	§ 60.115b [G]§ 60.115b(c) § 60.116b(a)	[G]§ 60.113b(c)(1) § 60.115b

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
						system/control device are to meet the specifications of §60.112b(a)(3)(i)-(ii).	§ 60.116b(b) § 60.116b(e) § 60.116b(e)(1) [G]§ 60.116b(e)(3) [G]§ 60.485(b) ** See CAM Summary	§ 60.116b(b)	
GRP-LOAD	EU	R-5211	VOC	30 TAC Chapter 115, Loading and Unloading of VOC	§ 115.212(a)(1) § 115.212(a)(1)(B) § 115.212(a)(3)(A) § 115.212(a)(3)(A)(ii) § 115.212(a)(3)(B) [G]§ 115.212(a)(3)(C) § 115.212(a)(3)(E) § 115.214(a)(1)(B) § 115.214(a)(1)(C)	At operations other than gasoline terminals, gasoline bulk plants, and marine terminals, vapors from loading VOC with a true vapor pressure of 0.5 psia or greater must be controlled by one of the methods specified in § 115.212(a)(1)(A)-(C).	§ 115.212(a)(3)(B) § 115.214(a)(1)(A) § 115.214(a)(1)(A)(i) § 115.214(a)(1)(A)(ii) § 115.214(a)(1)(A)(iii) § 115.215 § 115.215(1) § 115.215(10) [G]§ 115.215(2) § 115.215(4) § 115.215(9)	§ 115.216 § 115.216(2) § 115.216(3)(A) § 115.216(3)(A)(i) § 115.216(3)(A)(ii) § 115.216(3)(A)(iii) § 115.216(3)(B)	None
PAINT-1	PRO	R5421	VOC	30 TAC Chapter 115, Surface Coating Operations	§ 115.427(3)(B) [G]§ 115.422(6) § 115.426	Surface coating operations on a property that when uncontrolled will emit a combined weight of VOC of < 100 lbs in any consecutive 24-hr period are exempt from §115.421 and §115.423 of this title if documentation is provided to and approved by both the executive director and the US EPA to demonstrate that necessary coating performance criteria cannot be achieved with coatings that satisfy applicable emission specifications and	§ 115.426(4)	§ 115.426 § 115.426(4)	[G]§ 115.422(6)

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
						that control equipment is not technically or economically feasible.			
REACT ACRO	EP	60III	VOC/TOC	40 CFR Part 60, Subpart III	§ 60.612(a)	For each vent stream, reduce emissions of TOC by 98 wt%, or TOC concentration of 20 ppmv, dry basis corrected to 3 % O2 (use less stringent). If boiler/process heater used to comply, insert vent stream in flame zone.	§ 60.613(f) § 60.614(a) § 60.614(b) § 60.614(b)(1) § 60.614(b)(2) § 60.614(b)(3) [G]§ 60.614(b)(4) ** See CAM Summary	§ 60.615(b) § 60.615(g) § 60.615(l)	§ 60.613(f) § 60.615(a) § 60.615(b) § 60.615(g) § 60.615(i) § 60.615(j) § 60.615(l)
REACT ACRO	EU	63VVVVV V	VOC	40 CFR Part 63, Subpart VVVVVV	§ 63.11498(a)-Table 6 § 63.11495(3) § 63.11495(a)(1) § 63.11501 [G]§ 63.11495(2) [G]§ 63.11495(4)	Comply with the requirements of this section and in Table 6 to this subpart for all wastewater streams from a CMPU subject to this subpart.	§ 63.11495(3)	§ 63.11495(5) § 63.11501(c)(1) § 63.11501(c)(1)(i) § 63.11501(c)(1)(vi) § 63.11501(c)(2)(ii) § 63.11501(c)(5)	§ 63.11501(d) § 63.11501(d)(1) § 63.11501(d)(3) § 63.11501(d)(4) [G]§ 63.11501(b)(1)
SULFOX-TO	EU	60Dc	PM	40 CFR Part 60, Subpart Dc	§ 60.40c(a)	This subpart applies to each steam generating unit constructed, reconstructed, or modified after 6/9/89 and that has a maximum design heat input capacity of 2.9-29 megawatts (MW).	None	§ 60.48c(g)(1) § 60.48c(g)(2) § 60.48c(g)(3) § 60.48c(i)	[G]§ 60.48c(a)
SULFOX-TO	EU	60Dc	PM (Opacity)	40 CFR Part 60, Subpart Dc	§ 60.40c(a)	This subpart applies to each steam generating unit constructed, reconstructed, or modified after 6/9/89 and that has a maximum design heat input capacity of 2.9-29 megawatts (MW).	None	§ 60.48c(g)(1) § 60.48c(g)(2) § 60.48c(g)(3) § 60.48c(i)	[G]§ 60.48c(a)
SULFOX-TO	EU	60Dc	SO ₂	40 CFR Part 60, Subpart Dc	§ 60.40c(a)	This subpart applies to each steam generating unit constructed, reconstructed,	None	§ 60.48c(g)(1) § 60.48c(g)(2) § 60.48c(g)(3)	[G]§ 60.48c(a)

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
						or modified after 6/9/89 and that has a maximum design heat input capacity of 2.9-29 megawatts (MW).		§ 60.48c(i)	

Additional Monitoring Requirements

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CAM Summary

Unit/Group/Process Information	
ID No.: D226	
Control Device ID No.: INCIN	Control Device Type: Thermal incinerator (direct flame incinerator/regenerative thermal oxidizer)
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 115, Vent Gas Controls	SOP Index No.: R-5121-2
Pollutant: VOC	Main Standard: § 115.122(a)(2)
Monitoring Information	
Indicator: Combustion Temperature	
Minimum Frequency: once per day	
Averaging Period: N/A	
Deviation Limit: The minimum combustion temperature is less than 1380 degree F.	
<p>CAM Text: The INCIN temperature is measured with a 1-minute sample rate and the plant's data historian stores the temperature data for at least five years. The temperature probes on INCIN are maintained per manufacturers' recommendations. The probes are replaced during regularly planned turnarounds, which occur at least every 24 months.</p> <p>Each monitoring device shall be calibrated at a frequency in accordance with the manufacturer's specifications and other written procedures that provide an adequate assurance that the device is calibrated accurately and shall be accurate to within one of the following: ± 0.75% of the temperature being measured expressed in degrees Celsius; or ± 2.5 degrees Celsius.</p> <p>The monitoring device should be installed in the combustion chamber or immediately downstream of the combustion chamber.</p>	

CAM Summary

Unit/Group/Process Information	
ID No.: D226	
Control Device ID No.: FLARE	Control Device Type: Flare
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 115, Vent Gas Controls	SOP Index No.: R5121-1
Pollutant: VOC	Main Standard: § 115.122(a)(2)
Monitoring Information	
Indicator: Inlet Flow Rate	
Minimum Frequency: Once per day	
Averaging Period: N/A	
Deviation Limit: A maximum inlet gas flow rate greater than 334 scf/sec (1.208 MMscf/hr).	
<p>CAM Text: 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"> ± 2% of span; or ± 5% of design flow rate. 	

CAM Summary

Unit/Group/Process Information	
ID No.: D226	
Control Device ID No.: FLARE	Control Device Type: Flare
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 115, Vent Gas Controls	SOP Index No.: R5121-1
Pollutant: VOC	Main Standard: § 115.122(a)(2)
Monitoring Information	
Indicator: Net Heating Value	
Minimum Frequency: Once per day	
Averaging Period: N/A	
Deviation Limit: Minimum net heating value of the gas combusted is less than 200 Btu/scf.	
CAM Text: Calculate the net heating value of the gas being combusted using the procedures and specifications of 40 CFR § 60.18(f)(3). The sample points should be installed in the vent stream as near as possible to the flare inlet such that the total vent stream to the flare is measured and analyzed.	

CAM Summary

Unit/Group/Process Information	
ID No.: D226	
Control Device ID No.: SULFOX-TO	Control Device Type: Thermal incinerator (direct flame incinerator/regenerative thermal oxidizer)
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 115, Vent Gas Controls	SOP Index No.: R5121-3
Pollutant: VOC	Main Standard: § 115.122(a)(2)
Monitoring Information	
Indicator: Combustion Temperature	
Minimum Frequency: once per day	
Averaging Period: N/A	
Deviation Limit: Minimum combustion temperature is less than 1650 degree F or the one hour average temperature maintained during the last satisfactory test. Records of the last satisfactory test shall be maintained.	
<p>CAM Text: The SULFOX-TO temperature is measured with a 1-minute sample rate, and the plant's data historian stores the temperature data for at least five years. The temperature probes on SULFOX-TO are maintained per manufacturers' recommendations. The probes are replaced during regularly planned turnarounds, which occur at least every 24 months.</p> <p>Each monitoring device shall be calibrated at a frequency in accordance with the manufacturer's specifications and other written procedures that provide an adequate assurance that the device is calibrated accurately and shall be accurate to within one of the following: ± 0.75% of the temperature being measured expressed in degrees Celsius; or ± 2.5 degrees Celsius.</p> <p>The monitoring device should be installed in the combustion chamber or immediately downstream of the combustion chamber.</p>	

CAM Summary

Unit/Group/Process Information	
ID No.: D3023	
Control Device ID No.: INCIN	Control Device Type: Thermal incinerator (direct flame incinerator/regenerative thermal oxidizer)
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 115, Vent Gas Controls	SOP Index No.: R-5121-2
Pollutant: VOC	Main Standard: § 115.122(a)(2)
Monitoring Information	
Indicator: Combustion Temperature	
Minimum Frequency: once per day	
Averaging Period: N/A	
Deviation Limit: The minimum combustion temperature is less than 1380 degree F.	
<p>CAM Text: The INCIN temperature is measured with a 1-minute sample rate and the plant's data historian stores the temperature data for at least five years. The temperature probes on INCIN are maintained per manufacturers' recommendations. The probes are replaced during regularly planned turnarounds, which occur at least every 24 months.</p> <p>Each monitoring device shall be calibrated at a frequency in accordance with the manufacturer's specifications and other written procedures that provide an adequate assurance that the device is calibrated accurately and shall be accurate to within one of the following: ± 0.75% of the temperature being measured expressed in degrees Celsius; or ± 2.5 degrees Celsius.</p> <p>The monitoring device should be installed in the combustion chamber or immediately downstream of the combustion chamber.</p>	

CAM Summary

Unit/Group/Process Information	
ID No.: D3023	
Control Device ID No.: FLARE	Control Device Type: Flare
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 115, Vent Gas Controls	SOP Index No.: R5121-1
Pollutant: VOC	Main Standard: § 115.122(a)(2)
Monitoring Information	
Indicator: Inlet Flow Rate	
Minimum Frequency: Once per day	
Averaging Period: N/A	
Deviation Limit: A maximum inlet gas flow rate greater than 334 scf/sec (1.208 MMscf/hr).	
<p>CAM Text: 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"> ± 2% of span; or ± 5% of design flow rate. 	

CAM Summary

Unit/Group/Process Information	
ID No.: D3023	
Control Device ID No.: FLARE	Control Device Type: Flare
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 115, Vent Gas Controls	SOP Index No.: R5121-1
Pollutant: VOC	Main Standard: § 115.122(a)(2)
Monitoring Information	
Indicator: Net Heating Value	
Minimum Frequency: Once per day	
Averaging Period: N/A	
Deviation Limit: Minimum net heating value of the gas combusted is less than 200 Btu/scf.	
CAM Text: Calculate the net heating value of the gas being combusted using the procedures and specifications of 40 CFR § 60.18(f)(3). The sample points should be installed in the vent stream as near as possible to the flare inlet such that the total vent stream to the flare is measured and analyzed.	

CAM Summary

Unit/Group/Process Information	
ID No.: D3023	
Control Device ID No.: SULFOX-TO	Control Device Type: Thermal incinerator (direct flame incinerator/regenerative thermal oxidizer)
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 115, Vent Gas Controls	SOP Index No.: R5121-3
Pollutant: VOC	Main Standard: § 115.122(a)(2)
Monitoring Information	
Indicator: Combustion Temperature	
Minimum Frequency: once per day	
Averaging Period: N/A	
Deviation Limit: Minimum combustion temperature is less than 1650 degree F or the one hour average temperature maintained during the last satisfactory test. Records of the last satisfactory test shall be maintained.	
<p>CAM Text: The SULFOX-TO temperature is measured with a 1-minute sample rate, and the plant's data historian stores the temperature data for at least five years. The temperature probes on SULFOX-TO are maintained per manufacturers' recommendations. The probes are replaced during regularly planned turnarounds, which occur at least every 24 months.</p> <p>Each monitoring device shall be calibrated at a frequency in accordance with the manufacturer's specifications and other written procedures that provide an adequate assurance that the device is calibrated accurately and shall be accurate to within one of the following: ± 0.75% of the temperature being measured expressed in degrees Celsius; or ± 2.5 degrees Celsius.</p> <p>The monitoring device should be installed in the combustion chamber or immediately downstream of the combustion chamber.</p>	

CAM Summary

Unit/Group/Process Information	
ID No.: GRP-HFR	
Control Device ID No.: SULFOX-TO	Control Device Type: Thermal incinerator (direct flame incinerator/regenerative thermal oxidizer)
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 115, Storage of VOCs	SOP Index No.: R5112
Pollutant: VOC	Main Standard: § 115.112(a)(1)
Monitoring Information	
Indicator: Combustion Temperature	
Minimum Frequency: once per day	
Averaging Period: N/A	
Deviation Limit: Minimum combustion temperature is less than 1650 degree F or the one hour average temperature maintained during the last satisfactory test. Records of the last satisfactory test shall be maintained.	
<p>CAM Text: The SULFOX-TO temperature is measured with a 1-minute sample rate, and the plant's data historian stores the temperature data for at least five years. The temperature probes on SULFOX-TO are maintained per manufacturers' recommendations. The probes are replaced during regularly planned turnarounds, which occur at least every 24 months.</p> <p>Each monitoring device shall be calibrated at a frequency in accordance with the manufacturer's specifications and other written procedures that provide an adequate assurance that the device is calibrated accurately and shall be accurate to within one of the following: ± 0.75% of the temperature being measured expressed in degrees Celsius; or ± 2.5 degrees Celsius.</p> <p>The monitoring device should be installed in the combustion chamber or immediately downstream of the combustion chamber.</p>	

CAM Summary

Unit/Group/Process Information	
ID No.: GRP-HFR	
Control Device ID No.: SULFOX-TO	Control Device Type: Thermal incinerator (direct flame incinerator/regenerative thermal oxidizer)
Applicable Regulatory Requirement	
Name: 40 CFR Part 60, Subpart Kb	SOP Index No.: 60Kb
Pollutant: VOC	Main Standard: [G]§ 60.112b(a)(3)
Monitoring Information	
Indicator: Combustion Temperature	
Minimum Frequency: once per week	
Averaging Period: N/A	
Deviation Limit: Minimum combustion temperature is less than 1650 degree F or the one hour average temperature maintained during the last satisfactory test. Records of the last satisfactory test shall be maintained.	
<p>CAM Text: The SULFOX-TO temperature is measured with a 1-minute sample rate, and the plant's data historian stores the temperature data for at least five years. The temperature probes on SULFOX-TO are maintained per manufacturers' recommendations. The probes are replaced during regularly planned turnarounds, which occur at least every 24 months.</p> <p>Each monitoring device shall be calibrated at a frequency in accordance with the manufacturer's specifications and other written procedures that provide an adequate assurance that the device is calibrated accurately and shall be accurate to within one of the following: ± 0.75% of the temperature being measured expressed in degrees Celsius; or ± 2.5 degrees Celsius.</p> <p>The monitoring device should be installed in the combustion chamber or immediately downstream of the combustion chamber.</p>	

