FEDERAL OPERATING PERMIT

A FEDERAL OPERATING PERMIT IS HEREBY ISSUED TO
Oxy Vinyls, LP

AUTHORIZING THE OPERATION OF
Pasadena PVC Plant
Plastics Material and Resin Manufacturing

LOCATED AT
Harris County, Texas
Latitude 29° 43′ 3″ Longitude 95° 9′ 6″
Regulated Entity Number: RN102518065

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: O1362 Issuance Date: _____

_____
For the Commission

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General Terms and Conditions

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

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

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

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

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

Special Terms and Conditions:

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

1. Permit holder shall comply with the following requirements:

    A. Emission units (including groups and processes) in the Applicable Requirements Summary attachment shall meet the limitations, standards, equipment specifications, monitoring, recordkeeping, reporting, testing, and other requirements listed in the Applicable Requirements Summary attachment to assure compliance with the permit.

    B. The textual description in the column titled "Textual Description" in the Applicable Requirements Summary attachment is not enforceable and is not deemed as a substitute for the actual regulatory language. The Textual Description is provided for information purposes only.

    C. A citation listed on the Applicable Requirements Summary attachment, which has a notation [G] listed before it, shall include the referenced section and subsection for all commission rules, or paragraphs for all federal and state regulations and all subordinate paragraphs, subparagraphs and clauses, subclauses, and items contained within the referenced citation as applicable requirements.

    D. When a grouped citation, notated with a [G] in the Applicable Requirements Summary, contains multiple compliance options, the permit holder must keep records of when each compliance option was used.

    E. Emission units subject to 40 CFR Part 63, Subparts ZZZZ, DDDDD and HHHHHHH as identified in the attached Applicable Requirements Summary table are subject to 30 TAC

Chapter 113, Subchapter C, §§ 113.1090, 113.1130, and 113.1555 respectively which incorporates the 40 CFR Part 63 Subpart by reference.

F. For the purpose of generating emission reduction credits through 30 TAC Chapter 101, Subchapter H, Division 1 (Emission Credit Banking and Trading), the permit holder shall comply with the following requirements:

(i) Title 30 TAC § 101.302 (relating to General Provisions)

(ii) Title 30 TAC § 101.303 (relating to Emission Reduction Credit Generation Certification)

(iii) Title 30 TAC § 101.304 (relating to Mobile Emission Reduction Credit Generation and Certification)

(iv) Title 30 TAC § 101.309 (relating to Emission Credit Banking and Trading)

(v) The terms and conditions by which the emission limits are established to generate the reduction credit are applicable requirements of this permit

G. The permit holder shall comply with the following 30 TAC Chapter 101, Subchapter H, Division 3 (Mass Emission Cap and Trade Program) Requirements:

(i) Title 30 TAC § 101.352 (relating to General Provisions)

(ii) Title 30 TAC § 101.353 (relating to Allocation of Allowances)

(iii) Title 30 TAC § 101.354 (relating to Allowance Deductions)

(iv) Title 30 TAC § 101.356 (relating to Allowance Banking and Trading)

(v) Title 30 TAC § 101.359 (relating to Reporting)

(vi) Title 30 TAC § 101.360 (relating to Level of Activity Certification)

(vii) The terms and conditions by which the emission limits are established to meet or exceed the cap are applicable requirements of this permit

H. For the purpose of generating discrete emission reduction credits through 30 TAC Chapter 101, Subchapter H, Division 4 (Discrete Emission Credit Banking and Trading), the permit holder shall comply with the following requirements:

(i) Title 30 TAC § 101.372 (relating to General Provisions)

(ii) Title 30 TAC § 101.373 (relating to Discrete Emission Reduction Credit Generation and Certification)

(iii) Title 30 TAC § 101.374 (relating to Mobile Discrete Emission Reduction Credit Generation and Certification)

(iv) Title 30 TAC § 101.378 (relating to Discrete Emission Credit Banking and Trading)

(v) The terms and conditions by which the emission limits are established to generate the discrete reduction credit are applicable requirements of this permit

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

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

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

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

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

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

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

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

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

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

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

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

   A. Visible emissions from stationary vents with a flow rate of less than 100,000 actual cubic feet per minute 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. For visible emissions from all other sources not specified in 30 TAC § 111.111(a)(1), (4), or (7); the permit holder shall comply with the following requirements:

(i) Title 30 TAC § 111.111(a)(8)(A) (relating to Requirements for Specified Sources)

(ii) Title 30 TAC § 111.111(a)(8)(B)(i) or (ii)

(iii) For a source subject to 30 TAC § 111.111(a)(8)(A), complying with 30 TAC § 111.111(a)(8)(B)(i) or (ii), and capable of producing visible emissions from, but not limited to, particulate matter, acid gases and NO_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 source which is required to comply with 30 TAC § 111.111(a)(8)(A) shall be conducted at least once during each calendar quarter unless the source is not operating for the entire quarter.

(2) Records of all observations shall be maintained.

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

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

(4) Compliance Certification:

(a) If visible emissions are not present during the observation, the RO may certify that the source is in compliance with the applicable opacity requirement in 30 TAC § 111.111(a)(8) and (a)(8)(A)

(b) However, if visible emissions are present during the observation, the permit holder shall either list this occurrence as a deviation on the next deviation report as required under 30 TAC § 122.145(2) or conduct the appropriate opacity test specified in 30 TAC § 111.111(a)(8)(B) as soon as practicable, but no later than 24 hours after observing visible emissions to determine if the source is in compliance with the opacity requirements. If an opacity test is performed and the source is determined to be in compliance, the RO may certify that the source is in compliance with the applicable opacity requirement. However, if an opacity test is performed and the source is determined to be out of compliance, the permit holder shall list this occurrence as a deviation on the next deviation report as required under 30 TAC § 122.145(2). The opacity test must be performed by a certified opacity reader.

D. Certification of opacity readers determining opacities under Method 9 (as outlined in 40 CFR Part 60, Appendix A) to comply with opacity monitoring requirements shall be accomplished by completing the Visible Emissions Evaluators Course, or approved agency equivalent, no more than 180 days before the opacity reading.

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

F. Permit holders for sites that have materials handling, construction, roads, streets, alleys, and parking lots shall comply with the following requirements:

(i) Title 30 TAC § 111.145 (relating to Construction and Demolition)

(ii) Title 30 TAC § 111.147 (relating to Roads, Streets, and Alleys)

(iii) Title 30 TAC § 111.149 (relating to Parking Lots)

G. 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)

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

(i) Title 30 TAC § 111.207 (relating to Exception for Recreation, Ceremony, Cooking, and Warmth)

(ii) Title 30 TAC § 111.219 (relating to General Requirements for Allowable Outdoor Burning)

(iii) Title 30 TAC § 111.221 (relating to Responsibility for Consequences of Outdoor Burning)

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

5. Permit holder shall comply with the following 30 TAC Chapter 115, Subchapter C requirements:

A. When filling stationary gasoline storage vessels (Stage I) for motor vehicle fuel dispensing facilities, constructed prior to November 15, 1992, with transfers to stationary storage tanks located at a facility which has dispensed no more than 10,000 gallons of gasoline in any calendar month after January 1, 1991, the permit holder shall comply with the following requirements specified in 30 TAC Chapter 115, Subchapter C:

(i) Title 30 TAC § 115.222(3) (relating to Control Requirements), as it applies to liquid gasoline leaks, visible vapors, or significant odors

(ii) Title 30 TAC § 115.222(6) (relating to Control Requirements)

(iii) Title 30 TAC § 115.224(1) (relating to Inspection Requirements), as it applies to liquid gasoline leaks, visible vapors, or significant odors

(iv) Title 30 TAC § 115.226(2)(B) (relating to Recordkeeping Requirements)

6. The permit holder shall comply with the following 30 TAC Chapter 115, Subchapter F requirements (relating to Cutback Asphalt Requirements):

A. Title 30 TAC § 115.512(2) (relating to Control Requirements)

7. The permit holder shall comply with the following requirements of 30 TAC Chapter 115, Subchapter F, Division 3, Degassing of Storage Tanks, Transport Vessels and Marine Vessels:

A. For degassing of stationary VOC storage tanks, the permit holder shall comply with the following requirements:

(i) Title 30 TAC § 115.541(a) - (c) (relating to Emission Specifications)

(ii) Title 30 TAC § 115.541(f) (relating to Emission Specifications), for floating roof storage tanks

(iii) 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.

(iv) Title 30 TAC § 115.542(b) - (d), (relating to Control Requirements)

(v) Title 30 TAC § 115.543 (relating to Alternate Control Requirements)

(vi) Title 30 TAC § 115.544(a)(1) and (a)(2) (relating to Inspection, Monitoring, and Testing Requirements), for inspections

(vii) Title 30 TAC § 115.544(b) (relating to Inspection, Monitoring, and Testing Requirements), for monitoring

(viii) Title 30 TAC § 115.544(b)(1) and (b)(2) (relating to Inspection, Monitoring, and Testing Requirements), for monitoring of control devices

(ix) Title 30 TAC § 115.544(b)(2)(A) - (J) (relating to Inspection, Monitoring, and Testing Requirements), for monitoring (as appropriate to the control device)

(x) 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

(xi) 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)

(xii) Title 30 TAC § 115.545(1) - (7), (9) - (11) and (13) (relating to Approved Test Methods)

(xiii) Title 30 TAC § 115.546(a), (a)(1) and (a)(3) (relating to Recordkeeping and Notification Requirements), for recordkeeping

(xiv) 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)

(xv) 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)

(xvi) Title 30 TAC § 115.546(b) (relating to Recordkeeping and Notification Requirements), for notification

(xvii) Title 30 TAC § 115.547(4) (relating to Exemptions)

8. The permit holder shall comply with the requirements of 30 TAC § 115.722(b) (relating to Site-wide Cap and Control Requirements) and the requirements of 30 TAC § 115.726(g) (relating to Recordkeeping and Reporting Requirements).

9. The permit holder shall comply with the requirements of 30 TAC § 115.726(e)(3)(A) for vent streams having no potential to emit HRVOC.

10. The permit holder shall comply with the requirements of 30 TAC § 115.726(e)(3)(A) for vent streams from sources exempt under 30 TAC § 115.727(c)(3).

11. 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)

12. 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)

13. For facilities where no benzene is present onsite in wastes, products, by-products or intermediates, the permit holder shall comply with the reporting requirement in 40 CFR § 61.357(a).

14. 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

15. Unless otherwise specified, the permit holder shall comply with the compliance assurance monitoring requirements as specified in the attached “CAM Summary” upon issuance of the permit. In addition, the permit holder shall comply with the following:

A. The permit holder shall comply with the terms and conditions contained in 30 TAC § 122.147 (General Terms and Conditions for Compliance Assurance Monitoring).

B. The permit holder shall report, consistent with the averaging time identified in the "CAM Summary," deviations as defined by the deviation limit in the "CAM Summary." Any monitoring data below a minimum limit or above a maximum limit, that is collected in accordance with the requirements specified in 40 CFR § 64.7(c), shall be reported as a deviation. Deviations shall be reported according to 30 TAC § 122.145 (Reporting Terms and Conditions).

C. The permit holder may elect to collect monitoring data on a more frequent basis and average the data, consistent with the averaging time or minimum frequency specified in the "CAM Summary," for purposes of determining whether a deviation has occurred. However, the additional data points must be collected on a regular basis. In no event shall data be collected and used in particular instances in order to avoid reporting deviations. All monitoring data shall be collected in accordance with the requirements specified in 40 CFR § 64.7(c).

D. The permit holder shall operate the monitoring, identified in the attached "CAM Summary," in accordance with the provisions of 40 CFR § 64.7.

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

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

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

F. The permit holder shall comply with the requirements of 40 CFR § 70.6(a)(3)(ii)(A) and 30 TAC § 122.144(1)(A)-(F) for documentation of all required inspections.

16. 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

17. Permit holder shall comply with the requirements of New Source Review authorizations issued or claimed by the permit holder for the permitted area, including permits, permits by rule (including the terms, conditions, monitoring, recordkeeping, and reporting identified in registered PBRs and permits by rule identified in the PBR Supplemental Tables dated August 26, 2021 in the application for project 32583), 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

18. 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.

19. 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).

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

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

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

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

Compliance Requirements

21. 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.

22. Permit holder shall comply with the following 30 TAC Chapter 117 requirements:

A. The permit holder shall comply with the compliance schedules and submit written notification to the TCEQ Executive Director as required in 30 TAC Chapter 117, Subchapter H, Division 1:

(i) For sources in the Houston-Galveston-Brazoria Nonattainment area, 30 TAC § 117.9020:

(1) Title 30 TAC § 117.9020(2)(A), (C), and (D)

B. The permit holder shall comply with the Initial Control Plan unit listing requirement in 30 TAC § 117.350(c) and (c)(1).

C. The permit holder shall comply with the requirements of 30 TAC § 117.354 for Final Control Plan Procedures for Attainment Demonstration Emission Specifications and 30 TAC § 117.356 for Revision of Final Control Plan.

23. 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)

24. Use of Discrete Emission Credits to comply with the applicable requirements:

A. Unless otherwise prohibited, the permit holder may use discrete emission credits to comply with the following applicable requirements listed elsewhere in this permit:

(i) Title 30 TAC Chapter 115

(ii) Title 30 TAC Chapter 117

(iii) If applicable, offsets for Title 30 TAC Chapter 116

(iv) Temporarily exceed state NSR permit allowables

B. The permit holder shall comply with the following requirements in order to use the credit to comply with the applicable requirements:

(i) The permit holder must notify the TCEQ according to 30 TAC § 101.376(d)

(ii) The discrete emission credits to be used must meet all the geographic, timeliness, applicable pollutant type, and availability requirements listed in 30 TAC Chapter 101, Subchapter H, Division 4

(iii) The executive director has approved the use of the discrete emission credits according to 30 TAC § 101.376(d)(1)(A)

(iv) The permit holder keeps records of the use of credits towards compliance with the applicable requirements in accordance with 30 TAC § 101.372(h) and 30 TAC Chapter 122

(v) Title 30 TAC § 101.375 (relating to Emission Reductions Achieved Outside the United States)

Risk Management Plan

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

Protection of Stratospheric Ozone

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

A. Any on site servicing, maintenance, and repair on refrigeration and nonmotor vehicle air-conditioning appliances using ozone-depleting refrigerants or non-exempt substitutes shall be conducted in accordance with 40 CFR Part 82, Subpart F. Permit holders shall ensure that repairs on or refrigerant removal from refrigeration and nonmotor vehicle air-conditioning appliances using ozone-depleting refrigerants are performed only by properly certified technicians using certified equipment. Records shall be maintained as required by 40 CFR Part 82, Subpart F.

B. The permit holder shall comply with 40 CFR Part 82, Subpart F related to the disposal requirements for appliances using Class I or Class II (ozone-depleting) substances or non-exempt substitutes as specified in 40 CFR §§ 82.150 - 82.166 and the applicable Part 82 Appendices.

C. The permit holder shall comply with 40 CFR Part 82, Subpart H related to Halon Emissions Reduction requirements as specified in 40 CFR § 82.250 - § 82.270 and the applicable Part 82 Appendices.

Permit Location

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

Permit Shield (30 TAC § 122.148)

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

Attachments

Applicable Requirements Summary

Additional Monitoring Requirements

Permit Shield

New Source Review Authorization References

Applicable Requirements Summary

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 (§ 122.144), Reporting Terms and Conditions (§ 122.145), and Compliance Certification Terms and Conditions (§ 122.146) continue to apply.

Unit Summary

Unit/Group/ Process ID No.	Unit Type	Group/Inclusive Units	SOP Index No.	Regulation	Requirement Driver
120	MISCELLANEOUS UNITS	N/A	63HHHHHHH-CT	40 CFR Part 63, Subpart HHHHHHH	No changing attributes.
121	MISCELLANEOUS UNITS	N/A	63HHHHHHH-CT	40 CFR Part 63, Subpart HHHHHHH	No changing attributes.
75	FLARES	N/A	R5720-EMER	30 TAC Chapter 115, HRVOC Vent Gas	No changing attributes.
CAT-ENG1	SRIC ENGINES	N/A	R171ICI-EMERG	30 TAC Chapter 117, Subchapter B	No changing attributes.
CAT-ENG1	SRIC ENGINES	N/A	60IIII-01	40 CFR Part 60, Subpart IIII	No changing attributes.
CAT-ENG1	SRIC ENGINES	N/A	63ZZZZ-02	40 CFR Part 63, Subpart ZZZZ	No changing attributes.
CAT-ENG2	SRIC ENGINES	N/A	R171ICI-EMERG	30 TAC Chapter 117, Subchapter B	No changing attributes.
CAT-ENG2	SRIC ENGINES	N/A	60IIII-01	40 CFR Part 60, Subpart IIII	No changing attributes.
CAT-ENG2	SRIC ENGINES	N/A	63ZZZZ-02	40 CFR Part 63, Subpart ZZZZ	No changing attributes.
D-110A	STORAGE TANKS/VESSELS	N/A	R5112-01	30 TAC Chapter 115, Storage of VOCs	No changing attributes.
D-110B	STORAGE TANKS/VESSELS	N/A	R5112-01	30 TAC Chapter 115, Storage of VOCs	No changing attributes.
D-315	STORAGE TANKS/VESSELS	N/A	R5112-01	30 TAC Chapter 115, Storage of VOCs	No changing attributes.
D-322	STORAGE TANKS/VESSELS	N/A	R5112-01	30 TAC Chapter 115, Storage of VOCs	No changing attributes.
D-323	STORAGE TANKS/VESSELS	N/A	R5112-01	30 TAC Chapter 115, Storage of VOCs	No changing attributes.
D-405	STORAGE	N/A	R5112-01	30 TAC Chapter 115,	No changing attributes.

Unit Summary

Unit/Group/ Process ID No.	Unit Type	Group/Inclusive Units	SOP Index No.	Regulation	Requirement Driver
	TANKS/VESSELS			Storage of VOCs	
D-412	STORAGE TANKS/VESSELS	N/A	R5112-01	30 TAC Chapter 115, Storage of VOCs	No changing attributes.
D-5	MISCELLANEOUS UNITS	N/A	63HHHHHHH-TK	40 CFR Part 63, Subpart HHHHHHH	No changing attributes.
D-6	MISCELLANEOUS UNITS	N/A	63HHHHHHH-TK	40 CFR Part 63, Subpart HHHHHHH	No changing attributes.
D-602	STORAGE TANKS/VESSELS	N/A	R5112-01	30 TAC Chapter 115, Storage of VOCs	No changing attributes.
D-615	STORAGE TANKS/VESSELS	N/A	R5112-01	30 TAC Chapter 115, Storage of VOCs	No changing attributes.
D-981	STORAGE TANKS/VESSELS	N/A	R5112-01	30 TAC Chapter 115, Storage of VOCs	No changing attributes.
D-982	STORAGE TANKS/VESSELS	N/A	R5112-01	30 TAC Chapter 115, Storage of VOCs	No changing attributes.
D-983	STORAGE TANKS/VESSELS	N/A	R5112-01	30 TAC Chapter 115, Storage of VOCs	No changing attributes.
D-984	STORAGE TANKS/VESSELS	N/A	R5112-01	30 TAC Chapter 115, Storage of VOCs	No changing attributes.
DEG5	SOLVENT DEGREASING MACHINES	N/A	R5412-02	30 TAC Chapter 115, Degreasing Processes	No changing attributes.
F-74	MISCELLANEOUS UNITS	N/A	63HHHHHHH-FUG	40 CFR Part 63, Subpart HHHHHHH	No changing attributes.
F4	BOILERS/STEAM GENERATORS/STEAM GENERATING UNITS	N/A	R7ICI-01	30 TAC Chapter 117, Subchapter B	No changing attributes.
F4	BOILERS/STEAM GENERATORS/STEAM	N/A	63DDDDD-1	40 CFR Part 63, Subpart DDDDD	No changing attributes.

Unit Summary

Unit/Group/ Process ID No.	Unit Type	Group/Inclusive Units	SOP Index No.	Regulation	Requirement Driver
	GENERATING UNITS				
F6	BOILERS/STEAM GENERATORS/STEAM GENERATING UNITS	N/A	R7ICI-02	30 TAC Chapter 117, Subchapter B	No changing attributes.
F6	BOILERS/STEAM GENERATORS/STEAM GENERATING UNITS	N/A	60Db-01	40 CFR Part 60, Subpart Db	No changing attributes.
F6	BOILERS/STEAM GENERATORS/STEAM GENERATING UNITS	N/A	63DDDDD-1	40 CFR Part 63, Subpart DDDDD	No changing attributes.
F7	BOILERS/STEAM GENERATORS/STEAM GENERATING UNITS	N/A	R7ICI-01	30 TAC Chapter 117, Subchapter B	No changing attributes.
F7	BOILERS/STEAM GENERATORS/STEAM GENERATING UNITS	N/A	60Db-01	40 CFR Part 60, Subpart Db	No changing attributes.
F7	BOILERS/STEAM GENERATORS/STEAM GENERATING UNITS	N/A	63DDDDD-1	40 CFR Part 63, Subpart DDDDD	No changing attributes.
G684	SRIC ENGINES	N/A	R7ICI-EMERG	30 TAC Chapter 117, Subchapter B	No changing attributes.
G684	SRIC ENGINES	N/A	63ZZZZ-01	40 CFR Part 63, Subpart ZZZZ	No changing attributes.
GROUPVENT	EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS	N/A	R5121-02	30 TAC Chapter 115, Vent Gas Controls	No changing attributes.
GRPDEGRSR	SOLVENT DEGREASING MACHINES	DEG3, DEG4	R5412-01	30 TAC Chapter 115, Degreasing Processes	No changing attributes.
GRPENG	SRIC ENGINES	G002, G087, G121,	R7ICI-EMERG	30 TAC Chapter 117,	No changing attributes.

Unit Summary

Unit/Group/ Process ID No.	Unit Type	Group/Inclusive Units	SOP Index No.	Regulation	Requirement Driver
		G359C		Subchapter B	
GRPENG	SRIC ENGINES	G002, G087, G121, G359C	63ZZZZ-01	40 CFR Part 63, Subpart ZZZZ	No changing attributes.
INCFD	EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS	N/A	R5121-01	30 TAC Chapter 115, Vent Gas Controls	No changing attributes.
INCFD	EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS	N/A	63HHHHHHH-VT	40 CFR Part 63, Subpart HHHHHHH	No changing attributes.
ISOTK	STORAGE TANKS/VESSELS	N/A	R5112-01	30 TAC Chapter 115, Storage of VOCs	No changing attributes.
MSSFLARE	FLARES	N/A	R5720-MSS	30 TAC Chapter 115, HRVOC Vent Gas	No changing attributes.
PA-1	SURFACE COATING OPERATIONS	N/A	R5450-EXEMPT	30 TAC Chapter 115, Subchapter E, Division 5	Application System = The surface coating or surface coating process used is specified in §115.451(f)(1)-(7).
PA-1	SURFACE COATING OPERATIONS	N/A	R5450-NORMAL	30 TAC Chapter 115, Subchapter E, Division 5	Application System = The surface coating or surface coating process is not specified in §155.451(f)(1)-(7).
PROVC	MISCELLANEOUS UNITS	N/A	63HHHHHHH-OTH	40 CFR Part 63, Subpart HHHHHHH	Other emission sources at a polyvinyl chloride and copolymers production affected source
PROVC	MISCELLANEOUS UNITS	N/A	63HHHHHHH-SR	40 CFR Part 63, Subpart HHHHHHH	Stripped resin emission point that produces suspension resin
PROVC	MISCELLANEOUS UNITS	N/A	63HHHHHHH-WW	40 CFR Part 63, Subpart HHHHHHH	Process wastewater from an affected source producing PVC resin
RECO	EMISSION	N/A	R5720-RECO	30 TAC Chapter 115,	No changing attributes.