CAM Summary

Unit/Group/Process Information	
ID No.: REACT ACRO	
Control Device ID No.: SULFOX-TO	Control Device Type: Thermal incinerator (direct flame incinerator/regenerative thermal oxidizer)
Applicable Regulatory Requirement	
Name: 40 CFR Part 60, Subpart III	SOP Index No.: 60III
Pollutant: VOC/TOC	Main Standard: § 60.612(a)
Monitoring Information	
Indicator: Combustion Temperature	
Minimum Frequency: once per day	
Averaging Period: N/A	
Deviation Limit: Minimum combustion temperature is less than 1650 degree F or the one hour average temperature maintained during the last satisfactory test. Records of the last satisfactory test shall be maintained.	
<p>CAM Text: The SULFOX-TO temperature is measured with a 1-minute sample rate, and the plant's data historian stores the temperature data for at least five years. The temperature probes on SULFOX-TO are maintained per manufacturers' recommendations. The probes are replaced during regularly planned turnarounds, which occur at least every 24 months.</p> <p>Each monitoring device shall be calibrated at a frequency in accordance with the manufacturer's specifications and other written procedures that provide an adequate assurance that the device is calibrated accurately and shall be accurate to within one of the following: ± 0.75% of the temperature being measured expressed in degrees Celsius; or ± 2.5 degrees Celsius.</p> <p>The monitoring device should be installed in the combustion chamber or immediately downstream of the combustion chamber.</p>	

Periodic Monitoring Summary

Unit/Group/Process Information	
ID No.: DMDS-TK	
Control Device ID No.: INCIN	Control Device Type: Thermal incinerator (direct flame incinerator/regenerative thermal oxidizer)
Applicable Regulatory Requirement	
Name: 40 CFR Part 60, Subpart Kb	SOP Index No.: 60Kb-1
Pollutant: VOC	Main Standard: [G]§ 60.112b(a)(3)
Monitoring Information	
Indicator: Combustion Temperature / Exhaust Gas Temperature	
Minimum Frequency: Once per week	
Averaging Period: N/A	
Deviation Limit: It is a deviation if the combustion temperature is less than 1380°F	
<p>Periodic Monitoring Text: Measure and record the combustion temperature in the combustion chamber or immediately downstream of the combustion chamber. The monitoring instrumentation shall be maintained, calibrated and operated in accordance with manufacturer's specifications or other written procedures. Any monitoring data below the minimum limit shall be considered and reported as a deviation.</p>	

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

Unit / Group / Process ID No.	Group / Inclusive Units	Regulation	Basis of Determination
D226	N/A	40 CFR Part 63, Subpart EEEE	The site is not a major source of HAPs and was not a major source at the time of applicability.
D226	N/A	40 CFR Part 63, Subpart F	This site is not a major source of HAPs, and was not a major source at the time of applicability.
D226	N/A	40 CFR Part 63, Subpart FFFF	The site is not a major source of HAPs and was not a major source at the time of applicability.
D226	N/A	40 CFR Part 63, Subpart G	The site is not a major source of HAPs and was not a major source at the time of applicability.
D226	N/A	40 CFR Part 63, Subpart VVVVVV	The mercaptan process contains none of the 63VVVVVV Table 1 Compounds
D3023	N/A	40 CFR Part 63, Subpart EEEE	The site is not a major source of HAPs and was not a major source at the time of applicability.
D3023	N/A	40 CFR Part 63, Subpart F	This site is not a major source of HAPs, and was not a major source at the time of applicability.
D3023	N/A	40 CFR Part 63, Subpart FFFF	The site is not a major source of HAPs and was not a major source at the time of applicability.
D3023	N/A	40 CFR Part 63, Subpart G	The site is not a major source of HAPs and was not a major source at the time of applicability.
D310	N/A	40 CFR Part 60, Subpart K	Tank was modified after 5/19/78.
D310	N/A	40 CFR Part 60, Subpart Ka	Tank was modified after 7/23/84.
D310	N/A	40 CFR Part 63, Subpart EEEE	The site is not a major source of HAPs and was not a major source at the time of applicability.
D310	N/A	40 CFR Part 63, Subpart F	The site is not a major source of HAPs and was not a major source at the time of applicability.
D310	N/A	40 CFR Part 63, Subpart FFFF	The site is not a major source of HAPs and was

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

Unit / Group / Process ID No.	Group / Inclusive Units	Regulation	Basis of Determination
			not a major source at the time of applicability.
D310	N/A	40 CFR Part 63, Subpart G	The site is not a major source of HAPs and was not a major source at the time of applicability.
D8550	N/A	30 TAC Chapter 115, Storage of VOCs	Not in VOC service.
D8550	N/A	40 CFR Part 60, Subpart K	Tank was modified after 5/19/1978.
D8550	N/A	40 CFR Part 60, Subpart Ka	Tank was modified after 7/23/84.
D8550	N/A	40 CFR Part 60, Subpart Kb	Tank is < 40 m3.
D8550	N/A	40 CFR Part 63, Subpart G	The site is not a major source of HAPs, and was not a major source at the time of applicability.
D8560	N/A	30 TAC Chapter 115, Storage of VOCs	Not in VOC service.
D8560	N/A	40 CFR Part 60, Subpart K	Tank was modified after 5/19/78.
D8560	N/A	40 CFR Part 60, Subpart Ka	Tank was modified after 7/23/84.
D8560	N/A	40 CFR Part 60, Subpart Kb	Tank is < 40 m3.
D8560	N/A	40 CFR Part 63, Subpart G	The site is not a major source of HAPs, and was not a major source at the time of applicability.
D8570	N/A	30 TAC Chapter 115, Storage of VOCs	Not in VOC service.
D8570	N/A	40 CFR Part 60, Subpart K	Tank was modified after 5/19/78.
D8570	N/A	40 CFR Part 60, Subpart Ka	Tank was modified after 7/23/84.
D8570	N/A	40 CFR Part 60, Subpart Kb	Tank is < 40 m3.
D8570	N/A	40 CFR Part 63, Subpart G	The site is not a major source of HAPs, and was not a major source at the time of applicability.
D8640	N/A	30 TAC Chapter 115, Storage of VOCs	Not in VOC service.

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Unit / Group / Process ID No.	Group / Inclusive Units	Regulation	Basis of Determination
D8640	N/A	40 CFR Part 60, Subpart K	Tank was modified after 5/19/78.
D8640	N/A	40 CFR Part 60, Subpart Ka	Tank was modified after 7/23/84.
D8640	N/A	40 CFR Part 60, Subpart Kb	Tank is < 40 m3.
D8640	N/A	40 CFR Part 63, Subpart G	The site is not a major source of HAPs, and was not a major source at the time of applicability.
D8873	N/A	30 TAC Chapter 115, Storage of VOCs	Not in VOC service.
D8873	N/A	40 CFR Part 60, Subpart K	Tank was modified after 5/19/78.
D8873	N/A	40 CFR Part 60, Subpart Ka	Tank was modified after 7/23/84.
D8873	N/A	40 CFR Part 60, Subpart Kb	Tank is < 40 m3.
D8873	N/A	40 CFR Part 63, Subpart G	The site is not a major source of HAPs, and was not a major source at the time of applicability.
D8874	N/A	30 TAC Chapter 115, Storage of VOCs	Not in VOC service.
D8874	N/A	40 CFR Part 60, Subpart K	Tank was modified after 5/19/78.
D8874	N/A	40 CFR Part 60, Subpart Ka	Tank was modified after 7/23/84.
D8874	N/A	40 CFR Part 60, Subpart Kb	Tank is < 40 m3.
D8874	N/A	40 CFR Part 63, Subpart G	The site is not a major source of HAPs, and was not a major source at the time of applicability.
D9867	N/A	40 CFR Part 60, Subpart K	Tank was modified after 5/19/78.
D9867	N/A	40 CFR Part 60, Subpart Ka	Tank was modified after 7/23/84.
D9867	N/A	40 CFR Part 60, Subpart Kb	Tank volume > 151 m3 and max vapor pressure of liquid stored is < 3.5 kPa.
D9867	N/A	40 CFR Part 63, Subpart G	The site is not a major source of HAPs, and was

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Unit / Group / Process ID No.	Group / Inclusive Units	Regulation	Basis of Determination
			not a major source at the time of applicability.
D9868	N/A	40 CFR Part 60, Subpart K	Tank was modified after 5/19/78.
D9868	N/A	40 CFR Part 60, Subpart Ka	Tank was modified after 7/23/84.
D9868	N/A	40 CFR Part 60, Subpart Kb	75 m ³ < Tank volume < 151 m ³ and max vapor pressure of liquid stored is < 3.5 kPa.
D9868	N/A	40 CFR Part 63, Subpart G	The site is not a major source of HAPs, and was not a major source at the time of applicability.
DIST ACRO	N/A	40 CFR Part 60, Subpart NNN	Unit does not produce a product, co-product, by-product or intermediate listed.
DIST ACRO	N/A	40 CFR Part 63, Subpart G	The site is not a major source of HAPs and was not a major source at the time of applicability.
DIST ACRO	N/A	40 CFR Part 63, Subpart VVVVVV	Unit does not produce a product, co-product, by-product or intermediate listed.
DIST F1	N/A	40 CFR Part 60, Subpart NNN	Unit does not produce a product, co-product, by-product or intermediate listed.
DIST MMP	N/A	40 CFR Part 60, Subpart NNN	Unit does not produce a product, co-product, by-product or intermediate listed.
DIST MMP	N/A	40 CFR Part 63, Subpart VVVVVV	Unit does not produce a product, co-product, by-product or intermediate listed.
FLARE	N/A	40 CFR Part 60, Subpart A	Flare is not a control device for any NSPS or NESHAP affected facilities.
FLARE	N/A	40 CFR Part 63, Subpart A	Flare is not required by another Subpart.
GRP-BDIST	DIST BI, DIST BII, DIST DMDS, DIST DMS	40 CFR Part 60, Subpart NNN	Unit does not produce a product, co-product, by-product or intermediate listed.

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Unit / Group / Process ID No.	Group / Inclusive Units	Regulation	Basis of Determination
GRP-BREACT	REACT B1, REACT BII	40 CFR Part 60, Subpart RRR	Unit does not produce a product, co-product, by product, or intermediate listed
GRP-EFR	D2307, D307	40 CFR Part 60, Subpart K	Tank was modified after 5/19/78.
GRP-EFR	D2307, D307	40 CFR Part 60, Subpart Ka	Tank was modified after 7/23/84.
GRP-EFR	D2307, D307	40 CFR Part 63, Subpart G	The site is not a major source of HAP and was not a major source at the time of applicability.
GRP-FUG1	ACRO-FUG, F-1, MMP-FUG, STORAGE	40 CFR Part 63, Subpart H	The site is not a major source of HAPs and was not a major source at the time of applicability.
GRP-FUG1	ACRO-FUG, F-1, MMP-FUG, STORAGE	40 CFR Part 63, Subpart I	The site is not a major source of HAPs and was not a major source at the time of applicability.
GRP-FUG3	BMT-1E/T, BMT-1M, BMT-2M	40 CFR Part 63, Subpart H	The site is not a major source of HAPs and was not a major source at the time of applicability.
GRP-FUG3	BMT-1E/T, BMT-1M, BMT-2M	40 CFR Part 63, Subpart I	The site is not a major source of HAPs and was not a major source at the time of applicability.
GRP-HFR	D8501A, D8501B, D8501C	40 CFR Part 60, Subpart K	Tank was modified after 5/19/78.
GRP-HFR	D8501A, D8501B, D8501C	40 CFR Part 60, Subpart Ka	Tank was modified after 7/23/84.
GRP-HFR	D8501A, D8501B, D8501C	40 CFR Part 63, Subpart G	The site is not a major source of HAPs, and was not a major source at the time of applicability.
GRP-LOAD	METH RAIL, RAIL LOAD, TRUCK LOAD	40 CFR Part 63, Subpart EEEE	The site is not a major source of HAP and was not a major source at the time of applicability.
GRP-LOAD	METH RAIL, RAIL LOAD, TRUCK LOAD	40 CFR Part 63, Subpart F	This site is not a major source of HAPs, and was not a major source at the time of applicability.
GRP-LOAD	METH RAIL, RAIL LOAD, TRUCK LOAD	40 CFR Part 63, Subpart FFFF	The site is not a major source of HAP and was not a major source at the time of applicability.

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Unit / Group / Process ID No.	Group / Inclusive Units	Regulation	Basis of Determination
GRP-LOAD	METH RAIL, RAIL LOAD, TRUCK LOAD	40 CFR Part 63, Subpart G	Site is not a major source of HAP.
H202	N/A	30 TAC Chapter 112, Sulfur Compounds	Boiler does not fire liquid fuel.
H2202	N/A	30 TAC Chapter 112, Sulfur Compounds	Boiler does not fire liquid fuel.
H401	N/A	30 TAC Chapter 112, Sulfur Compounds	Boiler does not fire liquid fuel.
H402	N/A	30 TAC Chapter 117, Subchapter B	Industrial, commercial, or institutional boiler or process heater with a maximum rated capacity of less than 40 MMBtu/hr.
H501	N/A	30 TAC Chapter 112, Sulfur Compounds	Boiler does not fire liquid fuel.
H502	N/A	30 TAC Chapter 117, Subchapter B	Industrial, commercial, or institutional boiler or process heater with a maximum rated capacity of less than 40 MMBtu/hr.
INCIN	N/A	30 TAC Chapter 111, Incineration	Incinerator (thermal oxidizer) does not burn a waste covered by the regulation.
INCIN	N/A	40 CFR Part 63, Subpart EEE	This is not a hazardous waste combustor.
REACT ACRO	N/A	40 CFR Part 60, Subpart RRR	Unit does not produce a product, co-product, by-product, or intermediate listed.
REACT ACRO	N/A	40 CFR Part 63, Subpart G	The site is not a major source of HAP and was not a major source at the time of applicability.
REACT F1	N/A	40 CFR Part 60, Subpart RRR	Unit has not been modified since 6/29/90.
REACT MMP	N/A	40 CFR Part 60, Subpart III	Unit does not produce a product, co-product, by-product, or intermediate listed.
REACT MMP	N/A	40 CFR Part 60, Subpart RRR	Unit does not produce a product, co-product, by-product, or intermediate listed.

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Unit / Group / Process ID No.	Group / Inclusive Units	Regulation	Basis of Determination
REACT MMP	N/A	40 CFR Part 63, Subpart FFFF	The site is not a major source of HAP and was not a major source at the time of applicability.
REACT MMP	N/A	40 CFR Part 63, Subpart VVVVVV	Unit does not produce a product, co-product, by-product or intermediate listed.
SULFOX-CT	N/A	40 CFR Part 63, Subpart Q	The site is not a major source of HAPs, and was not a major source at the time of applicability.
SULFOX-INH	N/A	30 TAC Chapter 115, Storage of VOCs	Not in VOC service.
SULFOX-INH	N/A	40 CFR Part 63, Subpart EEEE	The site is not a major source of HAP and was not a major source at the time of applicability.
SULFOX-INH	N/A	40 CFR Part 63, Subpart F	The site is not a major source of HAPs, and was not a major source at the time of applicability.
SULFOX-INH	N/A	40 CFR Part 63, Subpart FFFF	The site is not a major source of HAP and was not a major source at the time of applicability.
SULFOX-INH	N/A	40 CFR Part 63, Subpart G	This site is not a major source of HAPs, and was not a major source at the time of applicability.
SULFOX-TO	N/A	40 CFR Part 60, Subpart Db	Maximum heat input capacity is < 100 MMBtu/hr
SULFOXCHLR	N/A	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	Not in VOC service.
SULFOXCHLR	N/A	40 CFR Part 60, Subpart VV	Not in VOC service.
X426A	N/A	30 TAC Chapter 112, Sulfur Compounds	Boiler does not fire solid or liquid fuel.
X426A	N/A	30 TAC Chapter 117, Subchapter B	Boiler is less than 40 MMBtu/hr and is located in Beaumont/Port Arthur area.
X426A	N/A	30 TAC Chapter 117, Utility Electric Generation	Boiler is not used for electric power generation.