Unit Summary

Unit/Group/ Process ID No.	Unit Type	Group/Inclusive Units	SOP Index No.	Regulation	Requirement Driver
	POINTS/STATIONARY VENTS/PROCESS VENTS			HRVOC Vent Gas	
T418	SRIC ENGINES	N/A	R7ICI-EMERG	30 TAC Chapter 117, Subchapter B	No changing attributes.
UNLOAD-LVP	LOADING/UNLOADING OPERATIONS	N/A	R5211-LVP	30 TAC Chapter 115, Loading and Unloading of VOC	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)
120	EU	63HHHHH HH-CT	112(B) HAPS	40 CFR Part 63, Subpart HHHHHHH	§ 63.11920(a)(1) § 63.11870(a) § 63.11870(b) § 63.11870(c) § 63.11870(e) § 63.11880(c) § 63.11890(a) § 63.11920(c)(3) § 63.11920(d)(2) [G]§ 63.11920(e) § 63.11920(f) [G]§ 63.11920(g)	For each closed loop recirculating heat exchange system, you must collect and analyze a sample from the location(s) described in either paragraph (a)(1)(i) or (ii) of this section.	§ 63.11920(a)(3)(iii) § 63.11920(a)(4)(i) [G]§ 63.11920(c)(3)	[G]§ 63.11920(h) [G]§ 63.11990(d)	§ 63.11985(a) § 63.11985(a)(3) § 63.11985(a)(9)(iii) § 63.11985(b) [G]§ 63.11985(b)(3)
121	EU	63HHHHH HH-CT	112(B) HAPS	40 CFR Part 63, Subpart HHHHHHH	§ 63.11920(a)(1) § 63.11870(a) § 63.11870(b) § 63.11870(c) § 63.11870(e) § 63.11880(c) § 63.11890(a) § 63.11920(c)(3) § 63.11920(d)(2) [G]§ 63.11920(e) § 63.11920(f) [G]§ 63.11920(g)	For each closed loop recirculating heat exchange system, you must collect and analyze a sample from the location(s) described in either paragraph (a)(1)(i) or (ii) of this section.	§ 63.11920(a)(3)(iii) § 63.11920(a)(4)(i) [G]§ 63.11920(c)(3)	[G]§ 63.11920(h) [G]§ 63.11990(d)	§ 63.11985(a) § 63.11985(a)(3) § 63.11985(a)(9)(iii) § 63.11985(b) [G]§ 63.11985(b)(3)
75	EP	R5720-EMER	Highly Reactive VOC	30 TAC Chapter 115, HRVOC Vent Gas	§ 115.722(d) § 115.722(d)(1) § 115.722(d)(2) § 115.725(g)(2) § 115.725(g)(2)(B)(i) [G]§ 115.725(g)(2)(C) § 115.725(g)(2)(D) [G]§ 115.725(l)	All flares must continuously meet the requirements of 40 CFR § 60.18(c)(2)-(6) and (d) as amended through October 17, 2000 (65 FR 61744) when vent gas containing HRVOC is being routed to the flare.	§ 115.725(g)(2) § 115.725(g)(2)(B)(i) § 115.725(g)(2)(B)(ii) [G]§ 115.725(g)(2)(C) § 115.725(g)(2)(D) § 115.725(g)(2)(E) [G]§ 115.725(l) § 115.725(n)	§ 115.726(d)(1) § 115.726(d)(2) § 115.726(d)(3) § 115.726(d)(4) § 115.726(d)(7)(A) § 115.726(d)(7)(B) § 115.726(d)(7)(C) § 115.726(d)(7)(D) § 115.726(d)(7)(E) § 115.726(i) § 115.726(j)(1) § 115.726(j)(2)	§ 115.725(n)
CAT-ENG1	EU	R171ICI-EMERG	Exempt	30 TAC Chapter 117, Subchapter B	[G]§ 117.303(a)(11) [G]§ 117.310(f)	Units exempted from the provisions of this division	None	§ 117.340(j) § 117.345(f)	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)
						except as specified in §§117.310(f), 117.340(j), 117.345(f)(6) and (10), 117.350(c)(1) and 117.354(a)(5) include new, modified, reconstructed, or relocated stationary diesel engine placed into service on or after October 1, 2001, that operates less than 100 hours per year, based on a rolling 12-month average, in other than emergency situations; and meets the requirements for non-road engines as specified. §117.303(a)(11)(A)-(B)		[G]§ 117.345(f)(10) [G]§ 117.345(f)(6)	
CAT-ENG1	EU	60IIII-01	CO	40 CFR Part 60, Subpart IIII	§ 60.4205(b) § 60.4202(a)(1)(ii) § 60.4202(a)(1)(ii)-Table 2 § 60.4206 § 60.4207(b) [G]§ 60.4211(a) § 60.4211(c) [G]§ 60.4211(f) § 60.4218	Owners and operators of emergency stationary CI ICE, that are not fire pump engines, with a maximum engine power greater than or equal to 8 KW and less than 19 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 6.6 g/KW-hr, as stated in 40 CFR 60.4202(a)(1)(i)-(ii) and 40 CFR 89.112(a) and Table 2 to this subpart.	None	None	None
CAT-ENG1	EU	60IIII-01	NMHC and NO_X	40 CFR Part 60, Subpart IIII	§ 60.4205(b) § 60.4202(a)(1)(ii) § 60.4202(a)(1)(ii)-Table 2 § 60.4206	Owners and operators of emergency stationary CI ICE, that are not fire pump engines, with a maximum engine power less than 37	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)
					§ 60.4207(b) [G]§ 60.4211(a) § 60.4211(c) [G]§ 60.4211(f) § 60.4218	KW and a displacement of less than 10 liters per cylinder and is a 2007 model year and later must comply with an NMHC+NOx emission limit of 7.5 g/KW-hr, as stated in 40 CFR 60.4202(a)(1)(i)-(ii) and 40 CFR 89.112(a) and Table 2 to this subpart.			
CAT-ENG1	EU	60IIII-01	PM	40 CFR Part 60, Subpart IIII	§ 60.4205(b) § 60.4202(a)(1)(ii) § 60.4202(a)(1)(ii)-Table 2 § 60.4206 § 60.4207(b) [G]§ 60.4211(a) § 60.4211(c) [G]§ 60.4211(f) § 60.4218	Owners and operators of emergency stationary CI ICE, that are not fire pump engines, with a maximum engine power less than 19 KW and a displacement of less than 10 liters per cylinder and is a 2008 model year and later must comply with a PM emission limit of 0.40 g/KW-hr, as stated in 40 CFR 60.4202(a)(1)(ii) and Table 2 to this subpart.	None	None	None
CAT-ENG1	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 engines or 40 CFR part 60 subpart JJJJ, for spark ignition engines as	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)
						applicable. No further requirements apply for such engines under this part.			
CAT-ENG2	EU	R171ICI-EMERG	Exempt	30 TAC Chapter 117, Subchapter B	[G]§ 117.303(a)(11) [G]§ 117.310(f)	Units exempted from the provisions of this division except as specified in §§117.310(f), 117.340(j), 117.345(f)(6) and (10), 117.350(c)(1) and 117.354(a)(5) include new, modified, reconstructed, or relocated stationary diesel engine placed into service on or after October 1, 2001, that operates less than 100 hours per year, based on a rolling 12-month average, in other than emergency situations; and meets the requirements for non-road engines as specified. §117.303(a)(11)(A)-(B)	None	§ 117.340(j) § 117.345(f) [G]§ 117.345(f)(10) [G]§ 117.345(f)(6)	None
CAT-ENG2	EU	60IIII-01	CO	40 CFR Part 60, Subpart IIII	§ 60.4205(b) § 60.4202(a)(1)(ii) § 60.4202(a)(1)(ii)-Table 2 § 60.4206 § 60.4207(b) [G]§ 60.4211(a) § 60.4211(c) [G]§ 60.4211(f) § 60.4218	Owners and operators of emergency stationary CI ICE, that are not fire pump engines, with a maximum engine power greater than or equal to 8 KW and less than 19 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 6.6 g/KW-hr, as stated in 40 CFR 60.4202(a)(1)(i)-(ii) and 40 CFR 89.112(a) and Table 2 to this subpart.	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)
CAT-ENG2	EU	60IIII-01	NMHC and NO_X	40 CFR Part 60, Subpart IIII	§ 60.4205(b) § 60.4202(a)(1)(ii) § 60.4202(a)(1)(ii)-Table 2 § 60.4206 § 60.4207(b) [G]§ 60.4211(a) § 60.4211(c) [G]§ 60.4211(f) § 60.4218	Owners and operators of emergency stationary CI ICE, that are not fire pump engines, with a maximum engine power less than 37 KW and a displacement of less than 10 liters per cylinder and is a 2007 model year and later must comply with an NMHC+NOx emission limit of 7.5 g/KW-hr, as stated in 40 CFR 60.4202(a)(1)(i)-(ii) and 40 CFR 89.112(a) and Table 2 to this subpart.	None	None	None
CAT-ENG2	EU	60IIII-01	PM	40 CFR Part 60, Subpart IIII	§ 60.4205(b) § 60.4202(a)(1)(ii) § 60.4202(a)(1)(ii)-Table 2 § 60.4206 § 60.4207(b) [G]§ 60.4211(a) § 60.4211(c) [G]§ 60.4211(f) § 60.4218	Owners and operators of emergency stationary CI ICE, that are not fire pump engines, with a maximum engine power less than 19 KW and a displacement of less than 10 liters per cylinder and is a 2008 model year and later must comply with a PM emission limit of 0.40 g/KW-hr, as stated in 40 CFR 60.4202(a)(1)(ii) and Table 2 to this subpart.	None	None	None
CAT-ENG2	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	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)
						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.			
D-110A	EU	R5112-01	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
D-110B	EU	R5112-01	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
D-315	EU	R5112-01	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
D-322	EU	R5112-01	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)
D-323	EU	R5112-01	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
D-405	EU	R5112-01	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
D-412	EU	R5112-01	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
D-5	EU	63HHHHH HH-TK	112(B) HAPS	40 CFR Part 63, Subpart HHHHHHH	[G]§ 63.1190(c)-Table 3 § 63.11870(a) § 63.11870(b) § 63.11870(c) § 63.11880(c) § 63.11890(a)	For each pressure vessel used to comply with the requirements specified in Table 3 to this subpart, you must meet the requirements in paragraphs (c)(1) through (4) of this section.	§ 63.11910(c)(3)	§ 63.11990(b)(4) § 63.11995(a) § 63.11995(b)	§ 63.11985(a) § 63.11985(a)(1) § 63.11985(b) § 63.11985(b)(1) § 63.11985(b)(10)
D-6	EU	63HHHHH HH-TK	112(B) HAPS	40 CFR Part 63, Subpart HHHHHHH	[G]§ 63.11910(c)-Table 3 § 63.11870(a) § 63.11870(b) § 63.11870(c) § 63.11880(c) § 63.11890(a)	For each pressure vessel used to comply with the requirements specified in Table 3 to this subpart, you must meet the requirements in paragraphs (c)(1) through (4) of this section.	§ 63.11910(c)(3)	§ 63.11990(b)(4) § 63.11995(a) § 63.11995(b)	§ 63.11985(a) § 63.11985(a)(1) § 63.11985(b) § 63.11985(b)(1) § 63.11985(b)(10)
D-602	EU	R5112-01	VOC	30 TAC Chapter	§ 115.111(a)(1)	Except as provided in §	[G]§ 115.117	§ 115.118(a)(1)	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, Storage of VOCs		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.		§ 115.118(a)(5) § 115.118(a)(7)	
D-615	EU	R5112-01	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
D-981	EU	R5112-01	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
D-982	EU	R5112-01	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
D-983	EU	R5112-01	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
D-984	EU	R5112-01	VOC	30 TAC Chapter 115, Storage of	§ 115.111(a)(1)	Except as provided in § 115.118, a storage tank	[G]§ 115.117	§ 115.118(a)(1) § 115.118(a)(5)	None

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
				VOCs		storing VOC with a true vapor pressure less than 1.5 psia is exempt from the requirements of this division.		§ 115.118(a)(7)	
DEG5	EU	R5412-02	VOC	30 TAC Chapter 115, Degreasing Processes	§ 115.412(1) § 115.411(1) § 115.411(2) [G]§ 115.412(1)(A) § 115.412(1)(C) [G]§ 115.412(1)(F)	No person shall own or operate a system utilizing a VOC for the cold solvent cleaning of objects without the controls listed in §115.412(1)(A)-(F), except as exempted in §115.411.	[G]§ 115.415(1) § 115.415(3) ** See Periodic Monitoring Summary	None	None
F-74	EU	63HHHHH HH-FUG	112(B) HAPS	40 CFR Part 63, Subpart HHHHHHH	[G]§ 63.11915(c)(1) § 63.1022(a) § 63.1022(b) § 63.1024(a) § 63.1024(d)(1) § 63.1024(d)(2) [G]§ 63.1029 § 63.11880(c) § 63.11890(a) § 63.11915(a)	Pressure relief devices in liquid service must comply with §63.1029(a)-(c) of 40 CFR Part 63, Subpart UU.	[G]§ 63.1029 § 63.11905 [G]§ 63.11915	[G]§ 63.1022(f) § 63.1024(d) [G]§ 63.1024(f) § 63.1038(a) § 63.1038(b)(1) § 63.1038(b)(5) § 63.1038(b)(7)	§ 63.1039(a) [G]§ 63.1039(a)(1) § 63.1039(b) § 63.1039(b)(2) § 63.1039(b)(8) § 63.11915(c)(1)(iii) § 63.11915(c)(2) § 63.11985(a)(2) § 63.11985(b)(2) § 63.11985(c)(7)
F-74	EU	63HHHHH HH-FUG	112(B) HAPS	40 CFR Part 63, Subpart HHHHHHH	[G]§ 63.11915(b) § 63.11890(c)	Compressors in HAP service must be equipped with a dual mechanical seal or equivalent equipment, or comply with the requirements of 40 CFR Part 63, Subpart UU.	None	§ 63.11990(c)	§ 63.11985(a)(2) § 63.11985(b)(2)
F-74	EU	63HHHHH HH-FUG	112(B) HAPS	40 CFR Part 63, Subpart HHHHHHH	[G]§ 63.11915(c)(1) § 63.1022(b) § 63.1022(b)(3) § 63.1024(d)(1) § 63.1024(d)(2) § 63.1030(e) § 63.11880(c) § 63.11890(a)	Pressure relief devices equipped with a rupture disk upstream of the pressure relief device must comply with the requirements of 40 CFR Part 63, Subpart UU except for the requirements of §63.1030(b) and (c)	§ 63.11905 [G]§ 63.11915(c)	§ 63.1024(d) § 63.1038(a) § 63.1038(b)(1) § 63.1038(b)(7)	§ 63.1039(a) [G]§ 63.1039(a)(1) § 63.1039(b) § 63.1039(b)(2) § 63.1039(b)(8) § 63.11915(c)(1)(iii) § 63.11985(a)(2) § 63.11985(b)(2)

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Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
					§ 63.11890(b) § 63.11890(c) [G]§ 63.11896 § 63.11915(a)	provided the owner or operator installs a replacement rupture disk upstream of the pressure relief device as soon as practical after each pressure release but no later than 5 calendar days after each pressure release, except as provided in §63.1024(d).			§ 63.11985(c)(7)
F-74	EU	63HHHHH HH-FUG	112(B) HAPS	40 CFR Part 63, Subpart HHHHHHH	§ 63.11915(c)(2) § 63.1022(b) § 63.1022(b)(2) § 63.1030(d) § 63.11880(c) § 63.11890(a) § 63.11915(a)	Pressure relief devices that discharge to a closed vent system and control device must comply with the requirements of 40 CFR Part 63, Subpart UU.	None	§ 63.1024(d) § 63.1038(a) § 63.1038(b)(1) § 63.11990(c)	§ 63.1039(a) [G]§ 63.1039(a)(1) § 63.11915(c)(2) § 63.11985(a)(2) § 63.11985(b)(2) § 63.11985(c)(7)
F-74	EU	63HHHHH HH-FUG	112(B) HAPS	40 CFR Part 63, Subpart HHHHHHH	§ 63.11915(a) § 63.1022(a) § 63.1022(c)(1) § 63.1022(c)(2) § 63.1022(c)(2)(i)(A) § 63.1022(c)(2)(i)(B) § 63.1022(c)(4)(i) § 63.1022(c)(4)(ii) § 63.1023(a) § 63.1023(e)(1) § 63.1024(a) § 63.1024(c)(1) § 63.1024(d)(1) § 63.1024(d)(2) [G]§ 63.1024(d)(3) § 63.1024(d)(5) [G]§ 63.1025 § 63.11880(c)	Valves in gas and vapor service and in light liquid service must comply with §63.1025(a)-(e) of 40 CFR Part 63, Subpart UU.	§ 63.1023(a) § 63.1023(a)(1)(i) § 63.1023(b) § 63.1023(b)(1) § 63.1023(b)(2)(i) § 63.1023(b)(2)(ii) § 63.1023(b)(3) § 63.1023(b)(4) § 63.1023(b)(4)(i) § 63.1023(b)(4)(ii) § 63.1023(b)(5) § 63.1023(b)(6) [G]§ 63.1023(c) § 63.11905 [G]§ 63.11915	§ 63.1022(c)(3) § 63.1022(c)(4)(i) § 63.1022(c)(4)(ii) § 63.1024(d) [G]§ 63.1024(f) § 63.1038(a) § 63.1038(b)(1) § 63.1038(b)(2) § 63.1038(b)(7) [G]§ 63.1038(c)(1)	§ 63.1039(a) [G]§ 63.1039(a)(1) § 63.1039(b) § 63.1039(b)(1) § 63.1039(b)(1)(i) § 63.1039(b)(2) § 63.1039(b)(3) § 63.1039(b)(5) § 63.1039(b)(8) § 63.11985(a)(2) § 63.11985(b)(2)