Permit Shield

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

Unit / Group / Process ID No.	Group / Inclusive Units	Regulation	Basis of Determination
X426A	N/A	40 CFR Part 60, Subpart D	Boiler heat input is less than 250 MMBtu/hr.
X426A	N/A	40 CFR Part 60, Subpart Da	Boiler heat input is less than 250 MMBtu/hr.
X426A	N/A	40 CFR Part 60, Subpart Db	Boiler heat input is less than 100 MMBtu/hr.
X426B	N/A	30 TAC Chapter 112, Sulfur Compounds	Boiler does not fire solid or liquid fuel.
X426B	N/A	30 TAC Chapter 117, Subchapter B	Boiler is less than 40 MMBtu/hr and is located in Beaumont/Port Arthur area.
X426B	N/A	30 TAC Chapter 117, Utility Electric Generation	Boiler is not used for electric power generation.
X426B	N/A	40 CFR Part 60, Subpart D	Boiler heat input is less than 250MMBtu/hr.
X426B	N/A	40 CFR Part 60, Subpart Da	Boiler heat input is less than 250MMBTu/hr.
X426B	N/A	40 CFR Part 60, Subpart Db	Boiler heat input is less than 100 MMBtu/hr.

New Source Review Authorization References

New Source Review Authorization References 65

New Source Review Authorization References by Emission Unit..... 66

New Source Review Authorization References

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

Prevention of Significant Deterioration (PSD) Permits	
PSD Permit No.: PSDTX1016M1	Issuance Date: 05/02/2023
Title 30 TAC Chapter 116 Permits, Special Permits, and Other Authorizations (Other Than Permits By Rule, PSD Permits, or NA Permits) for the Application Area.	
Authorization No.: 865A	Issuance Date: 05/02/2023
Permits By Rule (30 TAC Chapter 106) for the Application Area	
Number: 106.261	Version No./Date: 11/01/2003
Number: 106.262	Version No./Date: 11/01/2003
Number: 106.452	Version No./Date: 09/04/2000
Number: 106.454	Version No./Date: 11/01/2001
Number: 106.511	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
ACRO-FUG	ACROLEIN PROCESS AREA FUGITIVES	865A, PSDTX1016M1
BMT-1E/T	AREA FUGITIVES, BMT-I(ETHYL MERCAPTAN AND TBM PROD	865A, PSDTX1016M1
BMT-1M	AREA FUGITIVES, BMT-I (METHYL PRODUCTION)	865A, PSDTX1016M1
BMT-2M	AREA FUGITIVES, BMT-II (METHYL PRODUCTION)	865A, PSDTX1016M1
D226	FLARE KNOCKOUT POT (VENT TO FLARE) (FLARE HEADER)	865A, PSDTX1016M1
D2307	METHANOL STORAGE TANK - D2307 (EFR TANK)	865A, PSDTX1016M1
D3023	INCINERATOR (THERMAL OXIDIZER) KNOCKOUT POT	865A, PSDTX1016M1
D307	METHANOL STORAGE TANK - D307 (EFR TANK)	865A, PSDTX1016M1
D310	METHANOL STORAGE TANK - D307 (IFR TANK)	865A, PSDTX1016M1
D8501A	ACROLEIN STORAGE TANK - D8501A (HFR TANK)	865A, PSDTX1016M1
D8501B	ACROLEIN STORAGE TANK - D8501B (HFR TANK)	865A, PSDTX1016M1
D8501C	ACROLEIN STORAGE TANK - D8501C (HFR TANK)	865A, PSDTX1016M1
D8550	TREATED WASTEWATER TANK - D8550	865A, PSDTX1016M1
D8560	SULFOX HYDROQUINONE TANK - D8560	865A, PSDTX1016M1
D8570	SULFOX INHIBITOR TANK - D8570	865A, PSDTX1016M1
D8640	SULFOX ACETIC ACID TANK - D8640	865A, PSDTX1016M1
D8873	SULFOX ACETIC ACID TANK - D8873	865A, PSDTX1016M1
D8874	SULFOX MMP LOADING WATER WASTE TANK - D8874	865A, PSDTX1016M1
D9867	SULFOX MMP STORAGE TANK - D9867	865A, PSDTX1016M1
D9868	SULFOX MMP STORAGE TANK - D9868	865A, PSDTX1016M1
DIST ACRO	DISTILLATION PROCESSES IN THE ACROLEIN UNIT	865A, PSDTX1016M1

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
DIST BI	DISTILLATION PROCESSES IN THE BI UNIT	865A, PSDTX1016M1
DIST BII	DISTILLATION PROCESSES IN THE BII UNIT	865A, PSDTX1016M1
DIST DMDS	DISTILLATION PROCESSES IN THE DMDS UNIT	865A, PSDTX1016M1
DIST DMS	DISTILLATION PROCESSES IN THE DMS UNIT	865A, PSDTX1016M1
DIST F1	DISTILLATION PROCESSES IN THE H2S UNIT	865A, PSDTX1016M1
DIST MMP	DISTILLATION PROCESSES IN THE MMP UNIT	865A, PSDTX1016M1
DMDS-LOADI	DMDS ISOCONTAINER LOADING	865A, PSDTX1016M1
DMDS-LOADR	DMDS RAILCAR LOADING	865A, PSDTX1016M1
DMDS-LOADT	DMDS TRUCK LOADING	865A, PSDTX1016M1
DMDS-TK	DMDS STORAGE TANK	865A, PSDTX1016M1
F-1	AREA FUGITIVES H2S PLANT	865A, PSDTX1016M1
FLARE	FACILITY FLARE	865A, PSDTX1016M1
GENERATOR 1	EMERGENCY GENERATOR	106.511/09/04/2000
GENERATOR 2	EMERGENCY GENERATOR	106.511/09/04/2000
GENERATOR 3	EMERGENCY GENERATOR	106.511/09/04/2000
GENERATOR 4	EMERGENCY GENERATOR	106.511/09/04/2000
H202	HEAT TRANSFER FLUID HEATER	865A, PSDTX1016M1
H2202	HEAT TRANSFER FLUID HEATER	865A, PSDTX1016M1
H401	SULFUR HEATER	865A, PSDTX1016M1
H402	METHANE HEATER	865A, PSDTX1016M1
H501	SULFUR HEATER	865A, PSDTX1016M1

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
H502	METHANE HEATER	865A, PSDTX1016M1
INCIN	THERMAL INCINERATOR	865A, PSDTX1016M1
METH RAIL	METHANOL LOADED INTO RAILCAR FOR OFF-SITE SHIPMENT	865A, PSDTX1016M1
MMP-FUG	MMP PROCESS AREA FUGITIVES	865A, PSDTX1016M1
P-217	FIRE WATER PUMP	106.511/09/04/2000
P-3192A	REACTS FIRE WATER PUMP	106.511/09/04/2000
P-3192B	REACTS FIRE WATER PUMP	106.511/09/04/2000
PAINT-1	MAINTENANCE PAINTING EMISSIONS	865A, PSDTX1016M1
RAIL LOAD	PRODUCTS LOADED INTO RAILCAR FOR OFFSITE SHIPMENT	865A, PSDTX1016M1
REACT ACRO	ACROLEIN REACTOR	865A, PSDTX1016M1
REACT B1	REACTION PROCESSES IN THE BI UNIT	865A, PSDTX1016M1
REACT BII	REACTION PROCESSES IN THE BII UNIT	865A, PSDTX1016M1
REACT F1	REACTION PROCESS IN THE H2S UNIT	865A, PSDTX1016M1
REACT MMP	REACTION PROCESSES IN THE MMP UNIT	865A, PSDTX1016M1
STORAGE	AREA FUGITIVES, STORAGE TANK AREA	865A, PSDTX1016M1
SULFOX-CT	SULFOX COOLING TOWER	865A, PSDTX1016M1
SULFOX-INH	SULFOX INHIBITOR UNLOADING FILTER VENT (X-8564)	865A, PSDTX1016M1
SULFOX-TO	WASTEWATER VAPORIZER	865A, PSDTX1016M1
SULFOXCHLR	SULFOX CHILLER SYSTEM	865A, PSDTX1016M1
TRUCK LOAD	PRODUCTS LOADED INTO TRUCKS FOR OFF-SITE SHIPMENT	865A, PSDTX1016M1
X426A	STEAM BOILER	865A, PSDTX1016M1

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
X426B	STEAM BOILER	865A, PSDTX1016M1

Appendix A

Acronym List 71

Acronym List

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

ACFM	actual cubic feet per minute
AMOC	alternate means of control
ARP	Acid Rain Program
ASTM	American Society of Testing and Materials
B/PA	Beaumont/Port Arthur (nonattainment area)
CAM	Compliance Assurance Monitoring
CD	control device
CEMS	continuous emissions monitoring system
CFR	Code of Federal Regulations
COMS	continuous opacity monitoring system
CVS	closed vent system
D/FW	Dallas/Fort Worth (nonattainment area)
EP	emission point
EPA	U.S. Environmental Protection Agency
EU	emission unit
FCAA Amendments	Federal Clean Air Act Amendments
FOP	federal operating permit
gr/100 scf	grains per 100 standard cubic feet
HAP	hazardous air pollutant
H/G/B	Houston/Galveston/Brazoria (nonattainment area)
H ₂ S	hydrogen sulfide
ID No.	identification number
lb/hr	pound(s) per hour
MACT	Maximum Achievable Control Technology (40 CFR Part 63)
MMBtu/hr	Million British thermal units per hour
NA	nonattainment
N/A	not applicable
NADB	National Allowance Data Base
NESHAP	National Emission Standards for Hazardous Air Pollutants (40 CFR Part 61)
NO _x	nitrogen oxides
NSPS	New Source Performance Standard (40 CFR Part 60)
NSR	New Source Review
ORIS	Office of Regulatory Information Systems
Pb	lead
PBR	Permit By Rule
PEMS	predictive emissions monitoring system
PM	particulate matter
ppmv	parts per million by volume
PRO	process unit
PSD	prevention of significant deterioration
psia	pounds per square inch absolute
RO	Responsible Official
SIP	state implementation plan
SO ₂	sulfur dioxide
TCEQ	Texas Commission on Environmental Quality
TSP	total suspended particulate
TVP	true vapor pressure
U.S.C.	United States Code
VOC	volatile organic compound

Appendix B

Major NSR Summary Table 73

Major NSR Summary Table

Permit Number 865A and PSDTX1016M1					Issuance Date: May 2, 2023		
Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates		Monitoring and Testing Requirements	Recordkeeping Requirements	Reporting Requirements
			lb/hr	TPY (4)	Special Condition/Application Information	Special Condition/Application Information	Special Condition/Application Information
INCIN	Incinerator - Total	PM	0.89	3.90	3, 12, 13	3, 5, 12, 13	3, 13
		PM ₁₀	0.89	3.90			
		PM _{2.5}	0.89	3.90			
		SO ₂	139.00	78.00			
		NO _x	1.57	6.87			
		CO	2.03	8.90			
		VOC	0.37	1.48			
		H ₂ S	0.10	0.42			
		TRS	0.36	1.43			
SULFOX-TO	Thermal Oxidizer 1	PM	5.71	25.01	12, 14, 35	5, 6, 9, 12, 13, 14, 35	14
		PM ₁₀	5.71	25.01			
		PM _{2.5}	5.71	25.01			
		SO ₂ (Normal Operations)	23.66	13.93			
		SO ₂ (MSS)	100.00				
		NO _x	16.16	70.66			

Major NSR Summary Table

Permit Number 865A and PSDTX1016M1					Issuance Date: May 2, 2023		
Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates		Monitoring and Testing Requirements	Recordkeeping Requirements	Reporting Requirements
			lb/hr	TPY (4)	Special Condition/Application Information	Special Condition/Application Information	Special Condition/Application Information
		CO	32.70	70.52			
		VOC	6.66	15.26			
		TRS	0.02	0.01			
S-1	Sulfur Storage Tank	SO ₂	0.02	0.02	21	21	
		H ₂ S	0.03	0.02			
		TRS	0.03	0.02			
S-3	Sulfur Truck	SO ₂	0.06	0.06	21	21	
		H ₂ S	0.02	0.02			
		TRS	0.02	0.02			
F-1	H ₂ S Plant Fugitives (8)	VOC	<0.01	0.02	3, 30, 33	3, 5, 30, 33	3
		H ₂ S	< 0.01	<0.01			
		TRS	<0.01	0.02			
BMT-1M	Train 1 – MeSH Production Fugitives (8)	VOC	0.19	0.85	3, 30, 33	3, 5, 30, 33	3
		H ₂ S	0.02	0.07			
		TRS	0.16	0.72			
BMT-2M	Train 2 – MeSH	VOC	0.06	0.25	3, 30, 33	3, 5, 30, 33	3

Major NSR Summary Table

Permit Number 865A and PSDTX1016M1					Issuance Date: May 2, 2023		
Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates		Monitoring and Testing Requirements	Recordkeeping Requirements	Reporting Requirements
			lb/hr	TPY (4)	Special Condition/Application Information	Special Condition/Application Information	Special Condition/Application Information
	Production Fugitives (8)	H ₂ S	0.02	0.10			
		TRS	0.04	0.17			
ACRO-Fug	Acrolein Process Fugitives (8)	VOC	0.35	1.52	3, 31, 32, 36, 39	3, 31, 32, 36, 39	3
		H ₂ S	< 0.01	< 0.01			
		TRS	< 0.01	< 0.01			
MMP-Fug	MMP Process Area Fugitives (8)	VOC	0.17	0.73	3, 33	3, 5, 33	3
		TRS	0.08	0.35			
Column Main	Acrolein Unit Column/Filter Cleaning	VOC	0.01	0.01			
D307	Methanol Tank	VOC	2.32	0.22	3, 19, 49	3, 18, 19, 49	3
	Methanol Tank (MSS)	VOC (9)	3.08	1.86			
D2307	Methanol Tank	VOC	2.32	0.22	3, 19, 49	3, 18, 19, 49	3
	Methanol Tank (MSS)	VOC (9)	3.08	1.86			
D398	Gasoline Tank	VOC	4.56	0.22			
D215	Diesel Tank	VOC	0.02	0.01			

Major NSR Summary Table

Permit Number 865A and PSDTX1016M1					Issuance Date: May 2, 2023		
Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates		Monitoring and Testing Requirements	Recordkeeping Requirements	Reporting Requirements
			lb/hr	TPY (4)	Special Condition/Application Information	Special Condition/Application Information	Special Condition/Application Information
D399	Diesel Tank	VOC	0.02	0.01			
D3191A	Diesel Tank	VOC	0.02	0.01			
D3191B	Diesel Tank	VOC	0.02	0.01			
D8540	Caustic Tank	NaOH	0.01	0.01			
FLARE	Flare Limits both routine and MSS operation (5) (6)	CO	193.54	74.35	3, 11, 34	3, 5, 11, 13, 34	3
		H ₂ S	24.08	2.82			
		H ₂ SO ₄	7.21	31.57			
		H ₂ SO ₄ (5)	29.18				
		NO _x	22.56	8.67			
		SO ₂	625.00	448.96			
		SO ₂ (5)	3,065.51				
		TRS	37.87	8.84			
		TRS (5)	92.52				
		VOC	49.38	6.63			
		VOC (5)	70.32				
H401/H402	Sulfur Heater 401 &	CO	1.32	5.77	3, 8	3, 8	3

Major NSR Summary Table

Permit Number 865A and PSDTX1016M1					Issuance Date: May 2, 2023		
Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates		Monitoring and Testing Requirements	Recordkeeping Requirements	Reporting Requirements
			lb/hr	TPY (4)	Special Condition/Application Information	Special Condition/Application Information	Special Condition/Application Information
	Methane Heater 402 (7)	NO _x	1.61	7.04			
		PM	0.11	0.52			
		PM ₁₀	0.11	0.52			
		PM _{2.5}	0.11	0.52			
		SO ₂	0.01	0.05			
		VOC	0.09	0.38			
H501/H502	Sulfur Heater 501 & Methane Heater 502 (7)	CO	1.32	5.77	3, 8	3, 8	3, 8
		NO _x	1.61	7.04			
		PM	0.11	0.52			
		PM ₁₀	0.11	0.52			
		PM _{2.5}	0.11	0.52			
		SO ₂	0.01	0.05			
		VOC	0.09	0.38			
SULFOX-CT	Sulfox Cooling Tower	PM	0.04	0.18	3, 26	3, 26	3, 26
		PM ₁₀	0.04	0.18			
		PM _{2.5}	0.04	0.18			

Major NSR Summary Table

Permit Number 865A and PSDTX1016M1					Issuance Date: May 2, 2023		
Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates		Monitoring and Testing Requirements	Recordkeeping Requirements	Reporting Requirements
			lb/hr	TPY (4)	Special Condition/Application Information	Special Condition/Application Information	Special Condition/Application Information
		VOC	0.43	1.89			
SULFOX-INH	Bagfilter	PM	0.08	0.01			
		PM ₁₀	0.08	0.01			
		PM _{2.5}	0.08	0.01			
BMT-1E/T	Train 1 – EtSH Production Fugitives (8)	VOC	0.07	0.31	3, 30, 33	3, 5, 30, 33	3
		H ₂ S	< 0.01	0.01			
		TRS	< 0.01	0.01			
STORAGE	Storage Tanks Fugitives (8)	VOC	0.21	0.93	3, 30, 33, 49	3, 5, 30, 33, 49	3, 49
		TRS	0.18	0.80			
SulfoxChlr	Sulfox Chiller System (8)	HCFC	0.01	0.01	3	3	3
H202	Heat Transfer Fluid Heater (31 MMBtu/hr)	CO	2.59	11.32	3, 8	3, 8	3
		NO _x	3.08	13.48			
		PM	0.23	1.02			
		PM ₁₀	0.23	1.02			
		PM _{2.5}	0.23	1.02			
		SO ₂	0.02	0.08			

Major NSR Summary Table

Permit Number 865A and PSDTX1016M1					Issuance Date: May 2, 2023		
Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates		Monitoring and Testing Requirements	Recordkeeping Requirements	Reporting Requirements
			lb/hr	TPY (4)	Special Condition/Application Information	Special Condition/Application Information	Special Condition/Application Information
		VOC	0.17	0.74			
H2202	Heat Transfer Fluid Heater (31 MMBtu/hr)	CO	2.59	11.32	3, 8	3, 8	3
		NO _x	3.08	13.48			
		PM	0.23	1.02			
		PM ₁₀	0.23	1.02			
		PM _{2.5}	0.23	1.02			
		SO ₂	0.02	0.08			
		VOC	0.17	0.74			
X-426A	Steam Boiler (15.8 MMBtu/hr)	CO	1.33	5.81	3, 8	3, 8	3
		NO _x	2.05	9.00			
		PM	0.12	0.53			
		PM ₁₀	0.12	0.53			
		PM _{2.5}	0.12	0.53			
		SO ₂	0.01	0.04			
		VOC	0.09	0.38			
X-426B	Steam Boiler	CO	1.33	5.81	3, 8	3, 8	3

Major NSR Summary Table

Permit Number 865A and PSDTX1016M1					Issuance Date: May 2, 2023		
Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates		Monitoring and Testing Requirements	Recordkeeping Requirements	Reporting Requirements
			lb/hr	TPY (4)	Special Condition/Application Information	Special Condition/Application Information	Special Condition/Application Information
	(15.8 MMBtu/hr)	NO _x	2.05	9.00			
		PM	0.12	0.53			
		PM ₁₀	0.12	0.53			
		PM _{2.5}	0.12	0.53			
		SO ₂	0.01	0.04			
		VOC	0.09	0.38			
DMDS-LOADT	DMDS Truck Loading - Uncaptured Emissions	VOC	0.39	<0.01		25	
		TRS	0.39	<0.01			
DMDS-CT	DMDS Cooling Tower	PM	0.01	0.04	28	27, 28	
		PM ₁₀	0.01	0.03			
		PM _{2.5}	<0.01	<0.01			
		VOC	0.04	0.18			
DMDS-FUG	DMDS Fugitives (8)	VOC	0.22	0.98	33	5, 33	
		H ₂ S	0.03	0.13			
		TRS	0.22	0.98			

- (1) Emission point identification - either specific equipment designation or emission point number from plot plan.
- (2) Specific point source name. For fugitive sources, use area name or fugitive source name.
- (3)
 - CO - carbon monoxide
 - NO_x - total oxides of nitrogen
 - PM - total particulate matter, suspended in the atmosphere, including PM₁₀ and PM_{2.5}
 - PM₁₀ - particulate matter equal to or less than 10 microns in diameter, including PM_{2.5}
 - PM_{2.5} - particulate matter equal to or less than 2.5 microns in diameter
 - SO₂ - sulfur dioxide
 - VOC - volatile organic compounds as defined in Title 30 Texas Administrative Code § 101.1
 - NaOH - sodium hydroxide
 - H₂SO₄ - sulfuric acid
 - H₂S - hydrogen sulfide
 - TRS - total reduced sulfur, includes H₂S and sulfur bearing VOC, excludes SO₂
 - HCFC - hydrochlorofluorocarbon
- (4) Compliance with annual emission limits (tons per year) is based on a 12 month rolling period.
- (5) Allowable Flare short term rate during high flow events, limited to 100 hours per year.
- (6) Includes operation of the flare as the backup control device for EPN SULFUX-TO when it is not operating and 416 hours per calendar year for EPN INCIN when it is not operating.
- (7) Common exhaust stack.
- (8) Emission rate is an estimate and is enforceable through compliance with the applicable special condition(s) and permit application representations.
- (9) Planned startup, shutdown and maintenance activity emissions.



Texas Commission on Environmental Quality Air Quality Permit

A Permit Is Hereby Issued To
Arkema Inc.
Authorizing the Construction and Operation of
Arkema Beaumont Plant
Located at **Beaumont, Jefferson County, Texas**
Latitude 30.059166 *Longitude* -94.056944

Permit: 865A

Amendment Date: May 2, 2023

Expiration Date: July 15, 2025

A handwritten signature in black ink that reads "Erin E. Chamalor".

For the Commission

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

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

8. **Maximum Allowable Emission Rates.** The total emissions of air contaminants from any of the sources of emissions must not exceed the values stated on the table attached to the permit entitled "Emission Sources-- Maximum Allowable Emission Rates." [30 TAC § 116.115(b)(2)(F)]¹
9. **Maintenance of Emission Control.** The permitted facilities shall not be operated unless all air pollution emission capture and abatement equipment is maintained in good working order and operating properly during normal facility operations. The permit holder shall provide notification in accordance with 30 TAC §101.201, 101.211, and 101.221 of this title (relating to Emissions Event Reporting and Recordkeeping Requirements; Scheduled Maintenance, Startup, and Shutdown Reporting and Recordkeeping Requirements; and Operational Requirements). [30 TAC§ 116.115(b)(2)(G)]
10. **Compliance with Rules.** Acceptance of a permit by an applicant constitutes an acknowledgment and agreement that the permit holder will comply with all rules and orders of the commission issued in conformity with the TCAA and the conditions precedent to the granting of the permit. If more than one state or federal rule or regulation or permit condition is applicable, the most stringent limit or condition shall govern and be the standard by which compliance shall be demonstrated. Acceptance includes consent to the entrance of commission employees and agents into the permitted premises at reasonable times to investigate conditions relating to the emission or concentration of air contaminants, including compliance with the permit. [30 TAC § 116.115(b)(2)(H)]
11. **This** permit may not be transferred, assigned, or conveyed by the holder except as provided by rule. [30 TAC § 116.110(e)]
12. **There** may be additional special conditions attached to a permit upon issuance or modification of the permit. Such conditions in a permit may be more restrictive than the requirements of Title 30 of the Texas Administrative Code. [30 TAC § 116.115(c)]
13. **Emissions** from this facility must not cause or contribute to "air pollution" as defined in Texas Health and Safety Code (THSC) §382.003(3) or violate THSC § 382.085. If the executive director determines that such a condition or violation occurs, the holder shall implement additional abatement measures as necessary to control or prevent the condition or violation.
14. **The** permit holder shall comply with all the requirements of this permit. Emissions that exceed the limits of this permit are not authorized and are violations of this permit.¹

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

Common Acronyms in Air Permits

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

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

Special Conditions

Permit Numbers 865A and PSDTX1016M1

1. This permit covers only those sources of emissions listed in the attached table entitled "Emission Sources - Maximum Allowable Emission Rates" (MAERT), and those sources are limited to the emission limits and other conditions specified in that table.
2. Non-fugitive emissions from relief valves, safety valves, or rupture discs of gases containing volatile organic compounds (VOC) at a concentration of greater than 1 percent are not authorized by this permit unless authorized on the MAERT. Any releases directly to atmosphere from relief valves, safety valves, or rupture discs of gases containing VOC at a concentration greater than 1 weight percent are not consistent with good practice for minimizing emissions.

Federal Applicability

3. These facilities shall comply with all applicable requirements of the U.S. Environmental Protection Agency (EPA) regulations on Standards of Performance for New Stationary Sources promulgated in Title 40 Code of Federal Regulations Part 60 (40 CFR Part 60): **(9/18)**
 - A. Subpart A, General Provisions.
 - B. Subpart Kb, Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced after July 23, 1984.
 - C. Subpart VV, Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry for which Construction, Reconstruction, or Modification Commenced after January 5, 1981, and on or before November 7, 2006.
 - D. Subpart VVa, Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry for which Construction, Reconstruction, or Modification Commenced after November 7, 2006.
 - E. Subpart III, Volatile Organic Compound (VOC) Emissions from the Synthetic Organic Chemical Manufacturing Industry (SOCMI) Air Oxidation Unit Processes.
 - F. Subpart CCCC, Commercial and Industrial Solid Waste Incineration Units for Which Construction is Commenced after November 30, 1999 or for Which Modification or Reconstruction is Commenced after June 1, 2001.
 - G. Subpart DDDD, Emissions Guidelines and Compliance Times for Commercial and Industrial Solid Waste Incinerator Units
4. These facilities shall comply with all applicable requirements of the EPA regulations on National Emission Standards for Hazardous Air Pollutants for Source Categories in 40 CFR Part 63: **(9/18)**
 - A. Subpart A, General Provisions.
 - B. Subpart VVVVVV, National Emission Standards for Hazardous Air Pollutants for Chemical Manufacturing Area Sources

Emission Standards and Operational Specifications

5. Production of acrolein and methylmercaptopropionaldehyde (MMP), dimethyl disulfide (DMDS), dimethyl sulfide (DMS), hydrogen sulfide (H₂S), ethyl mercaptan (EtSH) and methyl mercaptan (MeSH) shall be limited to the amounts specified in the confidential section of the amendment

application initiated by letter dated April 18, 2017, and October 3, 2022. The site will maintain monthly records of daily and rolling 12 month production of each product. **(5/23)**

6. The H₂S plant shall operate at capacities where the total H₂S production is consumed on-site.
7. The Sulfox process unit shall never operate unless the Sulfox Unit thermal oxidizer (EPN SULFOX-TO) is properly operating. When the Sulfox Unit thermal oxidizer fails to operate, the Sulfox process unit shall be shut down in an orderly manner. The shutdown process shall be documented and kept at the plant site. **(11/19)**
8. Fuel gas combusted in each combustion emission point number (EPN) in this permit shall be sweet natural gas containing no more than five grains of total sulfur per 100 dry standard cubic feet. The owner or operator of this facility shall demonstrate compliance with this permit condition by annually obtaining documentation of the natural gas fuel sulfur content from the natural gas provider or analyzing the sulfur content of the natural gas fuel.
9. Waste gas streams from the Sulfox Unit vents cannot vent to more than one control device (i.e., EPN SULFOX-TO or EPN FLARE) at the same time. Documentation shall be kept at the plant site demonstrating compliance with this special condition. **(11/19)**
10. Emissions from any VOC water separation equipment shall be vented to a permitted control device or recycled to the process.

Flare Systems

11. The flare (EPN FLARE) shall be designed and operated in accordance with the following requirements:
 - A. The flare system shall be designed such that the combined assist natural gas and waste stream to each flare meets the 40 CFR § 60.18 specifications of minimum heating value and maximum tip velocity under normal, upset, and maintenance flow conditions.

The heating value and velocity requirements shall be satisfied during operations authorized by this permit. Flare testing per 40 CFR § 60.18(f) may be requested by the appropriate regional office to demonstrate compliance with these requirements.
 - B. The flare shall be operated with a flame present at all times and/or have a constant pilot flame. The pilot flame shall be continuously monitored by a thermocouple or an infrared monitor. The time, date, and duration of any loss of pilot flame shall be recorded. Each monitoring device shall be accurate to, and shall be calibrated at a frequency in accordance with, the manufacturer's specifications.
 - C. The flare shall be operated with no visible emissions except periods not to exceed a total of five minutes during any two consecutive hours.
 - D. The permit holder shall install a continuous flow monitor and a composition analyzer that provide a record of the vent stream flow and composition to the flare. The flow monitor sensor and analyzer sample points shall be installed in the vent stream as near as possible to the flare inlet such that the total vent stream to the flare is measured and analyzed. Readings shall be taken at least once every 15 minutes and the average hourly values of the flow and composition shall be recorded each hour.

The monitors shall be calibrated on an annual basis to meet the following accuracy specifications: the flow monitor shall be ± 5.0 percent, temperature monitor shall be ± 2.0 percent at absolute temperature, and pressure monitor shall be ± 5.0 mm Hg;

Calibration of the analyzer shall follow the procedures and requirements of Section 10.0 of 40 CFR Part 60, Appendix B, Performance Specification 9, as amended through October 17, 2000, (65 FR 61744), except that the multi-point calibration procedure in Section 10.1 of Performance Specification 9 shall be performed at least once every calendar quarter instead of once every month, and the mid-level calibration check procedure in Section 10.2 of Performance Specification 9 shall be performed at least once every calendar week instead of once every 24 hours. The calibration gases used for calibration procedures shall be in accordance with Section 7.1 of Performance Specification 9. Net heating value of the gas combusted in the flare shall be calculated according to the equation given in 40 CFR § 60.18(f)(3) as amended through October 17, 2000, (65 FR 61744).

The monitors and analyzers shall operate as required by this section at least 95 percent of the time when the flare is operational, averaged over a rolling 12-month period. Flared gas net heating value and actual exit velocity determined in accordance with 40 CFR § 60.18(f)(4) shall be recorded at least once every 15 minutes. Hourly mass emission rates shall be determined and recorded using the above readings and the emission factors used in the permit amendment application October 3, 2022.