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Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
					§ 63.11890(a)				
F-74	EU	63HHHHH HH-FUG	112(B) HAPS	40 CFR Part 63, Subpart HHHHHHH	§ 63.11915(a) § 63.1022(a) § 63.1022(b) § 63.1022(b)(1) § 63.1022(c)(1) § 63.1022(c)(4)(i) § 63.1022(d)(1) § 63.1023(a) § 63.1023(e)(1) § 63.1024(a) § 63.1024(c)(1) § 63.1024(d)(1) § 63.1024(d)(2) [G]§ 63.1024(d)(3) § 63.1024(e) [G]§ 63.1027 § 63.11880(c) § 63.11890(a)	Connectors in gas and vapor service and in light liquid service must comply with §63.1027(a)-(e) of 40 CFR Part 63, Subpart UU.	§ 63.1023(a) § 63.1023(a)(1)(iii) § 63.1023(b) § 63.1023(b)(1) § 63.1023(b)(2)(i) § 63.1023(b)(2)(ii) § 63.1023(b)(3) § 63.1023(b)(4) § 63.1023(b)(4)(i) § 63.1023(b)(4)(ii) § 63.1023(b)(5) § 63.1023(b)(6) [G]§ 63.1023(c) § 63.1038(b)(6) § 63.11905 [G]§ 63.11915	§ 63.1022(c)(3) § 63.1022(c)(4)(i) § 63.1022(d)(2) § 63.1023(e)(2) § 63.1024(d) [G]§ 63.1024(f) § 63.1038(a) § 63.1038(b)(1) § 63.1038(b)(2) § 63.1038(b)(3) § 63.1038(b)(6) § 63.1038(b)(7) § 63.1038(c)(3)	§ 63.1039(a) [G]§ 63.1039(a)(1) § 63.1039(b) § 63.1039(b)(1) § 63.1039(b)(1)(iii) § 63.1039(b)(2) § 63.1039(b)(8) § 63.11985(a)(2) § 63.11985(b)(2)
F-74	EU	63HHHHH HH-FUG	112(B) HAPS	40 CFR Part 63, Subpart HHHHHHH	§ 63.1915(a) § 63.1022(a) § 63.1022(b) § 63.1024(a) § 63.1024(d)(1) § 63.1024(d)(2) § 63.1024(d)(5) [G]§ 63.1029 § 63.11880(c) § 63.11890(a)	Valves in heavy liquid service must comply with §63.1029(a)-(c) of 40 CFR Part 63, Subpart UU.	[G]§ 63.1029 § 63.11905 § 63.11915(a)	[G]§ 63.1022(f) § 63.1024(d) [G]§ 63.1024(f) § 63.1038(a) § 63.1038(b)(1) § 63.1038(b)(5) § 63.1038(b)(7)	§ 63.1039(a) [G]§ 63.1039(a)(1) § 63.1039(b) § 63.1039(b)(2) § 63.1039(b)(8) § 63.11985(a)(2) § 63.11985(b)(2)
F-74	EU	63HHHHH HH-FUG	112(B) HAPS	40 CFR Part 63, Subpart HHHHHHH	§ 63.11915(a) § 63.1022(a) § 63.1022(b) § 63.1022(b)(1) § 63.1024(a) § 63.1024(d)(1) § 63.1024(d)(2) [G]§ 63.1029 § 63.11880(c)	Connectors in heavy liquid service must comply with §63.1029(a)-(c) of 40 CFR Part 63, Subpart UU.	[G]§ 63.1029 § 63.11905 § 63.11915(a)	[G]§ 63.1022(f) § 63.1024(d) [G]§ 63.1024(f) § 63.1038(a) § 63.1038(b)(1) § 63.1038(b)(5) § 63.1038(b)(7)	§ 63.1039(a) [G]§ 63.1039(a)(1) § 63.1039(b) § 63.1039(b)(2) § 63.1039(b)(8) § 63.11985(a)(2) § 63.11985(b)(2)

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Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
					§ 63.11890(a)				
F-74	EU	63HHHHH HH-FUG	112(B) HAPS	40 CFR Part 63, Subpart HHHHHHH	§ 63.11915(a) § 63.1022(a) § 63.1022(b) § 63.1022(b)(4) § 63.1024(a) § 63.1024(d)(1) § 63.1024(d)(2) [G]§ 63.1029 § 63.11880(c) § 63.11890(a)	Instrumentation systems must comply with §63.1029(a)-(c) of 40 CFR Part 63, Subpart UU.	[G]§ 63.1029 § 63.11905 § 63.11915(a)	§ 63.1024(d) [G]§ 63.1024(f) § 63.1038(a) § 63.1038(b)(1) § 63.1038(b)(7)	§ 63.1039(a) [G]§ 63.1039(a)(1) § 63.1039(b) § 63.1039(b)(2) § 63.1039(b)(8) § 63.11985(a)(2) § 63.11985(b)(2)
F-74	EU	63HHHHH HH-FUG	112(B) HAPS	40 CFR Part 63, Subpart HHHHHHH	§ 63.11915(a) § 63.1022(a) § 63.1032(b) § 63.1032(c) § 63.1032(c)(1) § 63.1032(c)(3) [G]§ 63.1032(c)(4) § 63.1032(c)(5) § 63.1032(d) § 63.11880(c) § 63.11890(a)	Sampling connection system shall be equipped with a closed-purge, closed-loop, or closed vent system and must comply with 40 CFR Part 63, Subpart UU.	None	[G]§ 63.1022(f) § 63.1038(a) § 63.1038(b)(1) § 63.1038(b)(5)	§ 63.1039(a) [G]§ 63.1039(a)(1) § 63.1039(b) § 63.1039(b)(8) § 63.11985(a)(2) § 63.11985(b)(2)
F-74	EU	63HHHHH HH-FUG	112(B) HAPS	40 CFR Part 63, Subpart HHHHHHH	[G]§ 63.11985(b) § 63.11880(c)	Pumps in HAP service shall be sealless design, double mechanical seal or equivalent, or comply with 40 CFR 63, Subpart UU.	None	§ 63.11990(c)	§ 63.11985(a)(2) § 63.11985(b)(2)
F-74	EU	63HHHHH HH-FUG	112(B) HAPS	40 CFR Part 63, Subpart HHHHHHH	[G]§ 63.11915(b) § 63.11880(c)	Agitators in HAP service must be equipped with double mechanical seals or equivalent equipment, or comply with the requirements of 40 CFR Part 63, Subpart UU.	None	§ 63.11990(c)	§ 63.11985(a)(2) § 63.11985(b)(2)
F4	EU	R7ICI-01	CO	30 TAC Chapter 117, Subchapter B	§ 117.310(c)(1) § 117.310(c)(1)(A)	CO emissions must not exceed 400 ppmv at 3.0%	[G]§ 117.335(a)(1) § 117.335(a)(4)	§ 117.345(a) § 117.345(f)	§ 117.335(b) § 117.335(g)

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
					§ 117.310(c)(3) § 117.340(f)(1)	O 2, dry basis.	§ 117.335(b) § 117.335(c) § 117.335(d) § 117.335(f) § 117.335(f)(3) § 117.335(g) § 117.340(a) § 117.340(b)(1) § 117.340(b)(3) § 117.340(e) [G]§ 117.340(f)(2) § 117.8100(a) § 117.8100(a)(1) § 117.8100(a)(1)(A) § 117.8100(a)(1)(B) § 117.8100(a)(1)(B)(ii) § 117.8100(a)(1)(B)(iii) § 117.8100(a)(1)(C) § 117.8100(a)(2) [G]§ 117.8100(a)(3) § 117.8100(a)(4) § 117.8100(a)(5) § 117.8100(a)(5)(A) § 117.8100(a)(5)(B) [G]§ 117.8100(a)(5)(D) [G]§ 117.8100(a)(5)(E) § 117.8100(a)(6) § 117.8120 § 117.8120(1) § 117.8120(1)(A)	§ 117.345(f)(1) [G]§ 117.345(f)(2) § 117.345(f)(7) § 117.345(f)(8) § 117.345(f)(9) § 117.8100(a)(5)(C)	[G]§ 117.345(b) [G]§ 117.345(c) § 117.345(d) § 117.345(d)(2) § 117.345(d)(3) § 117.345(d)(4) § 117.345(d)(5) § 117.8010 [G]§ 117.8010(1) § 117.8010(2) § 117.8010(2)(A) § 117.8010(2)(B) [G]§ 117.8010(3) § 117.8010(4) [G]§ 117.8010(5) § 117.8010(6) [G]§ 117.8010(7) [G]§ 117.8010(8) § 117.8100(c)
F4	EU	R7ICI-01	NO_X	30 TAC Chapter 117, Subchapter B	§ 117.310(d)(3) § 117.310(a) § 117.310(a)(1)(A)	An owner or operator may not use the alternative methods specified in	[G]§ 117.335(a)(1) § 117.335(a)(4) § 117.335(b)	§ 117.345(a) § 117.345(f) § 117.345(f)(1)	§ 117.335(b) § 117.335(g) [G]§ 117.345(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)
					§ 117.310(b) [G]§ 117.310(e)(1) § 117.310(e)(2) [G]§ 117.310(e)(3) § 117.310(e)(4) § 117.340(f)(1) § 117.340(l)(2) § 117.340(p)(1) § 117.340(p)(3)	§§ 117.315, 117.323 and 117.9800 to comply with the NO_x emission specifications but shall use the mass emissions cap and trade program in Chapter 101, Subchapter H, Division 3, except that electric generating facilities must also comply with the daily and 30-day system cap emission limitations of § 117.320. An owner or operator may use the alternative methods specified in § 117.9800 to comply with § 117.320.	§ 117.335(c) § 117.335(d) § 117.335(f) § 117.335(f)(2) § 117.335(g) § 117.340(a) § 117.340(b)(1) § 117.340(b)(3) § 117.340(c)(1) [G]§ 117.340(c)(3) [G]§ 117.340(f)(2) § 117.340(l)(2) § 117.340(o)(1) § 117.340(p)(1) § 117.8100(a) § 117.8100(a)(1) § 117.8100(a)(1)(A) § 117.8100(a)(1)(B) § 117.8100(a)(1)(B)(i) § 117.8100(a)(1)(B)(ii) § 117.8100(a)(1)(C) § 117.8100(a)(2) [G]§ 117.8100(a)(3) § 117.8100(a)(4) § 117.8100(a)(5) § 117.8100(a)(5)(A) § 117.8100(a)(5)(B) [G]§ 117.8100(a)(5)(D) [G]§ 117.8100(a)(5)(E) § 117.8100(a)(6)	[G]§ 117.345(f)(2) § 117.345(f)(8) § 117.345(f)(9) § 117.8100(a)(5)(C)	[G]§ 117.345(c) § 117.345(d) § 117.345(d)(3) § 117.8010 [G]§ 117.8010(1) § 117.8010(2) § 117.8010(2)(A) § 117.8010(2)(B) § 117.8010(2)(C) § 117.8010(2)(D) [G]§ 117.8010(3) § 117.8010(4) [G]§ 117.8010(5) § 117.8010(6) [G]§ 117.8010(7) [G]§ 117.8010(8) § 117.8100(c)
F4	EU	63DDDDD-1	112(B) HAPS	40 CFR Part 63, Subpart DDDDD	§ 63.7500(a)(1)-Table 3.1 § 63.7500(a)(1) § 63.7500(a)(3)	A new or existing boiler or process heater with a continuous oxygen trim system that maintains an	§ 63.7515(d) § 63.7525(a)(7) § 63.7540(a) [G]§ 63.7540(a)(10)	§ 63.7555(a) § 63.7555(a)(1) § 63.7560(a) § 63.7560(b)	§ 63.7530(e) § 63.7530(f) § 63.7545(a) § 63.7545(b)

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
					§ 63.7505(a) § 63.7540(a) [G]§ 63.7540(a)(10) § 63.7540(a)(12) § 63.7540(a)(13)	optimum air to fuel ratio must conduct a tune-up of the boiler or process heater every 5 years as specified in § 63.7540.		§ 63.7560(c)	§ 63.7545(c) [G]§ 63.7545(e) § 63.7550(a) [G]§ 63.7550(b) [G]§ 63.7550(c) [G]§ 63.7550(h)
F6	EU	R7ICI-02	CO	30 TAC Chapter 117, Subchapter B	§ 117.310(c)(1) § 117.310(c)(1)(A) § 117.310(c)(3) § 117.340(f)(1)	CO emissions must not exceed 400 ppmv at 3.0% O 2, dry basis.	[G]§ 117.335(a)(1) § 117.335(a)(4) § 117.335(b) § 117.335(c) § 117.335(d) § 117.335(f) § 117.335(f)(3) § 117.335(g) § 117.340(a) § 117.340(b)(1) § 117.340(b)(3) § 117.340(e) [G]§ 117.340(f)(2) § 117.8100(a) § 117.8100(a)(1) § 117.8100(a)(1)(A) § 117.8100(a)(1)(B) § 117.8100(a)(1)(B)(ii) § 117.8100(a)(1)(B)(iii) § 117.8100(a)(1)(C) § 117.8100(a)(2) [G]§ 117.8100(a)(3) § 117.8100(a)(4) § 117.8100(a)(5) § 117.8100(a)(5)(A) § 117.8100(a)(5)(B) [G]§ 117.8100(a)(5)(D) [G]§	§ 117.345(a) § 117.345(f) § 117.345(f)(1) [G]§ 117.345(f)(2) § 117.345(f)(7) § 117.345(f)(8) § 117.345(f)(9) § 117.8100(a)(5)(C)	§ 117.335(b) § 117.335(g) [G]§ 117.345(b) [G]§ 117.345(c) § 117.345(d) § 117.345(d)(2) § 117.345(d)(3) § 117.345(d)(4) § 117.345(d)(5) § 117.8010 [G]§ 117.8010(1) § 117.8010(2) § 117.8010(2)(A) § 117.8010(2)(B) [G]§ 117.8010(3) § 117.8010(4) [G]§ 117.8010(5) § 117.8010(6) [G]§ 117.8010(7) [G]§ 117.8010(8) § 117.8100(c)