- E. Hourly SO₂ and TRS emissions shall be calculated based on operational data. These shall be compared to the lb/hr and ton per year values on the MAERT.
- F. The flare (EPN FLARE) shall only operate as the emergency backup control device only when the Sulfox Thermal Oxidizer (EPN Sulfox-TO) is not operating. The data recorded shall be each emergency event and the estimated pounds an hour of TRS, SO₂, and VOC emitted from EPN FLARE when the Sulfox unit is not operating, and this data will be compared to the confidential May 27, 2007 submittal and subsequent updates to verify these representations are met. Records shall be kept at the plant site demonstrating compliance with this requirement. **(03/19)**

Vapor Oxidizers

- 12. The holder of this permit shall keep daily records of the flow rate of each combustion source's (EPNs INCIN and SULFOX-TO) inlet waste streams. This information along with each combustion source's operating parameters (i.e., firebox temperature and in-stack O₂, CO, NO_x, and SO₂ concentrations for EPN SULFOX-TO) may be used to determine whether compliance with the maximum allowable emission rate limits is being achieved. **(11/19)**
- 13. The following requirements shall apply to the incinerator (EPN INCIN):
 - A. The continuous gaseous flow from the overhead vent from the product recovery tower (PRT), continuous gaseous flow from the overhead vent from the hydrogen sulfide splitter towers, and intermittent venting from the pressure control valve on the ethyl mercaptan spheres shall vent to the incinerator (EPN INCIN). In the event that the incinerator (EPN INCIN) is not operable, the streams in this special condition may be routed to the flare (EPN FLARE). Routing of these streams to the flare shall not exceed 416 hours per calendar year. **(11/19)**

- B. The incinerator (EPN INCIN) shall maintain the VOC concentration in the exhaust gas less than 10 ppmv on a dry basis, corrected to 3 percent oxygen, or achieve a VOC destruction efficiency greater than 99.9 percent. **(9/18)**
- C. The incinerator (EPN INCIN) firebox exit temperature shall be maintained at not less than 1380°F and exhaust oxygen concentration not less than 4 percent while waste gas is being fed into the oxidizer prior to initial stack testing. **(11/19)**
- D. The incinerator (EPN INCIN) exhaust temperature shall be continuously monitored and recorded when waste gas is directed to the incinerator. The temperature measurement device shall reduce the temperature readings to an averaging period of 6 minutes or less and record it at that frequency. The temperature measurement device shall be installed, calibrated, and maintained according to accepted practice and the manufacturer's specifications. The device shall have an accuracy of the greater of ± 0.75 percent of the temperature being measured expressed in degrees Celsius or $\pm 2.5^\circ\text{C}$.

Quality assured (or valid) data must be generated when the incinerator (EPN INCIN) is operating except during the performance of a daily zero and span check. Loss of valid data due to periods of monitor break down, out-of-control operation (producing inaccurate data), repair, maintenance, or calibration may be exempted provided it does not exceed 5 percent of the time (in minutes) that the incinerator (EPN INCIN) operated over the previous rolling 12 month period. The measurements missed shall be estimated using engineering judgment and the methods used recorded. **(9/18)**

- E. The permit holder shall install, calibrate, and maintain a continuous emission monitoring system (CEMS) to measure and record the in-stack concentration of CO, SO₂, and O₂ from the incinerator (EPN INCIN). **(5/23)**
 - (1) The CEMS shall meet the design and performance specifications, pass the field tests, and meet the installation requirements and the data analysis and reporting requirements specified in the applicable Performance Specification Nos. 1 through 9, Title 40 Code of Federal Regulation Part 60 (40 CFR Part 60), Appendix B. If there are no applicable performance specifications in 40 CFR Part 60, Appendix B, contact the TCEQ Office of Air, Air Permits Division for requirements to be met.
 - (2) Section 1 below applies to sources subject to the quality-assurance requirements of 40 CFR Part 60, Appendix F; section 2 applies to all other sources:
 - (a) The permit holder shall assure that the CEMS meets the applicable quality-assurance requirements specified in 40 CFR Part 60, Appendix F, Procedure 1. Relative accuracy exceedances, as specified in 40 CFR Part 60, Appendix F, Section 5.2.3 and any CEMS downtime shall be reported to the appropriate TCEQ Regional Manager, and necessary corrective action shall be taken. Supplemental stack concentration measurements may be required at the discretion of the appropriate TCEQ Regional Manager.
 - (b) The system shall be zeroed and spanned daily, and corrective action taken when the 24-hour span drift exceeds two times the amounts specified in the applicable Performance Specification Nos. 1 through 9, 40 CFR Part 60, Appendix B, or as specified by the TCEQ if not specified in Appendix B. Zero and span is not required on weekends and plant holidays if instrument technicians are not normally scheduled on those days.

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

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

- (3) The monitoring data shall be reduced to hourly average concentrations at least once every day, using a minimum of four equally-spaced data points from each one-hour period. The individual average concentrations shall be reduced to units of lb/hr at least once every week as follows:

The measured (averaging period) average concentration from the CEMS shall be multiplied by the exhaust gas flow rate as measured by the stack flow rate monitor to determine the hourly emission rate.

- (4) All monitoring data and quality-assurance data shall be maintained by the source. The data from the CEMS may, at the discretion of the TCEQ, be used to determine compliance with the conditions of this permit.
- (5) Quality-assured (or valid) data must be generated when the incinerator (EPN INCIN) is operating except during the performance of a daily zero and span check. Loss of valid data due to periods of monitor break down, out-of-control operation (producing inaccurate data), repair, maintenance, or calibration may be exempted provided it does not exceed 5 percent of the time (in minutes) that the incinerator (EPN INCIN) operated over the previous rolling 12-month period. The measurements missed shall be estimated using engineering judgment and the methods used recorded. Options to increase system reliability to an acceptable value, including a redundant CEMS, may be required by the TCEQ Regional Manager.

14. The following requirements shall apply to the thermal oxidizer (EPN SULFOX-TO): **(9/18)**
 - A. Waste streams from the Sulfox unit and loading shall be routed to the thermal oxidizer (EPN SULFOX-TO).
 - B. The thermal oxidizer (EPN SULFOX-TO) shall maintain the VOC concentration in the exhaust gas less than 10 ppmv on a dry basis, corrected to 3 percent oxygen, or achieve a VOC destruction efficiency greater than 99.9 percent. **(11/19)**
 - C. The thermal oxidizer (EPN SULFOX-TO) firebox exit temperature shall be maintained at not less than 1,650°F and exhaust oxygen concentration not less than 2 percent while waste gas is being fed into the oxidizer. If additional stack testing is performed, the six minute average temperature shall be equal to, or greater than the respective hourly average maintained during the most recent satisfactory stack testing. **(11/18)**
 - D. The thermal oxidizer (EPN SULFOX-TO) exhaust temperature shall be continuously monitored and recorded when waste gas is directed to the oxidizer. The temperature measurement device shall reduce the temperature readings to an averaging period of 6

minutes or less and record it at that frequency. The temperature measurement device shall be installed, calibrated, and maintained according to accepted practice and the manufacturer's specifications. The device shall have an accuracy of the greater of ± 0.75 percent of the temperature being measured expressed in degrees Celsius or $\pm 2.5^{\circ}\text{C}$.

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

- E. The permit holder shall install, calibrate, and maintain a continuous emission monitoring system (CEMS) to measure and record the in-stack concentration of CO, NO_x, SO₂, and O₂ from the thermal oxidizer (EPN SULFOX-TO).
- (1) The CEMS shall meet the design and performance specifications, pass the field tests, and meet the installation requirements and the data analysis and reporting requirements specified in the applicable Performance Specification Nos. 1 through 9, Title 40 Code of Federal Regulation Part 60 (40 CFR Part 60), Appendix B. If there are no applicable performance specifications in 40 CFR Part 60, Appendix B, contact the TCEQ Office of Air, Air Permits Division for requirements to be met.
 - (2) Section 1 below applies to sources subject to the quality-assurance requirements of 40 CFR Part 60, Appendix F; section 2 applies to all other sources:
 - (a) The permit holder shall assure that the CEMS meets the applicable quality-assurance requirements specified in 40 CFR Part 60, Appendix F, Procedure 1. Relative accuracy exceedances, as specified in 40 CFR Part 60, Appendix F, Section 5.2.3 and any CEMS downtime shall be reported to the appropriate TCEQ Regional Manager, and necessary corrective action shall be taken. Supplemental stack concentration measurements may be required at the discretion of the appropriate TCEQ Regional Manager.
 - (b) The system shall be zeroed and spanned daily, and corrective action taken when the 24-hour span drift exceeds two times the amounts specified in the applicable Performance Specification Nos. 1 through 9, 40 CFR Part 60, Appendix B, or as specified by the TCEQ if not specified in Appendix B. Zero and span is not required on weekends and plant holidays if instrument technicians are not normally scheduled on those days.

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

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

- (3) The monitoring data shall be reduced to hourly average concentrations at least once every day, using a minimum of four equally-spaced data points from each one-hour period. The individual average concentrations shall be reduced to units of lb/hr at least once every week as follows:

The measured (averaging period) average concentration from the CEMS shall be multiplied by the exhaust gas flow rate as measured by the stack flow rate monitor to determine the hourly emission rate.

- (4) All monitoring data and quality-assurance data shall be maintained by the source. The data from the CEMS may, at the discretion of the TCEQ, be used to determine compliance with the conditions of this permit.
- (5) The appropriate TCEQ Regional Office shall be notified at least 30 days prior to any required RATA in order to provide them the opportunity to observe the testing.
- (6) Quality-assured (or valid) data must be generated when the thermal oxidizer (EPN SULFOX-TO) is operating except during the performance of a daily zero and span check. Loss of valid data due to periods of monitor break down, out-of-control operation (producing inaccurate data), repair, maintenance, or calibration may be exempted provided it does not exceed 5 percent of the time (in minutes) that the thermal oxidizer (EPN SULFOX-TO) operated over the previous rolling 12-month period. The measurements missed shall be estimated using engineering judgment and the methods used recorded. Options to increase system reliability to an acceptable value, including a redundant CEMS, may be required by the TCEQ Regional Manager.

Heaters

- 15. Sulfur heaters (EPNs H-401 and H-501) and methane heaters (EPNs H-402 and H-502) shall be equipped with low-nitrogen oxides (NO_x) technology that shall not exceed 0.10 pound (lb) of NO_x/MMBtu (million British thermal units) of natural gas fired. **(11/19)**

Boilers

- 16. Steam Boilers (EPNs X-426A and X-426B) shall be equipped with burners that shall not exceed 0.13 lb of NO_x/MMBtu of natural gas fired.

Storage Tanks

- 17. Storage tank throughput and service shall be limited to the following for the tanks listed in the table below: **(11/19)**

Tank Identifier	Service	Fill Rate (gallons/hour)	Rolling 12 Month Throughput (gallons)
EPN D398	Gasoline	250	10,000
EPN D215	Diesel	250	2,870
EPN D399	Diesel	250	5,000
EPN D3191A	Diesel	250	5,000

Tank Identifier	Service	Fill Rate (gallons/hour)	Rolling 12 Month Throughput (gallons)
EPN D3191B	Diesel	250	5,000
EPN D8540	Sodium hydroxide	5,220	714,449
FIN DMDS-TK	DMDS	*	*

* See confidential section of permit amendment application PI-1 dated October 3, 2022

18. Storage Tank Nos. D-307 and D-2307 shall be limited to an annual methanol throughput specified in the confidential section of the application submitted in May 2007. The site will maintain monthly records of annual throughput of each tank. The throughput of each tank shall be tabulated on a 12-month rolling basis. **(11/19)**

19. Storage tanks are subject to the following requirements: The control requirements specified in parts A–E of this condition shall not apply (1) where the VOC has an aggregate partial pressure of less than 0.50 psia at the maximum feed temperature or 95°F, whichever is greater, or (2) to storage tanks smaller than 25,000 gallons. **(5/23)**
 - A. The methanol storage tanks (EPN D307 and EPN D2307) shall contain a floating roof (external floating roof tank) which uses double seal or secondary seal technology provided the primary seal consists of either a mechanical shoe seal or a liquid-mounted seal and the secondary seal is rim-mounted. A weathershield is not approvable as a secondary seal unless specifically reviewed and determined to be vapor-tight.
 - B. For any tank equipped with a floating roof, the permit holder shall perform the visual inspections and any seal gap measurements specified in Title 40 Code of Federal Regulations § 60.113b (40 CFR § 60.113b) Testing and Procedures (as amended at 54 FR 32973, Aug. 11, 1989) to verify fitting and seal integrity. Records shall be maintained of the dates inspection was performed, any measurements made, results of inspections and measurements made (including raw data), and actions taken to correct any deficiencies noted.
 - C. The floating roof design shall incorporate sufficient flotation to conform to the requirements of API Code 650 dated November 1, 1998 except that an internal floating cover need not be designed to meet rainfall support requirements and the materials of construction may be steel or other materials.
 - D. Tanks shall be constructed or equipped with a connection to a vapor recovery system that routes vapors from the vapor space under the landed roof to a control device.
 - E. The DMDS tank (FIN DMDS-TK) shall be vented to either the incinerator (EPN INCIN) or the flare (EPN FLARE).
 - F. Except for labels, logos, etc. not to exceed 15 percent of the tank total surface area, uninsulated tank exterior surfaces exposed to the sun shall be white, except for the DMDS storage tank (FIN INCIN). The DMDS storage tank (FIN INCIN) shall be stainless steel construction. Storage tanks must be equipped with permanent submerged fill pipes.
 - G. The permit holder shall maintain an emissions record from all storage tanks that comply with one of the following:

- (1) For tanks EPN D215, EPN D398, EPN D399, EPN D3191A, EPN D3191B, EPN D8540, and EPN S-1, the permit holder shall maintain a record of tank throughput for the previous month and the past consecutive 12 month period for each tank.
- (2) For all other tanks, the permit holder shall maintain an emissions record which includes calculated emissions of VOC and H₂S from all storage tanks during the previous calendar month and the past consecutive 12 month period. The record shall include tank identification number, control method used, tank capacity in gallons, name of the material stored, VOC molecular weight, VOC monthly average temperature in degrees Fahrenheit, VOC vapor pressure at the monthly average material temperature in psia, VOC throughput for the previous month and year-to-date. Records of VOC monthly average temperature are not required to be kept for unheated tanks which receive liquids that are at or below ambient temperatures.

Emissions from tanks shall be calculated using the methods described in AP-42 Section 7.1-Organic Liquid Storage Tanks (Corrected August 2012). Sample calculations from the application shall be attached to a copy of this permit at the plant site.

20. Acetic acid and pyridine catalyst tank vents shall be controlled by the thermal oxidizer (EPN SULFOX-TO). Methyl mercaptan, ethyl mercaptan, and methanol railcar loading and unloading vents shall be controlled by the flare (EPN FLARE). **(11/19)**
21. The H₂S concentration in the vapor space of the molten sulfur storage tank (EPN S-1) shall not exceed 250 ppmv. The tank vapors shall be sampled and analyzed for H₂S at least once quarterly during loading activities. If any scheduled analysis indicates an exceedance of this limit, material transfers to the tank shall be reduced until additional sampling, to be conducted at least every eight hours, indicates that the H₂S concentration is below 250 ppmv. Records shall be maintained in accordance with these special conditions.

Loading Operations

22. All lines and connectors shall be visually inspected for any defects prior to hookup. Lines and connectors that are visibly damaged shall be removed from service. Operations shall cease immediately upon detection of any liquid leaking from the lines or connections. Upon completion of loading operations, all loading lines (except for MMP) shall be purged with inert gas to the flare before any connections between the loading racks and loaded vessels are broken. **(9/18)**
23. The MMP shall be loaded into railcars. The MMP railcar loading shall use closed loop vapor-balance systems connected to the MMP Storage Tank or the thermal oxidizer (EPN SULFOX-TO). Upon completion of MMP loading operations, the loading line shall be purged into the railcar or the MMP storage tank. When unhooking the railcar from the loading line, an acetic acid or equivalent wash shall be done after each MMP loading. The wash material tank shall vent to the thermal oxidizer (EPN SULFOX-TO). **(11/19)**
24. The MMP day storage tanks shall vent to the thermal oxidizers (EPN SULFOX-TO). Under no circumstances shall the MMP day storage tanks and bulk storage tank vent to the atmosphere. **(11/19)**
25. DMDS loading operations shall comply with the following requirements: **(5/23)**

- A. DMDS loading into tank trucks, railcars, or isocontainers are limited to the hourly and annual throughputs specified in the confidential section of the application submitted October 3, 2022.
- B. All loading shall be submerged and rolling 12-month rack throughput records shall be updated on a monthly basis for each product loaded.
- C. Loading emissions shall be vented to either the incinerator (EPN INCIN) or the flare (EPN FLARE).
- D. Each tank truck shall be leak checked and certified annually in accordance with Title 40 Code of Federal Regulations Part 60 (40 CFR 60), Subpart XX.
- E. In order to ensure 100% capture efficiency during railcar loading, the following requirements must be met:
 - (1) Each railcar to be loaded shall be pressure certified by Department of Transportation (DOT) requirements in 49 CFR 180 Subpart F. The holder of this permit shall not allow a railcar to be loaded unless it has markings verifying the railcar qualification is current. Records of the railcar specification which shall at a minimum identify the authorizing agency, class designation, and tank test pressure in psi gauge along with the qualification stencil identifying the year the rail car was last qualified and the year the next qualification is due shall be maintained for each railcar loaded.
 - (2) Connections shall be bolted and/or dry lock design for all loading operations.
 - (3) Each railcar to be loaded shall be designed to handle a pressure of 100 psi gauge or greater.
 - (4) Each railcar to be loaded shall not be equipped with a slip tube, commonly referred to as a spew rod or spit tube.

Cooling Towers

- 26. The cooling tower water (EPN SULFOX-CT) shall be monitored for VOC monthly with an approved air stripping system or equivalent. The appropriate equipment shall be maintained so as to minimize fugitive VOC emissions from the cooling tower. Faulty equipment shall be repaired at the earliest opportunity but no later than the next scheduled shutdown of the process unit in which the leak occurs. The results of the monitoring and maintenance efforts shall be recorded, and such records shall be maintained for a period of two years. The records shall be made available to the TCEQ Executive Director upon request. The cooling tower (EPN SULFOX-CT) shall be equipped with drift eliminators to minimize water mist related particulate matter losses.
- 27. The VOC associated with DMDS Cooling Tower (EPN DMDS-CT) water shall be monitored monthly with an air stripping system meeting the requirements of the TCEQ Sampling Procedures Manual, Appendix P (dated January 2003 or a later edition) or an approved equivalent sampling method. The results of the monitoring, cooling water flow rate and maintenance activities on the cooling water system shall be recorded. The monitoring results and cooling water hourly mass flow rate shall be used to determine cooling tower hourly VOC emissions. The rolling 12 month cooling water emission rate shall be recorded on a monthly basis and be determined by summing the VOC emissions between VOC monitoring periods over the rolling 12 month period. The emissions between VOC monitoring periods shall be obtained by multiplying the total cooling water mass flow between cooling water monitoring periods by the higher of the two VOC monitored results. **(5/23)**

28. The DMDS Cooling Tower (EPN DMDS-CT) shall be operated and monitored in accordance with the following: **(5/23)**
- A. Each cooling tower shall be equipped with drift eliminators having manufacturer's design assurance of 0.001% drift or less. Drift eliminators shall be maintained and inspected at least annually. The permit holder shall maintain records of all inspections and repairs.
 - B. Dissolved solids in the cooling water drift are considered to be emitted as PM, PM₁₀, and PM_{2.5} as represented in the permit application calculations.
 - C. Cooling water shall be sampled at least once per week for TDS.
 - D. A sample of cooling tower water shall be taken from the circulated water stream(s) entering the cooling tower. The analysis shall be conducted using the approved methods below:
 - (1) The analysis method for TDS shall be EPA Method 160.1, ASTM D5907, and SM 2540 C [SM - 19th edition of Standard Methods for Examination of Water]. Water samples should be capped upon collection, and transferred to a laboratory area for analysis.
 - (2) Alternate sampling and analysis methods may be used to comply with D(1) with written approval from the TCEQ Regional Director. If approved by the TCEQ Regional Director, the permit holder shall submit a permit application to incorporate the alternative sampling and analysis method into the permit within 2 months of the date of written approval.
 - (3) Records of all instrument calibrations and test results and process measurements used for the emission calculations shall be retained.
 - E. Emission rates of PM, PM₁₀ and PM_{2.5} shall be calculated using the measured TDS, the design drift rate and the daily maximum and average actual cooling water circulation rate for the short term and annual average rates. Alternately, the design maximum circulation rate may be used for all calculations. Emission records shall be updated monthly.

Fugitives

29. Special Condition Nos. 27-29 do not apply to components that are monitored with the AVO program required in Special Condition No. 30.

Piping, Valves, Connectors, Pumps, Agitators, and Compressors – 28VHP (EPN BMT-1M, EPN BMT-2M, EPN BMT-1E/T, and EPN Storage)

30. Except as may be provided for in the Special Conditions of this permit, the following requirements apply to the above-referenced equipment: **(9/18)**
- A. The requirements of paragraphs F and G shall not apply (1) where the Volatile Organic Compound (VOC) has an aggregate partial pressure or vapor pressure of less than 0.044 pounds per square inch, absolute (psia) at 68°F or (2) operating pressure is at least 5 kilopascals (0.725 psi) below ambient pressure. Equipment excluded from this condition shall be identified in a list or by one of the methods described below to be made readily available upon request.
- The exempted components may be identified by one or more of the following methods:
- piping and instrumentation diagram (PID);

- a written or electronic database or electronic file;
 - color coding;
 - a form of weatherproof identification; or
 - designation of exempted process unit boundaries.
- B. Construction of new and reworked piping, valves, pump systems, and compressor systems shall conform to applicable American National Standards Institute (ANSI), American Petroleum Institute (API), American Society of Mechanical Engineers (ASME), or equivalent codes.
- C. New and reworked underground process pipelines shall contain no buried valves such that fugitive emission monitoring is rendered impractical. New and reworked buried connectors shall be welded.
- D. To the extent that good engineering practice will permit, new and reworked valves and piping connections shall be so located to be reasonably accessible for leak-checking during plant operation. Difficult-to-monitor and unsafe-to-monitor valves, as defined by Title 30 Texas Administrative Code Chapter 115 (30 TAC Chapter 115), shall be identified in a list to be made readily available upon request. The difficult-to-monitor and unsafe-to-monitor valves may be identified by one or more of the methods described in Paragraph A above. If an unsafe to monitor component is not considered safe to monitor within a calendar year, then it shall be monitored as soon as possible during safe to monitor times. A difficult to monitor component for which quarterly monitoring is specified may instead be monitored annually.
- E. New and reworked piping connections shall be welded or flanged. Screwed connections are permissible only on piping smaller than two-inch diameter. Gas or hydraulic testing of the new and reworked piping connections at no less than operating pressure shall be performed prior to returning the components to service or they shall be monitored for leaks using an approved gas analyzer within 15 days of the components being returned to service. Adjustments shall be made as necessary to obtain leak-free performance. Connectors shall be inspected by visual, audible, and/or olfactory means at least weekly by operating personnel walk-through.

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

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

must be repaired within 24 hours or a cap, blind flange, plug, or second valve must be installed on the line or valve.

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

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

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

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

- G. Except as may be provided for in the special conditions of this permit, all pump, compressor, and agitator seals shall be monitored with an approved gas analyzer at least quarterly or be equipped with a shaft sealing system that prevents or detects emissions of VOC from the seal. Seal systems designed and operated to prevent emissions or seals equipped with automatic seal failure detection and alarm system need not be monitored. These seal systems may include (but are not limited to) dual pump seals with barrier fluid at higher pressure than process pressure, seals degassing to vent control systems kept in good working order, or seals equipped with an automatic seal failure detection and alarm system. Submerged pumps or sealless pumps (including, but not limited to, diaphragm, canned, or magnetic-driven pumps) may be used to satisfy the requirements of this condition and need not be monitored.
- H. Damaged or leaking valves or connectors found to be emitting VOC in excess of 500 parts per million by volume (ppmv) or found by visual inspection to be leaking (e.g., dripping process fluids) shall be tagged and replaced or repaired. Damaged or leaking pump, compressor, and agitator seals found to be emitting VOC in excess of 2,000 ppmv or found by visual inspection to be leaking (e.g., dripping process fluids) shall be tagged and replaced or repaired. A first attempt to repair the leak must be made within 5 days and a record of the attempt shall be maintained.
- I. A leaking component shall be repaired as soon as practicable, but no later than 15 days after the leak is found. If the repair of a component would require a unit shutdown that would

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

- J. Records of repairs shall include date of repairs, repair results, justification for delay of repairs, and corrective actions taken for all components. Records of instrument monitoring shall indicate dates and times, test methods, and instrument readings. The instrument monitoring record shall include the time that monitoring took place for no less than 95% of the instrument readings recorded. Records of physical inspections shall be noted in the operator's log or equivalent.
- K. Alternative monitoring frequency schedules of 30 TAC 115.352 - 115.359 or National Emission Standards for Organic Hazardous Air Pollutants, 40 CFR Part 63, Subpart H, may be used in lieu of Items G through H of this condition.
- L. Compliance with the requirements of this condition does not assure compliance with requirements of 30 TAC Chapter 115, an applicable New Source Performance Standard (NSPS), or an applicable National Emission Standard for Hazardous Air Pollutants (NESHAPS) and does not constitute approval of alternative standards for these regulations.

Piping, Valves, Connectors, Pumps, Agitators and Compressors, in contact with VOC - Intensive Directed Maintenance – 28MID (EPN ACRO-FUG)

- 31. Except as may be provided for in the Special Conditions of this permit, the following requirements apply to the above-referenced equipment: **(9/18)**
 - A. The requirements of paragraphs F and G shall not apply (1) where the volatile organic compounds (VOC) has an aggregate partial pressure or vapor pressure of less than 0.044 pounds per square inch, absolute (psia) at 68°F or (2) operating pressure is at least 5 kilopascals (0.725 psi) below ambient pressure. Equipment excluded from this condition shall be identified in a list or by one of the methods described below to be made available upon request.

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

 - piping and instrumentation diagram (PID);
 - a written or electronic database or electronic file;
 - color coding;

- a form of weatherproof identification; or
 - designation of exempted process unit boundaries.
- B. Construction of new and reworked piping, valves, pump systems, agitators, and compressor systems shall conform to applicable American National Standards Institute (ANSI), American Petroleum Institute (API), American Society of Mechanical Engineers (ASME), or equivalent codes.
- C. New and reworked underground process pipelines shall contain no buried valves such that fugitive emission monitoring is rendered impractical. New and reworked buried connectors shall be welded.
- D. To the extent that good engineering practice will permit, new and reworked valves and piping connections shall be so located to be reasonably accessible for leak-checking during plant operation. Difficult-to-monitor and unsafe-to-monitor valves, as defined by Title 30 Texas Administrative Code Chapter 115 (30 TAC Chapter 115), shall be identified in a list to be made available upon request. The difficult-to-monitor and unsafe-to-monitor valves may be identified by one or more of the methods described in Paragraph A above. If an unsafe to monitor component is not considered safe to monitor within a calendar year, then it shall be monitored as soon as possible during safe to monitor times. A difficult to monitor component for which quarterly monitoring is specified may instead be monitored annually.
- E. New and reworked piping connections shall be welded or flanged. Screwed connections are permissible only on piping smaller than two-inch diameter. Gas or hydraulic testing of the new and reworked piping connections at no less than operating pressure shall be performed prior to returning the components to service or they shall be monitored for leaks using an approved gas analyzer within 15 days of the components being returned to service. Adjustments shall be made as necessary to obtain leak-free performance. Connectors shall be inspected by visual, audible, and/or olfactory means at least weekly by operating personnel walk-through.

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

- (1) a cap, blind flange, plug, or second valve must be installed on the line or valve; or
 - (2) the open-ended valve or line shall be monitored once for leaks above background for a plant or unit turnaround lasting up to 45 days with an approved gas analyzer and the results recorded. For all other situations, the open-ended valve or line shall be monitored once by the end of the 72 hours period following the creation of the open ended line and monthly thereafter with an approved gas analyzer and the results recorded. For turnarounds and all other situations, leaks are indicated by readings of 500 ppmv and must be repaired within 24 hours or a cap, blind flange, plug, or second valve must be installed on the line or valve.
- F. Accessible valves shall be monitored by leak-checking for fugitive emissions at least quarterly using an approved gas analyzer with a directed maintenance program. Sealless/leakless valves (including, but not limited to, welded bonnet bellows and diaphragm

valves) and relief valves equipped with a rupture disc upstream or venting to a control device are not required to be monitored. For valves equipped with rupture discs, a pressure-sensing device shall be installed between the relief valve and rupture disc to monitor disc integrity. All leaking discs shall be replaced at the earliest opportunity but no later than the next process shutdown.

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

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

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

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

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

- H. Damaged or leaking valves, connectors, compressor seals, pump seals, and agitator seals found to be emitting VOC in excess of 500 parts per million by volume (ppmv) or found by visual inspection to be leaking (e.g., dripping process fluids) shall be tagged and replaced or repaired. A leaking component shall be repaired as soon as practicable, but no later than 15 days after the leak is found. If the repair of a component would require a unit shutdown that would create more emissions than the repair would eliminate, the repair may be delayed until the next scheduled shutdown. All leaking components which cannot be repaired until a scheduled shutdown shall be identified for such repair by tagging. A listing of all components that qualify for delay of repair shall be maintained on a delay of repair list. The cumulative daily emissions from all components on the delay of repair list shall be estimated by

multiplying by 24 the mass emission rate for each component calculated in accordance with the instructions in 30 TAC 115.782 (c)(1)(B)(i)(II). The calculations of the cumulative daily emissions from all components on the delay of repair list shall be updated within ten days of when the latest leaking component is added to the delay of repair list. When the cumulative daily emission rate of all components on the delay of repair list times the number of days until the next scheduled unit shutdown is equal to or exceeds the total emissions from a unit shutdown as calculated in accordance with 30 TAC 115.782 (c)(1)(B)(i)(I), the TCEQ Regional Manager and any local programs shall be notified and may require early unit shutdown or other appropriate action based on the number and severity of tagged leaks awaiting shutdown. This notification shall be made within 15 days of making this determination.

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

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

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

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

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

Where:

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

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

V_t = the total number of valves in the facility subject to the monitoring requirements, as of the last day of the monitoring period, not including nonaccessible and unsafe to-monitor valves.

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

- K. Records of repairs shall include date of repairs, repair results, justification for delay of repairs, and corrective actions taken for all components. Records of instrument monitoring shall indicate dates and times, test methods, and instrument readings. The instrument monitoring record shall include the time that monitoring took place for no less than 95% of the instrument readings recorded. Records of physical inspections shall be noted in the operator's log or equivalent.

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

28CNTA (Connectors Inspected Annually) - (EPN ACRO-FUG)

- 32. In addition to the weekly physical inspection required by Item E of Special Condition No. 28, all connectors in gas/vapor and light liquid service shall be monitored annually with an approved gas analyzer in accordance with Items F thru J of Special Condition No. 28. Alternative monitoring frequency schedules (“skip options”) of Title 40 Code of Federal Regulations Part 63, Subpart H, National Emission Standards for Organic Hazardous Air Pollutants for Equipment Leaks, may be used in lieu of the monitoring frequency required by this permit condition. Compliance with this condition does not assure compliance with requirements of applicable state or federal regulation and does not constitute approval of alternative standards for these regulations.

Piping, Valves, Pumps, and Compressors in contact with MMP and TRS – 28AVO (EPN BMT-1M, EPN F-1, EPN MMP-FUG, EPN BMT-2M, EPN BMT-1E/T, EPN Storage, and DMDS-FUG)

- 33. Except as may be provided for in the Special Conditions of this permit, the following requirements apply to the above-referenced equipment: **(9/18)**
 - A. Audio, olfactory, and visual checks for leaks within the operating area shall be made every twelve hours.
 - B. Immediately, but no later than one hour upon detection of a leak, plant personnel shall take at least one of the following actions:
 - (1) Isolate the leak.
 - (2) Commence repair or replacement of the leaking component.
 - (3) Use a leak collection/containment system to prevent the leak until repair or replacement can be made if immediate repair is not possible.