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
							117.8100(a)(5)(E) § 117.8100(a)(6) § 117.8120 § 117.8120(1) § 117.8120(1)(A)		
F6	EU	R7ICI-02	NO_X	30 TAC Chapter 117, Subchapter B	§ 117.310(d)(3) § 117.310(a) § 117.310(a)(1)(A) § 117.310(b) [G]§ 117.310(e)(1) § 117.310(e)(2) [G]§ 117.310(e)(3) § 117.310(e)(4) § 117.340(f)(1) § 117.340(l)(2) § 117.340(p)(1) § 117.340(p)(3)	An owner or operator may not use the alternative methods specified in §§ 117.315, 117.323 and 117.9800 to comply with the NO_x emission specifications but shall use the mass emissions cap and trade program in Chapter 101, Subchapter H, Division 3, except that electric generating facilities must also comply with the daily and 30-day system cap emission limitations of § 117.320. An owner or operator may use the alternative methods specified in § 117.9800 to comply with § 117.320.	[G]§ 117.335(a)(1) § 117.335(a)(4) § 117.335(b) § 117.335(c) § 117.335(d) § 117.335(f) § 117.335(f)(2) § 117.335(g) § 117.340(a) § 117.340(b)(1) § 117.340(b)(3) § 117.340(c)(1) [G]§ 117.340(c)(3) [G]§ 117.340(f)(2) § 117.340(l)(2) § 117.340(o)(1) § 117.340(p)(1) § 117.8100(a) § 117.8100(a)(1) § 117.8100(a)(1)(A) § 117.8100(a)(1)(B) § 117.8100(a)(1)(B)(i) § 117.8100(a)(1)(B)(ii) § 117.8100(a)(1)(C) § 117.8100(a)(2) [G]§ 117.8100(a)(3) § 117.8100(a)(4) § 117.8100(a)(5) § 117.8100(a)(5)(A) § 117.8100(a)(5)(B) [G]§	§ 117.345(a) § 117.345(f) § 117.345(f)(1) [G]§ 117.345(f)(2) § 117.345(f)(8) § 117.345(f)(9) § 117.8100(a)(5)(C)	§ 117.335(b) § 117.335(g) [G]§ 117.345(b) [G]§ 117.345(c) § 117.345(d) § 117.345(d)(3) § 117.8010 [G]§ 117.8010(1) § 117.8010(2) § 117.8010(2)(A) § 117.8010(2)(B) § 117.8010(2)(C) § 117.8010(2)(D) [G]§ 117.8010(3) § 117.8010(4) [G]§ 117.8010(5) § 117.8010(6) [G]§ 117.8010(7) [G]§ 117.8010(8) § 117.8100(c)

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
							117.8100(a)(5)(D) [G]§ 117.8100(a)(5)(E) § 117.8100(a)(6)		
F6	EU	60Db-01	NO_X	40 CFR Part 60, Subpart Db	§ 60.44b(l)(2) § 60.44b(h) § 60.44b(i) § 60.46b(a)	Affected facilities with a low heat release rate and combusting natural gas or distillate oil in excess of 30% of the heat input from the combustion of all fuels, a limit determined by use of the specified formula.	§ 60.46b(c) § 60.46b(e) § 60.46b(e)(1) § 60.46b(e)(4) [G]§ 60.48b(b) § 60.48b(c) § 60.48b(d) § 60.48b(e) [G]§ 60.48b(e)(2) § 60.48b(e)(3) § 60.48b(f) § 60.48b(g)(1)	[G]§ 60.48b(b) § 60.48b(c) [G]§ 60.49b(d) [G]§ 60.49b(g) § 60.49b(o)	§ 60.49b(a) § 60.49b(a)(1) § 60.49b(a)(3) § 60.49b(b) § 60.49b(h) § 60.49b(h)(4) § 60.49b(i) § 60.49b(v) § 60.49b(w)
F6	EU	60Db-01	PM	40 CFR Part 60, Subpart Db	§ 60.40b(a)	This subpart applies to each steam generating unit constructed, modified, or reconstructed after 6/19/84, and that has a heat input capacity from fuels combusted in the unit > 29 MW (100 MMBtu/hr).	None	[G]§ 60.49b(d) § 60.49b(o)	§ 60.49b(a) § 60.49b(a)(1) § 60.49b(a)(3)
F6	EU	60Db-01	PM (Opacity)	40 CFR Part 60, Subpart Db	§ 60.40b(a)	This subpart applies to each steam generating unit constructed, modified, or reconstructed after 6/19/84, and that has a heat input capacity from fuels combusted in the unit > 29 MW (100 MMBtu/hr).	None	[G]§ 60.49b(d) § 60.49b(o)	§ 60.49b(a) § 60.49b(a)(1) § 60.49b(a)(3)
F6	EU	60Db-01	SO_2	40 CFR Part 60, Subpart Db	§ 60.40b(a)	This subpart applies to each steam generating unit constructed, modified, or reconstructed after 6/19/84, and that has a heat input	None	[G]§ 60.49b(d) § 60.49b(o)	§ 60.49b(a) § 60.49b(a)(1) § 60.49b(a)(3)

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
						capacity from fuels combusted in the unit > 29 MW (100 MMBtu/hr).			
F6	EU	63DDDDD-1	112(B) HAPS	40 CFR Part 63, Subpart DDDDD	§ 63.7500(a)(1)-Table 3.1 § 63.7500(a)(1) § 63.7500(a)(3) § 63.7505(a) § 63.7540(a) [G]§ 63.7540(a)(10) § 63.7540(a)(12) § 63.7540(a)(13)	A new or existing boiler or process heater with a continuous oxygen trim system that maintains an optimum air to fuel ratio must conduct a tune-up of the boiler or process heater every 5 years as specified in § 63.7540.	§ 63.7515(d) § 63.7525(a)(7) § 63.7540(a) [G]§ 63.7540(a)(10)	§ 63.7555(a) § 63.7555(a)(1) § 63.7560(a) § 63.7560(b) § 63.7560(c)	§ 63.7530(e) § 63.7530(f) § 63.7545(a) § 63.7545(b) § 63.7545(c) [G]§ 63.7545(e) § 63.7550(a) [G]§ 63.7550(b) [G]§ 63.7550(c) [G]§ 63.7550(h)
F7	EU	R7ICI-01	CO	30 TAC Chapter 117, Subchapter B	§ 117.310(c)(1) § 117.310(c)(1)(A) § 117.310(c)(3) § 117.340(f)(1)	CO emissions must not exceed 400 ppmv at 3.0% O 2, dry basis.	[G]§ 117.335(a)(1) § 117.335(a)(4) § 117.335(b) § 117.335(c) § 117.335(d) § 117.335(f) § 117.335(f)(3) § 117.335(g) § 117.340(a) § 117.340(b)(1) § 117.340(b)(3) § 117.340(e) [G]§ 117.340(f)(2) § 117.8100(a) § 117.8100(a)(1) § 117.8100(a)(1)(A) § 117.8100(a)(1)(B) § 117.8100(a)(1)(B)(ii) § 117.8100(a)(1)(B)(iii) § 117.8100(a)(1)(C) § 117.8100(a)(2)	§ 117.345(a) § 117.345(f) § 117.345(f)(1) [G]§ 117.345(f)(2) § 117.345(f)(7) § 117.345(f)(8) § 117.345(f)(9) § 117.8100(a)(5)(C)	§ 117.335(b) § 117.335(g) [G]§ 117.345(b) [G]§ 117.345(c) § 117.345(d) § 117.345(d)(2) § 117.345(d)(3) § 117.345(d)(4) § 117.345(d)(5) § 117.8010 [G]§ 117.8010(1) § 117.8010(2) § 117.8010(2)(A) § 117.8010(2)(B) [G]§ 117.8010(3) § 117.8010(4) [G]§ 117.8010(5) § 117.8010(6) [G]§ 117.8010(7) [G]§ 117.8010(8) § 117.8100(c)

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
							[G]§ 117.8100(a)(3) § 117.8100(a)(4) § 117.8100(a)(5) § 117.8100(a)(5)(A) § 117.8100(a)(5)(B) [G]§ 117.8100(a)(5)(D) [G]§ 117.8100(a)(5)(E) § 117.8100(a)(6) § 117.8120 § 117.8120(1) § 117.8120(1)(A)		
F7	EU	R7ICI-01	NO_X	30 TAC Chapter 117, Subchapter B	§ 117.310(d)(3) § 117.310(a) § 117.310(a)(1)(A) § 117.310(b) [G]§ 117.310(e)(1) § 117.310(e)(2) [G]§ 117.310(e)(3) § 117.310(e)(4) § 117.340(f)(1) § 117.340(l)(2) § 117.340(p)(1) § 117.340(p)(3)	An owner or operator may not use the alternative methods specified in §§ 117.315, 117.323 and 117.9800 to comply with the NO_x emission specifications but shall use the mass emissions cap and trade program in Chapter 101, Subchapter H, Division 3, except that electric generating facilities must also comply with the daily and 30-day system cap emission limitations of § 117.320. An owner or operator may use the alternative methods specified in § 117.9800 to comply with § 117.320.	[G]§ 117.335(a)(1) § 117.335(a)(4) § 117.335(b) § 117.335(c) § 117.335(d) § 117.335(f) § 117.335(f)(2) § 117.335(g) § 117.340(a) § 117.340(b)(1) § 117.340(b)(3) § 117.340(c)(1) [G]§ 117.340(c)(3) [G]§ 117.340(f)(2) § 117.340(l)(2) § 117.340(o)(1) § 117.340(p)(1) § 117.8100(a) § 117.8100(a)(1) § 117.8100(a)(1)(A) § 117.8100(a)(1)(B) § 117.8100(a)(1)(B)(i) § 117.8100(a)(1)(B)(ii)	§ 117.345(a) § 117.345(f) § 117.345(f)(1) [G]§ 117.345(f)(2) § 117.345(f)(8) § 117.345(f)(9) § 117.8100(a)(5)(C)	§ 117.335(b) § 117.335(g) [G]§ 117.345(b) [G]§ 117.345(c) § 117.345(d) § 117.345(d)(3) § 117.8010 [G]§ 117.8010(1) § 117.8010(2) § 117.8010(2)(A) § 117.8010(2)(B) § 117.8010(2)(C) § 117.8010(2)(D) [G]§ 117.8010(3) § 117.8010(4) [G]§ 117.8010(5) § 117.8010(6) [G]§ 117.8010(7) [G]§ 117.8010(8) § 117.8100(c)

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
							§ 117.8100(a)(1)(C) § 117.8100(a)(2) [G]§ 117.8100(a)(3) § 117.8100(a)(4) § 117.8100(a)(5) § 117.8100(a)(5)(A) § 117.8100(a)(5)(B) [G]§ 117.8100(a)(5)(D) [G]§ 117.8100(a)(5)(E) § 117.8100(a)(6)		
F7	EU	60Db-01	NO_X	40 CFR Part 60, Subpart Db	§ 60.44b(l)(2) § 60.44b(h) § 60.44b(i) § 60.46b(a)	Affected facilities with a low heat release rate and combusting natural gas or distillate oil in excess of 30% of the heat input from the combustion of all fuels, a limit determined by use of the specified formula.	§ 60.46b(c) § 60.46b(e) § 60.46b(e)(1) § 60.46b(e)(4) [G]§ 60.48b(b) § 60.48b(c) § 60.48b(d) § 60.48b(e) [G]§ 60.48b(e)(2) § 60.48b(e)(3) § 60.48b(f) § 60.48b(g)(1)	[G]§ 60.48b(b) § 60.48b(c) [G]§ 60.49b(d) [G]§ 60.49b(g) § 60.49b(o)	§ 60.49b(a) § 60.49b(a)(1) § 60.49b(a)(3) § 60.49b(b) § 60.49b(h) § 60.49b(h)(4) § 60.49b(i) § 60.49b(v) § 60.49b(w)
F7	EU	60Db-01	PM	40 CFR Part 60, Subpart Db	§ 60.40b(a)	This subpart applies to each steam generating unit constructed, modified, or reconstructed after 6/19/84, and that has a heat input capacity from fuels combusted in the unit > 29 MW (100 MMBtu/hr).	None	[G]§ 60.49b(d) § 60.49b(o)	§ 60.49b(a) § 60.49b(a)(1) § 60.49b(a)(3)
F7	EU	60Db-01	PM (Opacity)	40 CFR Part 60, Subpart Db	§ 60.40b(a)	This subpart applies to each steam generating unit constructed, modified, or reconstructed after 6/19/84, and that has a heat input capacity from fuels	None	[G]§ 60.49b(d) § 60.49b(o)	§ 60.49b(a) § 60.49b(a)(1) § 60.49b(a)(3)