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

- C. This condition replaces Special Condition Nos. 27-29 for compounds containing 10 percent by weight or more of the following compounds:
 - Carbon Disulfide
 - Chemical Plant Waste Mixtures
 - Diethyl Sulfide (DES)
 - Dimethyl Disulfide
 - Dimethyl Sulfide
 - Ethyl Mercaptan
 - Hydrogen Sulfide
 - Methyl Mercaptan
 - Methylmercaptopropionaldehyde

Tertiary Butyl Mercaptan

Capture System Requirements

34. The following requirements apply to capture systems for EPN FLARE: **(11/19)**
- A. Conduct a once a month visual, audible, and/or olfactory inspection of the capture system to verify there are no leaking components in the capture system; or
 - B. Once a year, verify the capture system is leak-free by inspecting in accordance with 40 CFR Part 60, Appendix A, Test Method 21. Leaks shall be indicated by an instrument reading greater than or equal to 500 ppmv above background.
 - C. The control device shall not have a bypass.
 - D. If any of the above inspections is not satisfactory, the permit holder shall promptly take necessary corrective action.
35. The following requirements apply to capture systems for EPN INCIN and EPN SULFOX-TO. **(11/19)**
- A. Conduct a once a month visual, audible, and/or olfactory inspection of the capture system to verify there are no leaking components in the capture system; or
 - B. Once a year, verify the capture system is leak-free by inspecting in accordance with 40 CFR Part 60, Appendix A, Test Method 21. Leaks shall be indicated by an instrument reading greater than or equal to 500 ppmv above background.
 - C. The bypass for the control device shall comply with either of the following requirements:
 - (1) Install a flow indicator that records and verifies zero flow at least once every 15 minutes immediately downstream of each valve that if opened would allow a vent stream to bypass the control device and be emitted, either directly or indirectly, to the atmosphere; or
 - (2) Once a month, inspect the valves, verifying the position of the valves and the condition of the car seals prevent flow out the bypass.
- A deviation shall be reported if the monitoring or inspections indicate bypass of the control device when it is required to be in service. **(03/19)**
- D. If any of the above inspections is not satisfactory, the permit holder shall promptly take necessary corrective action.

Acrolein Operations (Disaster Prevention and Mitigation)

36. The following requirements apply to process piping, valves, pumps, and compressors in acrolein service:
- A. Audio, olfactory, and visual checks for acrolein leaks shall be made every 12 hours within the acrolein operating area. The date and time of each check shall be recorded.

- B. Immediately, but no later than one hour upon detection of a leak, plant personnel shall take the following actions:
- (1) Isolate the leak within eight hours;
 - (2) Commence repair or replacement of the leaking component within four hours; and,
 - (3) If immediate repair is not possible, a leak collection/containment system will be used to prevent the leak or the facility shall be shutdown until repair or replacement can be made. Containment can include the adjustment of bolts, fittings, packing glands, and pump/compressor seals as appropriate to contain the leak.

Records shall be maintained of all leaks, repairs, and replacements made. These records shall be maintained for a period of two years at the plant site and shall be made immediately available at the request of TCEQ personnel.

37. The holder of this permit shall only store acrolein in Tank Nos. D-8501A, D-8501B, and D-8501C. The acrolein tanks shall be in a restricted access area from plant vehicles and personnel. Each acrolein storage tank is limited to a maximum storage temperature of 100°F at all times.
38. There shall be at least one operator on duty at all times when the acrolein unit is in operation.
39. All Sulfox unit operating personnel at these facilities shall be properly trained to recognize acrolein leaks. Records shall be kept which indicate the type of training given to the employees and the appropriate dates.
40. All acrolein storage vessels shall be equipped with a rupture disc upstream of the relief valves. A pressure gauge or equivalent device shall be installed between the relief valve and rupture disc to monitor disc integrity. All leaking discs shall be replaced at the earliest opportunity, but not later than the next scheduled acrolein storage tank maintenance outage. A spare parts inventory of rupture discs for the acrolein storage vessels shall be maintained at the site.
41. All acrolein storage vessels equipped with a rupture disc upstream of a relief valve shall be properly maintained and operated during operation of the acrolein storage vessels. Cleaning and maintenance of the rupture disc and relief valves shall be performed as recommended by the manufacturer and as necessary so that the equipment efficiency can be adequately maintained.
42. The holder of this permit shall maintain a complete emergency response plan at the plant site which describes the course of action to be taken by their chemical personnel in the event that an acrolein upset or a severe acrolein leak occurs. This plan shall include the steps to minimize the situation by acrolein ground level foam and/or water mitigation methods, procedures for notification of the proper civil authorities, any potentially-affected residences, and any other appropriate organizations.
43. Under no circumstances shall the acrolein storage tanks be allowed to vent to the atmosphere.
44. Hydroquinone or similar inhibitor will be added to the acrolein prior to its storage in these tanks.

Maintenance, Startup, and Shutdown

45. This permit authorizes the planned maintenance, startup, and shutdown (MSS) activities summarized in the MSS Activity Summary (Special Condition No. 46) attached to this permit. **(5/23)**

Special Condition No. 46 identifies MSS activities that may be performed at the plant. Emissions from activities identified in Special Condition No. 46 shall be considered to be equal to the potential to emit represented in the permit application. The estimated emissions from the activities listed in Special Condition No. 46 must be revalidated annually. This revalidation shall consist of the estimated emissions for each type of activity and the basis for that emission estimate.

The performance of each planned MSS activity and the emissions associated with it shall be recorded and include at least the following information:

- A. the process unit at which emissions from the MSS activity occurred, including the emission point number and common name of the process unit;
 - B. the type of planned MSS activity and the reason for the planned activity;
 - C. the common name and the facility identification number, if applicable, of the facilities at which the MSS activity and emissions occurred;
 - D. the date and time of the MSS activity and its duration;
 - E. the estimated quantity of each air contaminant, or mixture of air contaminants, emitted with the data and methods used to determine it. The emissions shall be estimated using the methods identified in the permit application, consistent with good engineering practice.
46. All MSS emissions shall be summed monthly and the rolling 12-month emissions shall be updated on a monthly basis. This permit authorizes emissions from the following temporary facilities used to support planned MSS activities at permanent site facilities: frac tanks, containers, and vacuum trucks. Emissions from temporary facilities are authorized provided the temporary facility (a) does not remain on the plant site for more than 12 consecutive months, (b) is used solely to support planned MSS activities at the permanent site facilities listed in this Special Condition, and (c) does not operate as a replacement for an existing authorized facility. **(5/23)**

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

A. MSS Activity Summary

MSS Activity	Activity	EPN(s)
Storage Tanks	Ventilation, cleaning, inspection	INCIN. SULFOX-TO, FLARE
Methanol Tanks D307, D2307 MSS	Ventilation, cleaning, inspection	D307, D2307
MSS Loading Vessel Purges	Railcar, truck, isocontainer purge	FLARE
Process Vessels and Equipment	Clearing, draining, purging, degassing	INCIN. SULFOX-TO, FLARE

MSS Activity	Activity	EPN(s)
Process Startup and Shutdown	All process units	INCIN, SULFOX-TO, FLARE
Acrolein Unit Cleaning	Filter cleaning	ColumnMain, SULFOX-TO

47. Process units and facilities, with the exception of those identified in Special Condition Nos. 49 and 50 shall be depressurized, emptied, degassed, and placed in service in accordance with the following requirements.
- A. The process equipment shall be depressurized to a control device or a controlled recovery system prior to venting to atmosphere, degassing, or draining liquid. Equipment that only contains material that is liquid with VOC partial pressure less than 0.50 psi at the normal process temperature and 95°F may be opened to atmosphere and drained in accordance with paragraph C of this special condition. The vapor pressure at 95°F may be used if the actual temperature of the liquid is verified to be less than 95°F and the temperature is recorded.
 - B. If mixed phase materials must be removed from process equipment, the cleared material shall be routed to a knockout drum or equivalent to allow for managed initial phase separation. If the VOC partial pressure is greater than 0.50 psi at either the normal process temperature or 95°F, any vents in the system must be routed to a control device or a controlled recovery system. The vapor pressure at 95°F may be used if the actual temperature of the liquid is verified to be less than 95°F and the temperature is recorded. Control must remain in place until degassing has been completed or the system is no longer vented to atmosphere.
 - C. All liquids from process equipment or storage vessels must be removed to the maximum extent practical prior to opening equipment to commence degassing and/or maintenance. Liquids must be drained into a closed vessel or closed liquid recovery system unless prevented by the physical configuration of the equipment. If it is necessary to drain liquid into an open pan or sump, the liquid must be covered or transferred to a covered vessel within one hour of being drained.
 - D. If the VOC partial pressure is greater than 0.50 psi at the normal process temperature or 95°F, facilities shall be degassed using good engineering practice to ensure air contaminants are removed from the system through the control device or controlled recovery system to the extent allowed by process equipment or storage vessel design. The vapor pressure at 95°F may be used if the actual temperature of the liquid is verified to be less than 95°F and the temperature is recorded. The facilities to be degassed shall not be vented directly to atmosphere, except as necessary to establish isolation of the work area or to monitor VOC concentration following controlled depressurization. The venting shall be minimized to the maximum extent practicable and actions taken recorded. The control device or recovery system utilized shall be recorded with the estimated emissions from controlled and uncontrolled degassing calculated using the methods that were used to determine allowable emissions for the permit application.
 - (1) For MSS activities, the following option may be used in lieu of (2) below. The facilities being prepared for maintenance shall not be vented directly to atmosphere until the

VOC concentration has been verified to be less than 10 percent of the lower explosive limit (LEL) per the site safety procedures.

- (2) The locations and/or identifiers where the purge gas or steam enters the process equipment or storage vessel and the exit points for the exhaust gases shall be recorded (process flow diagrams [PFDs] or piping and instrumentation diagrams [P&IDs] may be used to demonstrate compliance with the requirement). If the process equipment is purged with a gas, two system volumes of purge gas must have passed through the control device or controlled recovery system before the vent stream may be sampled to verify acceptable VOC concentration prior to uncontrolled venting. The VOC sampling and analysis shall be performed using an instrument meeting the requirements of Special Condition 49. The sampling point shall be upstream of the inlet to the control device or controlled recovery system. The sample ports and the collection system must be designed and operated such that there is no air leakage into the sample probe or the collection system downstream of the process equipment or vessel being purged. If there is not a connection (such as a sample, vent, or drain valve) available from which a representative sample may be obtained, a sample may be taken upon entry into the system after degassing has been completed. The sample shall be taken from inside the vessel so as to minimize any air or dilution from the entry point. The facilities shall be degassed to a control device or controlled recovery system until the VOC concentration is less than 10,000 ppmv or 10 percent of the LEL. Documented site procedures used to de-inventory equipment to a control device for safety purposes (i.e., hot work or vessel entry procedures) that achieve at least the same level of purging may be used in lieu of the above.

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

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

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

$$\text{VOC Concentration} = \text{Concentration as read from the instrument} * \text{RF}$$

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

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

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

measured contaminant concentration (ppmv) < release concentration.

Where the release concentration is:

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

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

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

- C. Lower explosive limit measured with a lower explosive limit detector.
- (1) The detector shall be calibrated within 30 days of use with a certified pentane gas standard at 25% of the lower explosive limit (LEL) for pentane. Records of the calibration date/time and calibration result (pass/fail) shall be maintained.
 - (2) A functionality test shall be performed on each detector within 24 hours of use with a certified gas standard at 25% of the LEL for pentane. The LEL monitor shall read no lower than 90% of the calibration gas certified value. Records, including the date/time and test results, shall be maintained.
 - (3) A certified methane gas standard equivalent to 25% of the LEL for pentane may be used for calibration and functionality tests provided that the LEL response is within 95% of that for pentane.

49. This permit authorizes emissions from EPN D307 and D2307 for the storage tanks identified in the attached facility list during planned floating roof landings. Tank roofs may only be landed for changes of tank service or tank inspection/maintenance as identified in the permit application. Emissions from change of service tank landings, for which the tank is not cleaned and degassed, shall not exceed 10 tons of VOC in any rolling 12 month period. Tank roof landings include all operations when the tank floating roof is on its supporting legs. These emissions are subject to the maximum allowable emission rates indicated on the MAERT. The following requirements apply to tank roof landings.

- A. The tank liquid level shall be continuously lowered after the tank floating roof initially lands on its supporting legs until the tank has been drained to the maximum extent practicable without entering the tank. Liquid level may be maintained steady for a period of up to two hours if necessary to allow for valve lineups and pump changes necessary to drain the tank. This

requirement does not apply where the vapor under a floating roof is routed to control or a controlled recovery system during this process.

- B. If the VOC partial pressure of the liquid previously stored in the tank is greater than 0.50 psi at 95°F, tank refilling or degassing of the vapor space under the landed floating roof must begin within 24 hours after the tank has been drained unless the vapor under the floating roof is routed to control or a controlled recovery system during this period. The tank shall not be opened except as necessary to set up for degassing and cleaning. Floating roof tanks with liquid capacities less than 100,000 gallons may be degassed without control if the VOC partial pressure of the standing liquid in the tank has been reduced to less than 0.02 psia prior to ventilating the tank. Controlled degassing of the vapor space under landed roofs shall be completed as follows:
- (1) Any gas or vapor removed from the vapor space under the floating roof must be routed to a control device or a controlled recovery system and controlled degassing must be maintained until the VOC concentration is less than 10,000 ppmv or 10 percent of the LEL. The locations and identifiers of vents other than permanent roof fittings and seals, control device or controlled recovery system, and controlled exhaust stream shall be recorded. There shall be no other gas/vapor flow out of the vapor space under the floating roof when degassing to the control device or controlled recovery system.
 - (2) The vapor space under the floating roof shall be vented using good engineering practice to ensure air contaminants are flushed out of the tank through the control device or controlled recovery system to the extent allowed by the storage tank design.
 - (3) A volume of purge gas equivalent to twice the volume of the vapor space under the floating roof must have passed through the control device or into a controlled recovery system, before the vent stream may be sampled to verify acceptable VOC concentration. The measurement of purge gas volume shall not include any make-up air introduced into the control device or recovery system. The VOC sampling and analysis shall be performed as specified in Special Condition No. 42.
 - (4) The sampling point shall be upstream of the inlet to the control device or controlled recovery system. The sample ports and the collection system must be designed and operated such that there is no air leakage into the sample probe or the collection system downstream of the process equipment or vessel being purged.
 - (5) Degassing must be performed every 24 hours unless there is no standing liquid in the tank or the VOC partial pressure of the remaining liquid in the tank is less than 0.15 psia.
- C. The tank shall not be opened or ventilated without control, except as allowed by (1) or (2) below until one of the criteria in part D of this condition is satisfied.

Minimize air circulation in the tank vapor space.

- (1) One manway may be opened to allow access to the tank to remove or de-volatilize the remaining liquid. Other manways or access points may be opened as necessary to remove or de-volatilize the remaining liquid. Wind barriers shall be installed at all open manways and access points to minimize air flow through the tank.
 - (2) Access points shall be closed when not in use
- D. The tank may be opened without restriction and ventilated without control, after all standing liquid has been removed from the tank or the liquid remaining in the tank has a VOC partial

pressure less than 0.02 psia. These criteria shall be demonstrated in any one of the following ways.

- (1) Low VOC partial pressure liquid that is soluble with the liquid previously stored may be added to the tank to lower the VOC partial pressure of the liquid mixture remaining in the tank to less than 0.02 psia. This liquid shall be added during tank degassing if practicable. The estimated volume of liquid remaining in the drained tank and the volume and type of liquid added shall be recorded. The liquid VOC partial pressure may be estimated based on this information and engineering calculations.
- (2) If water is added or sprayed into the tank to remove standing VOC, one of the following must be demonstrated:
 - (a) Take a representative sample of the liquid remaining in the tank and verify no visible sheen using the static sheen test from 40 CFR 435 Subpart A Appendix 1.
 - (b) Take a representative sample of the liquid remaining in the tank and verify hexane soluble VOC concentration is less than 1000 ppmw using EPA method 1664 (may also use 8260B or 5030 with 8015 from SW-846).
 - (c) Stop ventilation and close the tank for at least 24 hours. When the tank manway is opened after this period, verify VOC concentration is less than 1000 ppmv through the procedure in Special Condition 42.
- (3) No standing liquid verified through visual inspection.

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

- E. Tanks shall be refilled as rapidly as practicable until the roof is off its legs with the following exceptions:
 - (1) Only one tank with a landed floating roof can be filled at any time at a rate not to exceed 4000 gallons/hr.
 - (2) The vapor space below the tank roof is directed to a control device when the tank is refilled until the roof is floating on the liquid. The control device used and the method and locations used to connect the control device shall be recorded. All vents from the tank being filled must exit through the control device.
- F. The occurrence of each roof landing and the associated emissions shall be recorded and the rolling 12-month tank roof landing emissions shall be updated on a monthly basis. These records shall include at least the following information:
 - (1) the identification of the tank and emission point number, and any control devices or recovery systems used to reduce emissions;
 - (2) the reason for the tank roof landing;
 - (3) for the purpose of estimating emissions, the date, time, and other information specified for each of the following events:
 - (a) the roof was initially landed,
 - (b) all liquid was pumped from the tank to the extent practical,
 - (c) start and completion of controlled degassing, and total volumetric flow,

- (d) all standing liquid was removed from the tank or any transfers of low VOC partial pressure liquid to or from the tank including volumes and vapor pressures to reduce tank liquid VOC partial pressure to <0.02 psi,
 - (e) if there is liquid in the tank, VOC partial pressure of liquid, start and completion of uncontrolled degassing, and total volumetric flow,
 - (f) refilling commenced, liquid filling the tank, and the volume necessary to float the roof; and
 - (g) tank roof off supporting legs, floating on liquid;
- (4) the estimated quantity of each air contaminant, or mixture of air contaminants, emitted between events c and g with the data and methods used to determine it. The emissions associated with roof landing activities shall be calculated using the methods described in Section 7.1.3.2 of AP-42 "Compilation of Air Pollution Emission Factors, Chapter 7 - Storage of Organic Liquids" dated November 2006 and the permit application.
50. Fixed roof storage tanks are subject to the requirements of Special Condition 49.C. and 49.D. If the ventilation of the vapor space is controlled, the emission control system shall meet the requirements of Special Condition 49.B.(1) through 49.B.(4). Records shall be maintained per Special Condition 49.F.(3)c through 49.F.(3)e, and 49.F.(4).
51. Additional occurrences of MSS activities authorized by this permit may be authorized under permit by rule only if conducted in compliance with this permit's procedures, emission controls, monitoring, and recordkeeping requirements applicable to the activity. **(5/23)**
52. Control devices required by this permit for emissions from planned MSS activities are limited to those types identified in this condition. Each device used must meet all the requirements identified for that type of control device. **(5/23)**
- A. The plant flare system operated in accordance with Special Condition No. 11.
 - B. The incinerator (EPN INCIN) operated in accordance with Special Condition No. 13.
 - C. The Sulfox TO (EPN SULFOX-TO) operated in accordance with Special Condition 14.
53. In the event the flare (EPN FLARE) shuts down for maintenance purposes during a plant shutdown, with the exception of loading vessel purges (FIN DMDS-MSSPURGE), a temporary flare meeting the requirements of Special Condition No. 11 shall be installed in a location near the existing flare. The temporary flare shall be operated during the time the flare is shut down. **(5/23)**

Projected Actual Emissions

54. The project associated with the permit amendment application PI-1 dated October 3, 2022, TCEQ NSR Project No. 348325, was determined to not be subject to major new source review through the use of projected actual emission rates for one or more facilities associated with the project. Actual emissions from the sources using a projected actual as listed in the table of this special condition shall be monitored as represented in the application and records maintained, and reports provided in accordance with 30 TAC §116.127. Records shall be maintained for ten calendar years from the resumption of regular operations. Records shall include the date of resumption of regular

operations after the project change. Records are not required to be maintained prior to the start of operations of the new dimethyl disulfide production line. **(5/23)**

Pollutant: SO ₂						
Application project emissions increase: 0.06 tpy						
Net project increase:						
FIN	EPN	Baseline Actual Emissions (tpy)	Post Project Allowable (tpy)	Projected Actual Emissions (tpy)	Correction (tpy)	Monitoring Special Condition Nos.
BMT-1M	FLARE	31.02	448.97	37.23	6.20	11
BMT-1M	INCIN	*	78.00	*	*	13
BMT-2	FLARE	35.00	448.97	42.00	7.00	11
BMT-2	INCIN	*	78.00	*	*	13
H2S-1	FLARE	3.81	448.97	4.57	4.57	11
DMDS-PROCESS	INCIN	0	0.005	N/A	N/A	11
DMDS-PROCESS	FLARE	0	0.005	N/A	N/A	11
DMDS-TK	INCIN	0	0.0002	N/A	N/A	13
DMDS-TK	FLARE	0	0.0002	N/A	N/A	11
DMDS-LOADT	INCIN	0	0.0005	N/A	N/A	13
DMDS-LOADT	FLARE	0	0.0005	N/A	N/A	11
DMDS-LOADR	INCIN	0	0.0005	N/A	N/A	13
DMDS-LOADR	FLARE	0	0.0005	N/A	N/A	11
DMDS-LOADI	INCIN	0	0.0005	N/A	N/A	13
DMDS-LOADI	FLARE	0	0.0005	N/A	N/A	11
DMDS-PRUGE	FLARE	0	0.003	N/A	N/A	11
DMDS-MSSPURGE	FLARE	0	0.05	N/A	N/A	11
INCIN	INCIN	32.34	78.0	38.80	11.40	11

Total Baseline Actual (tpy)	102.17				
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The project seeks to authorize a new dimethyl disulfide production line.

* Emissions from FIN BMT-1/EPN INCIN and FIN BMT-2/EPN INCIN are represented under FIN INCIN/EPN INCIN.

A report is due to the Executive Director in any calendar year in which the actual emissions for the project exceed the total baseline actual emissions in the table above by 50.00 tpy netting significant emission rate, and a projected actual emission for any facility is exceeded in accordance with 116.127(c).

If netting is triggered during the project and a projected actual emission is exceeded, and actual emissions do not exceed the netting significant emission rate for the calendar year, the permit holder will maintain an emissions record for the calendar year and no report is required.

Permit by Rule

55. The following sources and/or activities are authorized under a Permit by Rule (PBR) by Title 30 Texas Administrative Code Chapter 106 (30 TAC Chapter 106). These lists are not intended to be all inclusive and can be altered without modifications to this permit. **(5/23)**

Authorization	Source or Activity
30 TAC § 106.263 (effective 11/01/01)	Routine Facility Maintenance
PBR Registration No. 156318	Fugitive components
PBR Registration No. 157445	Fugitive components
PBR Registration No. 162857	Fugitive components
PBR Registration No. 163175	Fugitive components
PBR Registration No. 163312	Fugitive components
PBR Registration No. 165843	Fugitive components
PBR Registration No. 169473	Flare alternate operating scenario

Recordkeeping

56. The records required by these special conditions shall be maintained in either hard copy or electronic format and shall be maintained for at least five years rather than the two-year period specified in General Condition No. 7. These records shall be made immediately available at the request of personnel from the TCEQ or any air pollution control agency with jurisdiction. **(9/18)**

Date: May 2, 2023

Emission Sources - Maximum Allowable Emission Rates

Permit Number 865A and PSDTX1016M1

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

Air Contaminants Data

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates	
			lbs/hour	TPY (4)
INCIN	Incinerator - Total	PM	0.89	3.90
		PM ₁₀	0.89	3.90
		PM _{2.5}	0.89	3.90
		SO ₂	139.00	78.00
		NO _x	1.57	6.87
		CO	2.03	8.90
		VOC	0.37	1.48
		H ₂ S	0.10	0.42
		TRS	0.36	1.43
SULFOX-TO	Thermal Oxidizer 1	PM	5.71	25.01
		PM ₁₀	5.71	25.01
		PM _{2.5}	5.71	25.01
		SO ₂ (Normal Operations)	23.66	13.93
		SO ₂ (MSS)	100.00	
		NO _x	16.16	70.66
		CO	32.70	70.52
		VOC	6.66	15.26
		TRS	0.02	0.01
S-1	Sulfur Storage Tank	SO ₂	0.02	0.02
		H ₂ S	0.03	0.02
		TRS	0.03	0.02
S-3	Sulfur Truck	SO ₂	0.06	0.06
		H ₂ S	0.02	0.02
		TRS	0.02	0.02

Emission Sources - Maximum Allowable Emission Rates

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates	
			lbs/hour	TPY (4)
F-1	H ₂ S Plant Fugitives (8)	VOC	<0.01	0.02
		H ₂ S	< 0.01	<0.01
		TRS	<0.01	0.02
BMT-1M	Train 1 – MeSH Production Fugitives (8)	VOC	0.19	0.85
		H ₂ S	0.02	0.07
		TRS	0.16	0.72
BMT-2M	Train 2 – MeSH Production Fugitives (8)	VOC	0.06	0.25
		H ₂ S	0.02	0.10
		TRS	0.04	0.17
ACRO-Fug	Acrolein Process Fugitives (8)	VOC	0.35	1.52
		H ₂ S	< 0.01	< 0.01
		TRS	< 0.01	< 0.01
MMP-Fug	MMP Process Area Fugitives (8)	VOC	0.17	0.73
		TRS	0.08	0.35
ColumnMain	Acrolein Unit Column/Filter Cleaning	VOC	0.01	0.01
D307	Methanol Tank	VOC	2.32	0.22
	Methanol Tank (MSS)	VOC (9)	3.08	1.86
D2307	Methanol Tank	VOC	2.32	0.22
	Methanol Tank (MSS)	VOC (9)	3.08	1.86
D398	Gasoline Tank	VOC	4.56	0.22
D215	Diesel Tank	VOC	0.02	0.01
D399	Diesel Tank	VOC	0.02	0.01
D3191A	Diesel Tank	VOC	0.02	0.01
D3191B	Diesel Tank	VOC	0.02	0.01
D8540	Caustic Tank	NaOH	0.01	0.01
FLARE	Flare Limits both routine and MSS operation (5) (6)	CO	193.54	74.35
		H ₂ S	24.08	2.82

Emission Sources - Maximum Allowable Emission Rates

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates	
			lbs/hour	TPY (4)
		H ₂ SO ₄	7.21	31.57
		H ₂ SO ₄ (5)	29.18	
		NO _x	22.56	8.67
		SO ₂	625.00	448.96
		SO ₂ (5)	3,065.51	
		TRS	37.87	8.84
		TRS (5)	92.52	
		VOC	49.38	6.63
		VOC (5)	70.32	
H401/H402	Sulfur Heater 401 & Methane Heater 402 (7)	CO	1.32	5.77
		NO _x	1.61	7.04
		PM	0.11	0.52
		PM ₁₀	0.11	0.52
		PM _{2.5}	0.11	0.52
		SO ₂	0.01	0.05
		VOC	0.09	0.38
H501/H502	Sulfur Heater 501 & Methane Heater 502 (7)	CO	1.32	5.77
		NO _x	1.61	7.04
		PM	0.11	0.52
		PM ₁₀	0.11	0.52
		PM _{2.5}	0.11	0.52
		SO ₂	0.01	0.05
		VOC	0.09	0.38
SULFOX-CT	Sulfox Cooling Tower	PM	0.04	0.18
		PM ₁₀	0.04	0.18
		PM _{2.5}	0.04	0.18
		VOC	0.43	1.89

Emission Sources - Maximum Allowable Emission Rates

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates	
			lbs/hour	TPY (4)
SULFOX-INH	Bagfilter	PM	0.08	0.01
		PM ₁₀	0.08	0.01
		PM _{2.5}	0.08	0.01
BMT-1E/T	Train 1 – EtSH Production Fugitives (8)	VOC	0.07	0.31
		H ₂ S	< 0.01	0.01
		TRS	< 0.01	0.01
STORAGE	Storage Tanks Fugitives (8)	VOC	0.21	0.93
		TRS	0.18	0.80
SulfoxChlr	Sulfox Chiller System (8)	HCFC	0.01	0.01
H202	Heat Transfer Fluid Heater (31 MMBtu/hr)	CO	2.59	11.32
		NO _x	3.08	13.48
		PM	0.23	1.02
		PM ₁₀	0.23	1.02
		PM _{2.5}	0.23	1.02
		SO ₂	0.02	0.08
		VOC	0.17	0.74
H2202	Heat Transfer Fluid Heater (31 MMBtu/hr)	CO	2.59	11.32
		NO _x	3.08	13.48
		PM	0.23	1.02
		PM ₁₀	0.23	1.02
		PM _{2.5}	0.23	1.02
		SO ₂	0.02	0.08
		VOC	0.17	0.74
X-426A	Steam Boiler (15.8 MMBtu/hr)	CO	1.33	5.81
		NO _x	2.05	9.00
		PM	0.12	0.53
		PM ₁₀	0.12	0.53

Emission Sources - Maximum Allowable Emission Rates

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates	
			lbs/hour	TPY (4)
		PM _{2.5}	0.12	0.53
		SO ₂	0.01	0.04
		VOC	0.09	0.38
X-426B	Steam Boiler (15.8 MMBtu/hr)	CO	1.33	5.81
		NO _x	2.05	9.00
		PM	0.12	0.53
		PM ₁₀	0.12	0.53
		PM _{2.5}	0.12	0.53
		SO ₂	0.01	0.04
		VOC	0.09	0.38
DMDS-LOADT	DMDS Truck Loading - Uncaptured Emissions	VOC	0.39	<0.01
		TRS	0.39	<0.01
DMDS-CT	DMDS Cooling Tower	PM	0.01	0.04
		PM ₁₀	0.01	0.03
		PM _{2.5}	<0.01	<0.01
		VOC	0.04	0.18
DMDS-FUG	DMDS Fugitives (8)	VOC	0.22	0.98
		H ₂ S	0.03	0.13
		TRS	0.22	0.98

(1) Emission point identification - either specific equipment designation or emission point number from plot plan.

(2) Specific point source name. For fugitive sources, use area name or fugitive source name.

- (3)
- CO - carbon monoxide
 - NO_x - total oxides of nitrogen
 - PM - total particulate matter, suspended in the atmosphere, including PM₁₀ and PM_{2.5}
 - PM₁₀ - particulate matter equal to or less than 10 microns in diameter, including PM_{2.5}
 - PM_{2.5} - particulate matter equal to or less than 2.5 microns in diameter
 - SO₂ - sulfur dioxide
 - VOC - volatile organic compounds as defined in Title 30 Texas Administrative Code § 101.1
 - NaOH - sodium hydroxide
 - H₂SO₄ - sulfuric acid
 - H₂S - hydrogen sulfide
 - TRS - total reduced sulfur, includes H₂S and sulfur bearing VOC, excludes SO₂
 - HCFC - hydrochlorofluorocarbon

Emission Sources - Maximum Allowable Emission Rates

- (4) Compliance with annual emission limits (tons per year) is based on a 12 month rolling period.
- (5) Allowable Flare short term rate during high flow events, limited to 100 hours per year.
- (6) Includes operation of the flare as the backup control device for EPN SULFUX-TO when it is not operating and 416 hours per calendar year for EPN INCIN when it is not operating.
- (7) Common exhaust stack.
- (8) Emission rate is an estimate and is enforceable through compliance with the applicable special condition(s) and permit application representations.
- (9) Planned startup, shutdown and maintenance activity emissions.

Date: May 2, 2023