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
						combusted in the unit > 29 MW (100 MMBtu/hr).			
F7	EU	60Db-01	SO_2	40 CFR Part 60, Subpart Db	§ 60.40b(a)	This subpart applies to each steam generating unit constructed, modified, or reconstructed after 6/19/84, and that has a heat input capacity from fuels combusted in the unit > 29 MW (100 MMBtu/hr).	None	[G]§ 60.49b(d) § 60.49b(o)	§ 60.49b(a) § 60.49b(a)(1) § 60.49b(a)(3)
F7	EU	63DDDDD-1	112(B) HAPS	40 CFR Part 63, Subpart DDDDD	§ 63.7500(a)(1)-Table 3.1 § 63.7500(a)(1) § 63.7500(a)(3) § 63.7505(a) § 63.7540(a) [G]§ 63.7540(a)(10) § 63.7540(a)(12) § 63.7540(a)(13)	A new or existing boiler or process heater with a continuous oxygen trim system that maintains an optimum air to fuel ratio must conduct a tune-up of the boiler or process heater every 5 years as specified in § 63.7540.	§ 63.7515(d) § 63.7525(a)(7) § 63.7540(a) [G]§ 63.7540(a)(10)	§ 63.7555(a) § 63.7555(a)(1) § 63.7560(a) § 63.7560(b) § 63.7560(c)	§ 63.7530(e) § 63.7530(f) § 63.7545(a) § 63.7545(b) § 63.7545(c) [G]§ 63.7545(e) § 63.7550(a) [G]§ 63.7550(b) [G]§ 63.7550(c) [G]§ 63.7550(h)
G684	EU	R7ICI-EMERG	Exempt	30 TAC Chapter 117, Subchapter B	§ 117.303(a)(6)(D) [G]§ 117.310(f)	Units exempted from the provisions of this division, except as specified in §§117.310(f), 117.340(j), 117.345(f)(6) and (10), 117.350(c)(1), and 117.354(a)(5), include stationary gas turbines and stationary internal combustion engines that are used exclusively in emergency situations, except that operation for testing or maintenance purposes is allowed for up to 52 hours per year, based on a rolling 12-month average.	§ 117.8140(a) § 117.8140(a)(3)	§ 117.340(j) § 117.345(f) [G]§ 117.345(f)(10) [G]§ 117.345(f)(6)	None

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
G684	EU	63ZZZZ-01	112(B) HAPS	40 CFR Part 63, Subpart ZZZZ	§ 63.6602-Table2c.1 § 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)(3)	For each existing emergency stationary CI RICE and black start stationary CI RICE, located at a major source, you must comply with the requirements as specified in Table 2c.1.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)
GROUPVENT	EP	R5121-02	VOC	30 TAC Chapter 115, Vent Gas Controls	§ 115.127(a)(2)(B) [G]§ 115.122(a)(4) § 115.127(a)(2)	A vent gas stream specified in §115.121(a)(1) of this title with a concentration of VOC less than 612 parts per million by volume (ppmv) is exempt from §115.121(a)(1) of this title.	[G]§ 115.125 § 115.126(2)	§ 115.126 § 115.126(2) § 115.126(4)	None
GRPDEGRSR	EU	R5412-01	VOC	30 TAC Chapter 115, Degreasing Processes	§ 115.412(1) § 115.411(1) § 115.411(2) [G]§ 115.412(1)(A) § 115.412(1)(C) § 115.412(1)(D) [G]§ 115.412(1)(F)	No person shall own or operate a system utilizing a VOC for the cold solvent cleaning of objects without the controls listed in §115.412(1)(A)-(F), except as exempted in §115.411.	[G]§ 115.415(1) § 115.415(3) ** See Periodic Monitoring Summary	None	None
GRPENG	EU	R7ICI-EMERG	Exempt	30 TAC Chapter 117, Subchapter B	§ 117.303(a)(6)(D) [G]§ 117.310(f)	Units exempted from the provisions of this division, except as specified in §§117.310(f), 117.340(j), 117.345(f)(6) and (10), 117.350(c)(1), and 117.354(a)(5), include stationary gas turbines and stationary internal combustion engines that are used exclusively in emergency situations,	§ 117.8140(a) § 117.8140(a)(3)	§ 117.340(j) § 117.345(f) [G]§ 117.345(f)(10) [G]§ 117.345(f)(6)	None

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
						except that operation for testing or maintenance purposes is allowed for up to 52 hours per year, based on a rolling 12-month average.			
GRPENG	EU	63ZZZZ-01	112(B) HAPS	40 CFR Part 63, Subpart ZZZZ	§ 63.6602-Table2c.1 § 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)(3)	For each existing emergency stationary CI RICE and black start stationary CI RICE, located at a major source, you must comply with the requirements as specified in Table 2c.1.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)
INCFD	EP	R5121-01	VOC	30 TAC Chapter 115, Vent Gas Controls	§ 115.122(a)(1) § 115.121(a)(1) § 115.122(a)(1)(A)	Vent gas affected by §115.121(a)(1) must be controlled properly with a control efficiency > 90% 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
INCFD	EP	63HHHHHH-VT	DIOXINS/FURANS	40 CFR Part 63, Subpart HHHHHHH	§ 63.11925(a)-Table 1.1.e § 63.11870(a) § 63.11870(b) § 63.11870(c) § 63.11870(e) § 63.11880(c) § 63.11890(a) § 63.11925(e)(2) § 63.11925(e)(5) § 63.11935(a)	You must meet the dioxins/furans (toxic equivalency basis) emission limit of 0.038 ng/dscm for PVC-only process vents from an affected source producing PVC resin.	§ 63.11925(d)(2) § 63.11925(d)(3) [G]§ 63.11925(e)(4) [G]§ 63.11925(f)-Table 6 [G]§ 63.11925(g)(2) [G]§ 63.11935(c) § 63.11935(d)(1) § 63.11935(e) § 63.11940(a) § 63.11940(b)(1) [G]§ 63.11940(c)	[G]§ 63.11990(e) [G]§ 63.11990(f) § 63.11995(a) § 63.11995(b)	§ 63.11985(a) § 63.11985(a)(4) [G]§ 63.11985(a)(5) § 63.11985(a)(9) § 63.11985(a)(9)(iv) [G]§ 63.11985(b)(4) [G]§ 63.11985(c)(9)

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
							§ 63.11945(a)-Table 8.5.a § 63.11945(a)-Table 8.6 § 63.11945(b)(1) [G]§ 63.11945(d)		
INCFD	EP	63HHHHHHH-VT	HCL	40 CFR Part 63, Subpart HHHHHHH	§ 63.11925(a)-Table 1.1.d § 63.11870(a) § 63.11870(b) § 63.11870(c) § 63.11870(e) § 63.11880(c) § 63.11890(a) § 63.11925(e)(2) § 63.11925(e)(5) § 63.11935(a)	You must meet the hydrogen chloride (HCl) emission limit of 78 ppmv for PVC-only process vents from an affected source producing PVC resin.	§ 63.11925(d)(2) § 63.11925(d)(3) [G]§ 63.11925(e)(4) [G]§ 63.11925(g)(2) § 63.11935(a)-Table 5 [G]§ 63.11935(c)-Table 7.3 [G]§ 63.11935(c)-Table 7.6 [G]§ 63.11935(c)-Table 7.8 § 63.11935(d)(1) § 63.11935(e) § 63.11940(a) § 63.11940(b)(1) [G]§ 63.11940(c) § 63.11945(a)-Table 8.4.a § 63.11945(a)-Table 8.6 § 63.11945(b)(1) [G]§ 63.11945(d)	[G]§ 63.11990(e) [G]§ 63.11990(f) § 63.11995(a) § 63.11995(b)	§ 63.11985(a) § 63.11985(a)(4) [G]§ 63.11985(a)(5) § 63.11985(a)(9) § 63.11985(a)(9)(iv) [G]§ 63.11985(b)(4) [G]§ 63.11985(c)(9)
INCFD	EP	63HHHHHHH-VT	THC	40 CFR Part 63, Subpart HHHHHHH	§ 63.11925(a)-Table 1.1.b § 63.11870(a) § 63.11870(b) § 63.11870(c) § 63.11870(e) § 63.11880(c) § 63.11890(a) § 63.11925(e)(2)	You must meet the total hydrocarbon (THC) limit of 9.7 ppmv measured as propane for PVC-only process vents from an affected source producing PVC resin.	§ 63.11925(d)(2) § 63.11925(d)(3) [G]§ 63.11925(e)(4) [G]§ 63.11925(g)(2) § 63.11935(a)-Table 5 [G]§ 63.11935(c)-Table 7.1 § 63.11935(d)(1)	[G]§ 63.11990(e) [G]§ 63.11990(f) § 63.11995(a) § 63.11995(b)	§ 63.11985(a) § 63.11985(a)(4) [G]§ 63.11985(a)(5) § 63.11985(a)(9) § 63.11985(a)(9)(iv) [G]§ 63.11985(b)(4) [G]§ 63.11985(c)(9)

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
					§ 63.11925(e)(5) § 63.11935(a)		§ 63.11935(e) § 63.11940(a) § 63.11940(b)(1) [G]§ 63.11940(c) § 63.11945(a)-Table 8.1.a § 63.11945(a)-Table 8.6 § 63.11945(b)(1) [G]§ 63.11945(d)		
INCFD	EP	63HHHHHH-VT	VINYL CHLORIDE	40 CFR Part 63, Subpart HHHHHHH	§ 63.11925(a)-Table 1.1.a § 63.11870(a) § 63.11870(b) § 63.11870(c) § 63.11870(e) § 63.11880(c) § 63.11890(a) § 63.11925(e)(2) § 63.11925(e)(5) § 63.11935(a)	You must meet the vinyl chloride emission limit of 6 ppmv for PVC-only process vents from an affected source producing PVC resin.	§ 63.11925(d)(2) § 63.11925(d)(3) [G]§ 63.11925(e)(4) [G]§ 63.11925(g)(2) § 63.11935(a)-Table 5 [G]§ 63.11935(c)-Table 7.1 § 63.11935(d)(1) § 63.11935(e) § 63.11940(a) § 63.11940(b)(1) [G]§ 63.11940(c) § 63.11945(a)-Table 8.3.a § 63.11945(a)-Table 8.6 § 63.11945(b)(1) [G]§ 63.11945(d)	[G]§ 63.11990(e) [G]§ 63.11990(f) § 63.11995(a) § 63.11995(b)	§ 63.11985(a) § 63.11985(a)(4) [G]§ 63.11985(a)(5) § 63.11985(a)(9) § 63.11985(a)(9)(iv) [G]§ 63.11985(b)(4) [G]§ 63.11985(c)(9)
ISOTK	EU	R5112-01	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
MSSFLARE	EP	R5720-MSS	Highly Reactive	30 TAC Chapter 115, HRVOC Vent	§ 115.722(d) § 115.722(d)(1)	All flares must continuously meet the requirements of	§ 115.725(f)(1) § 115.725(f)(2)	§ 115.726(d)(1) § 115.726(d)(2)	§ 115.725(n)

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
			VOC	Gas	§ 115.722(d)(2) § 115.725(f)(1) § 115.725(f)(2) § 115.725(f)(3) § 115.725(f)(4) § 115.725(f)(5) § 115.725(f)(6) [G]§ 115.725(l)	40 CFR § 60.18(c)(2)-(6) and (d) as amended through October 17, 2000 (65 FR 61744) when vent gas containing HRVOC is being routed to the flare.	§ 115.725(f)(3) § 115.725(f)(4) § 115.725(f)(4)(B) § 115.725(f)(5) § 115.725(f)(6) [G]§ 115.725(l) § 115.725(n)	§ 115.726(d)(3) § 115.726(d)(4) [G]§ 115.726(d)(6) § 115.726(i) § 115.726(j)(1) § 115.726(j)(2)	
PA-1	EU	R5450-EXEMPT	VOC	30 TAC Chapter 115, Subchapter E, Division 5	§ 115.453(a)(1)(C)-Table 1 § 115.453(a) § 115.453(a)(1) § 115.453(a)(1)(C) § 115.453(d)(1) § 115.453(d)(1)(A) § 115.453(d)(1)(B) § 115.453(d)(1)(C) § 115.453(d)(1)(D) § 115.453(d)(1)(E) § 115.453(d)(2) § 115.453(d)(2)(A) § 115.453(d)(2)(B) § 115.453(d)(2)(C) § 115.453(d)(2)(D) § 115.453(d)(2)(E) § 115.453(d)(2)(F) § 115.453(d)(2)(G)	The VOC content of air-dried coating applied to miscellaneous metal parts and products shall not exceed the pounds of VOC per gallon of coating listed in Table 1.	§ 115.455(a) [G]§ 115.455(a)(1) § 115.455(a)(5) § 115.455(b)	§ 115.458(b)(1) § 115.458(b)(2) § 115.458(b)(6) § 115.458(b)(7)	None
PA-1	EU	R5450-NORMAL	VOC	30 TAC Chapter 115, Subchapter E, Division 5	§ 115.453(a)(1)(C)-Table 1 § 115.453(a) § 115.453(a)(1) § 115.453(a)(1)(C) [G]§ 115.453(c) § 115.453(d)(1) § 115.453(d)(1)(A) § 115.453(d)(1)(B) § 115.453(d)(1)(C) § 115.453(d)(1)(D)	The VOC content of air-dried coating applied to miscellaneous metal parts and products shall not exceed the pounds of VOC per gallon of coating listed in Table 1.	§ 115.455(a) [G]§ 115.455(a)(1) § 115.455(a)(5) § 115.455(b)	§ 115.458(b)(1) § 115.458(b)(2) § 115.458(b)(6) § 115.458(b)(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)
					§ 115.453(d)(1)(E) § 115.453(d)(2) § 115.453(d)(2)(A) § 115.453(d)(2)(B) § 115.453(d)(2)(C) § 115.453(d)(2)(D) § 115.453(d)(2)(E) § 115.453(d)(2)(F) § 115.453(d)(2)(G)				
PROVC	EU	63HHHHH HH-OTH	112(B) HAPS	40 CFR Part 63, Subpart HHHHHHH	[G]§ 63.11955 § 63.11870(a) § 63.11870(b) § 63.11870(c) § 63.11870(e) § 63.11880(c) § 63.11890(a) [G]§ 63.11956	You must meet the emission limits specified in §63.11955(a)-(d) for other emission sources at a polyvinyl chloride and copolymers production affected source.	[G]§ 63.11956	[G]§ 63.11990(j) § 63.11995(a) § 63.11995(b)	§ 63.11985(a) § 63.11985(a)(9) § 63.11985(a)(9)(v) § 63.11985(b) § 63.11985(b)(6)
PROVC	EU	63HHHHH HH-SR	TOTAL NON-VINYL CHLORIDE ORGANIC HAP	40 CFR Part 63, Subpart HHHHHHH	§ 63.11960(a)-Table 1.3.b.iii § 63.11870(a) § 63.11870(b) § 63.11870(c) § 63.11870(e) § 63.11880(c) § 63.11890(a) [G]§ 63.11960(b)-Table 10	You must meet the total non-vinyl chloride organic HAP emission limit of 670 pppw for a stripped resin emission point that produces suspension resin.	[G]§ 63.11960(c)(1) [G]§ 63.11960(c)(2) § 63.11960(c)-Table 9.1.a § 63.11960(d)(2) § 63.11960(d)(3) § 63.11960(d)-Table 9.2.a [G]§ 63.11960(e) [G]§ 63.11960(f)	[G]§ 63.11990(h) § 63.11995(a) § 63.11995(b)	§ 63.11985(a) [G]§ 63.11985(a)(7) § 63.11985(a)(9) § 63.11985(a)(9)(vi) § 63.11985(b) § 63.11985(b)(4)(ii) [G]§ 63.11985(b)(4)(iii) § 63.11985(b)(7)
PROVC	EU	63HHHHH HH-SR	VINYL CHLORIDE	40 CFR Part 63, Subpart HHHHHHH	§ 63.11960(a)-Table 1.3.a.iii § 63.11870(a) § 63.11870(b) § 63.11870(c) § 63.11870(e) § 63.11880(c) § 63.11890(a) [G]§ 63.11960(b)-Table 10	You must meet the vinyl chloride emission limit of 37 pppw for a stripped resin emission point that produces suspension resin.	[G]§ 63.11960(c)(1) [G]§ 63.11960(c)(2) § 63.11960(c)-Table 9.1.a § 63.11960(d)(1) § 63.11960(d)(3) § 63.11960(d)-Table 9.2.a [G]§ 63.11960(e)	[G]§ 63.11990(h) § 63.11995(a) § 63.11995(b)	§ 63.11985(a) [G]§ 63.11985(a)(7) § 63.11985(a)(9) § 63.11985(a)(9)(vi) § 63.11985(b) § 63.11985(b)(4)(ii) [G]§ 63.11985(b)(4)(iii) § 63.11985(b)(7)

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
PROVC	EU	63HHHHH HH-WW	TOTAL NON-VINYL CHLORIDE ORGANIC HAP	40 CFR Part 63, Subpart HHHHHHH	§ 63.11965(a)-Table 1.4.b § 63.11870(a) § 63.11870(b) § 63.11870(c) § 63.11870(e) § 63.11880(c) § 63.11890(a) [G]§ 63.11965(b) § 63.11965(c) § 63.11965(d) § 63.11965(e) [G]§ 63.11965(f)-Table 10	You must meet the total non-vinyl chloride organic HAP emission limit of 110 pppw for process wastewater from an affected source producing PVC resin.	[G]§ 63.11970-Table 9.3 [G]§ 63.11975-Table 9.4 [G]§ 63.11980	§ 63.11990(a) [G]§ 63.11990(i) § 63.11995(a) § 63.11995(b)	§ 63.11985(a) [G]§ 63.11985(a)(8) § 63.11985(a)(9) § 63.11985(a)(9)(vii) § 63.11985(b) § 63.11985(b)(4)(ii) [G]§ 63.11985(b)(4)(iii) [G]§ 63.11985(b)(8)
PROVC	EU	63HHHHH HH-WW	VINYL CHLORIDE	40 CFR Part 63, Subpart HHHHHHH	§ 63.11965(a)-Table 1.4.a § 63.11870(a) § 63.11870(b) § 63.11870(c) § 63.11870(e) § 63.11880(c) § 63.11890(a) [G]§ 63.11965(b) § 63.11965(c) § 63.11965(d) § 63.11965(e)	You must meet the total vinyl chloride emission limit of 6.8 pppw for process wastewater from an affected source producing PVC resin.	[G]§ 63.11970-Table 9.3 [G]§ 63.11975-Table 9.4 [G]§ 63.11980	§ 63.11990(a) [G]§ 63.11990(i) § 63.11995(a) § 63.11995(b)	§ 63.11985(a) [G]§ 63.11985(a)(8) § 63.11985(a)(9) § 63.11985(a)(9)(vii) § 63.11985(b) § 63.11985(b)(4)(ii) [G]§ 63.11985(b)(4)(iii) [G]§ 63.11985(b)(8)
RECO	EP	R5720-RECO	Highly Reactive VOC	30 TAC Chapter 115, HRVOC Vent Gas	§ 115.722(c)(1) § 115.722(c)(3) § 115.722(d) § 115.722(d)(1) § 115.722(d)(2)	HRVOC emissions at each site located in Harris County that is subject to this division or Division 2 of this subchapter must not exceed 1,200 pounds of HRVOC per one-hour block period from any flare, vent, pressure relief valve, cooling tower, or any combination.	§ 115.725(n)	§ 115.726(d)(1) § 115.726(d)(2) § 115.726(d)(3) § 115.726(d)(4) [G]§ 115.726(h) § 115.726(i) § 115.726(j)(1) § 115.726(j)(2)	§ 115.725(n)
T418	EU	R7ICI-	Exempt	30 TAC Chapter	§ 117.303(a)(6)(D)	Units exempted from the	§ 117.8140(a)	§ 117.340(j)	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)
		EMERG		117, Subchapter B	[G]§ 117.310(f)	provisions of this division, except as specified in §§117.310(f), 117.340(j), 117.345(f)(6) and (10), 117.350(c)(1), and 117.354(a)(5), include stationary gas turbines and stationary internal combustion engines that are used exclusively in emergency situations, except that operation for testing or maintenance purposes is allowed for up to 52 hours per year, based on a rolling 12-month average.	§ 117.8140(a)(3)	§ 117.345(f) [G]§ 117.345(f)(10) [G]§ 117.345(f)(6)	
UNLOAD-LVP	EU	R5211-LVP	VOC	30 TAC Chapter 115, Loading and Unloading of VOC	§ 115.217(a)(1) § 115.212(a)(2) § 115.214(a)(1)(B) § 115.214(a)(1)(D) § 115.214(a)(1)(D)(i)	Vapor pressure (at land-based operations). All land-based loading and unloading of VOC with a true vapor pressure less than 0.5 psia is exempt from the requirements of this division, except as specified.	§ 115.214(a)(1)(A) § 115.214(a)(1)(A)(i) § 115.215 § 115.215(4)	§ 115.216 § 115.216(2) § 115.216(3)(B)	None

Additional Monitoring Requirements

CAM Summary

Unit/Group/Process Information	
ID No.: INCFD	
Control Device ID No.: F-301A, F-801B	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.: R5121-01
Pollutant: VOC	Main Standard: § 115.122(a)(1)
Monitoring Information	
Indicator: Firebox temperatures	
Minimum Frequency: Four times per hour	
Averaging Period: Hourly	
Deviation Limit: The incinerator firebox temperature must be maintained at not less than 1,300 degrees Fahrenheit for each individual incinerator when feeding vent gas or liquid feed.	
CAM Text: The temperature measurement device for each incinerator shall be installed, calibrated, and maintained according to accepted practice and manufacturer's specifications. The devices shall have an accuracy of the greater of ±0.75 percent of the temperature being measured expressed in degrees Celsius or ±2.5ºC. The incinerator firebox exit temperature for each incinerator shall be continuously monitored and recorded. The incinerator firebox exit temperatures shall be maintained at not less than 1,300 degrees Fahrenheit while feeding vent gas or liquid feed. Quality assured (or valid) data must be generated when the facilities are operating except during the performance of a daily zero and span check. Loss of valid data due to periods of monitor break down, out-of-control operation (producing inaccurate data), repair, maintenance, or calibration may be exempted provided it does not exceed 5 percent of the time (in minutes) that each facility operated over the previous rolling 12 month period. The measurements missed shall be estimated using engineering judgment and the methods used recorded.	

Periodic Monitoring Summary

Unit/Group/Process Information	
ID No.: DEG5	
Control Device ID No.: N/A	Control Device Type: N/A
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 115, Degreasing Processes	SOP Index No.: R5412-02
Pollutant: VOC	Main Standard: § 115.412(1)
Monitoring Information	
Indicator: Visual inspection and maintenance of records.	
Minimum Frequency: Quarterly	
Averaging Period: N/A	
Deviation Limit: Noncompliance with 115.412(1)(A), (C), (D), (F).	
Periodic Monitoring Text: Inspect equipment and record data quarterly to ensure compliance with §§ 115.412(1)(A), (C), (D), (F). Any monitoring data that indicates the cold cleaners are not in compliance with §§ 115.412(1)(A), (C), (D), (F) shall be considered and reported as a deviation.	

Periodic Monitoring Summary

Unit/Group/Process Information	
ID No.: GRPDEGRSR	
Control Device ID No.: N/A	Control Device Type: N/A
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 115, Degreasing Processes	SOP Index No.: R5412-01
Pollutant: VOC	Main Standard: § 115.412(1)
Monitoring Information	
Indicator: Visual inspection and maintenance of records.	
Minimum Frequency: Quarterly	
Averaging Period: N/A	
Deviation Limit: Noncompliance with 115.412(1)(A), (C), (D), (F).	
Periodic Monitoring Text: Inspect equipment and record data quarterly to ensure compliance with §§ 115.412(1)(A), (C), (D), (F). Any monitoring data that indicates the cold cleaners are not in compliance with §§ 115.412(1)(A), (C), (D), (F) shall be considered and reported as a deviation.	

Permit Shield

Permit Shield

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

Unit / Group / Process ID No.	Group / Inclusive Units	Regulation	Basis of Determination
120	N/A	30 TAC Chapter 115, HRVOC Cooling Towers	The cooling tower heat exchange system in the Houston/Galveston/Brazoria area does not emit or does not have the potential to emit highly reactive volatile organic compounds.
121	N/A	30 TAC Chapter 115, HRVOC Cooling Towers	The cooling tower heat exchange system in the Houston/Galveston/Brazoria area does not emit or does not have the potential to emit highly reactive volatile organic compounds.
75	N/A	30 TAC Chapter 111, Visible Emissions	Flares used only during emergency or upset conditions are exempt from the compliance monitoring requirements of this division.
87	N/A	30 TAC Chapter 117, Subchapter B	The unit is an incinerator with a maximum rated capacity less than 40 MMBtu/hr.
88	N/A	30 TAC Chapter 117, Subchapter B	The unit is an incinerator with a maximum rated capacity less than 40 MMBtu/hr.
D-112	N/A	30 TAC Chapter 115, Storage of VOCs	The VOC storage vessel is in a motor vehicle fuel dispensing service and has a nominal capacity less than 25,000 gallons.
D-315	N/A	40 CFR Part 63, Subpart EEEE	The storage tank does not store organic liquids or Table 1 HAPs as defined in 63.2406.
D-412	N/A	40 CFR Part 63, Subpart EEEE	The storage tank does not store organic liquids or Table 1 HAPs as defined in 63.2406.
F-74	N/A	30 TAC Chapter 115, HRVOC Fugitive Emissions	The site does not contain a synthetic organic chemical, polymer, resin, or methyl tert-butyl-ether manufacturing process, natural gas/gasoline processing or petroleum refinery as defined in 115.10 and does not contain components in HRVOC service.

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
F-74	N/A	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	The site does not contain a synthetic organic chemical, polymer, resin, or methyl tert-butyl-ether manufacturing process, natural gas/gasoline processing or petroleum refinery as defined in 115.10.
F-99	N/A	30 TAC Chapter 115, Industrial Wastewater	The site does not generate any affected volatile organic compound (VOC) wastewater streams as defined in 115.140(2).
F4	N/A	40 CFR Part 60, Subpart D	The boiler heat input rate is less than 250 MMBtu/hr.
F4	N/A	40 CFR Part 60, Subpart Db	The boiler was not constructed, modified or reconstructed after June 19, 1984.
G684	N/A	40 CFR Part 60, Subpart IIII	The stationary compression ignition internal combustion engine did not commence construction, modification, or reconstruction after July 11, 2005.
GROUPVENT	N/A	40 CFR Part 63, Subpart HHHHHHH	This is not a PVC process vent because the vent stream originates from process components associated with the stripped resin downstream of the resin stripper such as dryers, centrifuges, and filters.
GRPENG	G002, G087, G121, G359C	40 CFR Part 60, Subpart IIII	The stationary compression ignition internal combustion engine did not commence construction, modification, or reconstruction after July 11, 2005.
T418	N/A	40 CFR Part 60, Subpart IIII	The stationary compression ignition (CI) internal combustion engine (ICE) did not commence construction, modification, or reconstruction after

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
			July 11, 2005.
T418	N/A	40 CFR Part 63, Subpart ZZZZ	This is an existing emergency stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions and is not contractually obligated to supply power.
UNLOAD-GVP	N/A	30 TAC Chapter 115, Loading and Unloading of VOC	This is a motor vehicle fuel dispensing facility. Motor vehicle fuel dispensing facility is exempt from the requirements of this division.

New Source Review Authorization References

New Source Review Authorization References

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

Nonattainment (NA) Permits	
NA Permit No.: N002	Issuance Date: 03/07/2022
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.: 18384	Issuance Date: 03/07/2022
Authorization No.: 172112	Issuance Date: 04/19/2023
Authorization No.: 181424	Issuance Date: 09/17/2025
Permits By Rule (30 TAC Chapter 106) for the Application Area	
Number: 86	Version No./Date: 05/04/1994
Number: 106.122	Version No./Date: 09/04/2000
Number: 106.124	Version No./Date: 09/04/2000
Number: 106.227	Version No./Date: 09/04/2000
Number: 106.261	Version No./Date: 11/01/2003
Number: 106.262	Version No./Date: 11/01/2003
Number: 106.263	Version No./Date: 11/01/2001
Number: 106.264	Version No./Date: 09/04/2000
Number: 106.265	Version No./Date: 09/04/2000
Number: 106.266	Version No./Date: 09/04/2000
Number: 106.371	Version No./Date: 09/04/2000
Number: 106.373	Version No./Date: 09/04/2000
Number: 106.393	Version No./Date: 09/04/2000
Number: 106.412	Version No./Date: 09/04/2000
Number: 106.433	Version No./Date: 09/04/2000
Number: 106.452	Version No./Date: 09/04/2000
Number: 106.454	Version No./Date: 11/01/2001
Number: 106.472	Version No./Date: 09/04/2000
Number: 106.473	Version No./Date: 09/04/2000
Number: 106.511	Version No./Date: 09/04/2000
Number: 106.512	Version No./Date: 09/04/2000
Number: 106.532	Version No./Date: 09/04/2000

New Source Review Authorization References by Emissions Unit

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

Unit/Group/Process ID No.	Emission Unit Name/Description	New Source Review Authorization**
120	COOLING TOWER E618	18384, N002, 106.371/09/04/2000
121	COOLING TOWER E310	18384, N002, 106.371/09/04/2000
75	EMERGENCY FLARE	18384, N002
87	INCINERATOR /SCRUBBER (F-801B)	18384, N002
88	INCINERATOR /SCRUBBER (F-801A)	172112
CAT-ENG1	CATALYST TRAILER ENGINE	106.512/09/04/2000
CAT-ENG2	CATALYST TRAILER ENGINE	106.512/09/04/2000
D-110A	DIESEL STORAGE TANK	106.412/09/04/2000
D-110B	DIESEL STORAGE TANK	106.412/09/04/2000
D-112	GASOLINE STORAGE TANK	106.412/09/04/2000
D-315	ANTISTAT STORAGE TANK	106.472/09/04/2000
D-322	IC SUSPENDING AGENT MAKE-UP TANK	106.472/09/04/2000, 106.473/09/04/2000
D-323	IC SUSPENDING AGENT MEASURING TANK	106.472/09/04/2000, 106.473/09/04/2000
D-405	DIESEL STORAGE TANK	106.472/09/04/2000
D-412	REACTOR COATING STORAGE TANK	86/05/04/1994 [27087], 106.472/09/04/2000
D-5	VINYL CHLORIDE SPHERE	18384, N002
D-6	VINYL CHLORIDE SPHERE	18384, N002
D-602	CHEMTREAT BULK TANK	106.472/09/04/2000, 106.473/09/04/2000
D-615	DIESEL STORAGE TANK	106.472/09/04/2000
D-981	CATALYST MIX TANK	106.472/09/04/2000, 106.473/09/04/2000
D-982	LB STORAGE TANK	106.472/09/04/2000

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**
D-983	LA STORAGE TANK	106.472/09/04/2000
D-984	LD STORAGE TANK	106.472/09/04/2000
DEG3	DEGREASER	106.454/11/01/2001
DEG4	DEGREASER	106.454/11/01/2001
DEG5	DEGREASER	106.454/11/01/2001
F-74	PVC PLANT FUGITIVES	18384, N002, 106.261/11/01/2003 [160505, 163878], 106.262/11/01/2003 [136634, 158865, 158925, 163878], 106.264/09/04/2000 [136634]
F-99	WASTEWATER (WTU) FUGITIVES	106.532/09/04/2000
F4	BOILER F4	18384, N002
F6	BOILER F6	18384, N002
F7	BOILER F7	18384, N002
G002	FIREWATER PUMP ENGINE	106.511/09/04/2000
G087	FIREWATER PUMP ENGINE	106.511/09/04/2000
G121	FIREWATER PUMP ENGINE	106.511/09/04/2000
G359C	RW DIESEL DRIVEN PUMP	106.511/09/04/2000
G684	FIREWATER PUMP ENGINE	106.511/09/04/2000
GROUPVENT	VENTS DOWNSTREAM OF THE RESIN STRIPPER	18384, N002
INCFD	INCINERATOR FEED STREAMS	18384, N002
ISOTK	ISO CONTAINER	106.472/09/04/2000
MSSFLARE	RECO MAINTENANCE FLARE	106.263/11/01/2001

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**
PA-1	PAINT YARD OPERATIONS	106.433/09/04/2000
PROVC	VINYL CHLORIDE PROCESS (SITE WIDE)	18384, N002
RECO	RECO VENT	106.263/11/01/2001
T418	EMERGENCY GENERATOR	106.511/09/04/2000
UNLOAD-GVP	GASOLINE UNLOADING OPERATIONS	106.412/09/04/2000
UNLOAD-LVP	LOW VP VOC UNLOADING OPERATIONS	18384, N002

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

Appendix A

Acronym List

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

ACFM ..... actual cubic feet per minute
AMOC ..... alternate means of control
ARP ..... Acid Rain Program
ASTM ..... American Society of Testing and Materials
B/PA ..... Beaumont/Port Arthur (nonattainment area)
CAM ..... Compliance Assurance Monitoring
CD ..... control device
CEMS ..... continuous emissions monitoring system
CFR ..... Code of Federal Regulations
COMS ..... continuous opacity monitoring system
CVS ..... closed vent system
D/FW ..... Dallas/Fort Worth (nonattainment area)
EP ..... emission point
EPA ..... U.S. Environmental Protection Agency
EU ..... emission unit
FCAA Amendments ..... Federal Clean Air Act Amendments
FOP ..... federal operating permit
gr/100 scf ..... grains per 100 standard cubic feet
HAP ..... hazardous air pollutant
H/G/B ..... Houston/Galveston/Brazoria (nonattainment area)
H_2S ..... hydrogen sulfide
ID No. ..... identification number
lb/hr ..... pound(s) per hour
MACT ..... Maximum Achievable Control Technology (40 CFR Part 63)
MMBtu/hr ..... Million British thermal units per hour
NA ..... nonattainment
N/A ..... not applicable
NADB ..... National Allowance Data Base
NESHAP ..... National Emission Standards for Hazardous Air Pollutants (40 CFR Part 61)
NO_x ..... nitrogen oxides
NSPS ..... New Source Performance Standard (40 CFR Part 60)
NSR ..... New Source Review
ORIS ..... Office of Regulatory Information Systems
Pb ..... lead
PBR ..... Permit By Rule
PEMS ..... predictive emissions monitoring system
PM ..... particulate matter
ppmv ..... parts per million by volume
PRO ..... process unit
PSD ..... prevention of significant deterioration
psia ..... pounds per square inch absolute
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

Permit Numbers: 18384 and N002					Issuance Date: March 7, 2022		
Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates		Monitoring and Testing Requirements	Recordkeeping Requirements	Reporting Requirements
			lbs/hour	TPY (4)	Special Condition/Application Information	Special Condition/Application Information	Special Condition/Application Information
70A/B	Dryer/Centrifuge No. 1	VOC	25.20	-	4, 5, 14, 18	4, 5, 9, 18	4, 5
		VCM (8)	7.35	-			
		PM	1.48	6.48			
		PM_{10}	1.48	6.48			
		$PM_{2.5}$	1.48	6.48			
71A/B	Dryer/Centrifuge No. 2	VOC	19.08	40.00	4, 5, 14, 18	4, 5, 9, 18	4, 5
		VCM (8)	7.00	-			
		PM	1.48	6.48			
		PM_{10}	1.48	6.48			
		$PM_{2.5}$	1.48	6.48			
72A/B	Dryer/Centrifuge No. 3	VOC	21.00	40.00	4, 5, 14, 18	4, 5, 9, 18	4, 5
		VCM (8)	7.00	-			
		PM	1.48	6.48			
		PM_{10}	1.48	6.48			

Major NSR Summary Table

Permit Numbers: 18384 and N002					Issuance Date: March 7, 2022		
Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates		Monitoring and Testing Requirements	Recordkeeping Requirements	Reporting Requirements
			lbs/hour	TPY (4)	Special Condition/Application Information	Special Condition/Application Information	Special Condition/Application Information
		$PM_{2.5}$	1.48	6.48			
83A/B	Dryer/Centrifuge No. 4	VOC	13.30	28.57	4, 5, 14, 18, 37, 38	4, 5, 9, 18, 37, 38	4, 5, 37
		VCM (8) (9)	6.30	-			
		PM	1.13	4.95			
		PM_{10}	1.13	4.95			
		$PM_{2.5}$	1.13	4.95			
89A/B	Dryer/Centrifuge No. 5	VOC	20.00	-	4, 5, 14, 18	4, 5, 9, 18	4, 5
		VCM (8)	8.80	-			
		PM	1.48	6.48			
		PM_{10}	1.48	6.48			
		$PM_{2.5}$	1.48	6.48			
90A/B	Dryer/Centrifuge No. 6	VOC	20.00	-	4, 5, 14, 18	4, 5, 9, 18	4, 5
		VCM (8)	8.80	-			
		PM	1.48	6.48			

Major NSR Summary Table

Permit Numbers: 18384 and N002					Issuance Date: March 7, 2022		
Emission Point No. (1)	**Source Name (2)**	**Air Contaminant Name (3)**	**Emission Rates**		**Monitoring and Testing Requirements**	**Recordkeeping Requirements**	**Reporting Requirements**
			lbs/hour	**TPY (4)**	**Special Condition/Application Information**	**Special Condition/Application Information**	**Special Condition/Application Information**
		PM_{10}	1.48	6.48			
		$PM_{2.5}$	1.48	6.48			
92A/B/C	Dryer/Centrifuge No. 7	VOC	26.50	-	4, 5, 14, 18	4, 5, 9, 18	4, 5
		VCM (8)	11.66	-			
		PM	2.26	9.90			
		PM_{10}	2.26	9.90			
		$PM_{2.5}$	2.26	9.90			
70A/B, 71A/B, 72A/B, 83A/B, 89A/B, 90A/B, and 92A/B/C	PVC Dryer Emission Caps: Production Lines 1 – 7 (6)	VOC	-	128.30	4, 5, 8	4, 5, 8, 9	4, 5
		VCM (8)	-	11.00			
		MeOH (10)		14.00			
77A-H, 77J-N, and 77P-Y	PVC Storage Silos (6)	PM	1.31	5.74	11	9	
		PM_{10}	1.31	5.74			
		$PM_{2.5}$	1.31	5.74			
78A	Off-Loading Silos (6)	PM	0.09	0.07		9	

Major NSR Summary Table

Permit Numbers: 18384 and N002					Issuance Date: March 7, 2022		
Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates		Monitoring and Testing Requirements	Recordkeeping Requirements	Reporting Requirements
			lbs/hour	TPY (4)	Special Condition/Application Information	Special Condition/Application Information	Special Condition/Application Information
		PM_{10}	0.09	0.07			
		$PM_{2.5}$	0.09	0.07			
78B	Off-Loading Silos (6)	PM	0.09	0.07		9	
		PM_{10}	0.09	0.07			
		$PM_{2.5}$	0.09	0.07			
F-74	Process Fugitives (5)	VOC	6.39	27.22	4, 5, 19, 20, 21, 22, 23	4, 5, 9, 19	4, 5
		VCM (8)	6.05	25.74			
		PM	0.01	0.01			
		PM_{10}	0.01	0.01			
		$PM_{2.5}$	0.01	0.01			
88	A Incinerator System	VOC	0.28	0.55	4, 5, 25, 26, 27, 29, 30, 31	4, 5, 9, 27, 28, 29, 30, 31	4, 5
		VCM (8)	0.06	0.26			
		HCl	0.44	1.94			
		SO_2	<0.01	0.01			

Major NSR Summary Table

Permit Numbers: 18384 and N002					Issuance Date: March 7, 2022		
Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates		Monitoring and Testing Requirements	Recordkeeping Requirements	Reporting Requirements
			lbs/hour	TPY (4)	Special Condition/Application Information	Special Condition/Application Information	Special Condition/Application Information
		NO_x	0.49	2.15			
		PM	0.08	0.33			
		PM_{10}	0.08	0.33			
		$PM_{2.5}$	0.08	0.33			
		CO	0.41	1.80			
87 .	B Incinerator System	VOC	0.28	0.55	4, 5, 25, 26, 27, 29, 30, 31	4, 5, 9, 27, 28, 29, 30, 31	4, 5
		VCM (8)	0.06	0.26			
		HCl	0.44	1.94			
		SO_2	<0.01	0.01			
		NO_x	0.30	1.31			
		PM	0.08	0.33			
		PM_{10}	0.08	0.33			
		$PM_{2.5}$	0.08	0.33			

Major NSR Summary Table

Permit Numbers: 18384 and N002					Issuance Date: March 7, 2022		
Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates		Monitoring and Testing Requirements	Recordkeeping Requirements	Reporting Requirements
			lbs/hour	TPY (4)	Special Condition/Application Information	Special Condition/Application Information	Special Condition/Application Information
		CO	0.41	1.80			
120	Cooling Tower 120	VOC	1.40	6.14	5, 24	5, 24	
		VCM (8)	0.35	1.53			
		PM	1.68	7.36			
		PM_{10}	0.84	3.68			
		$PM_{2.5}$	0.02	0.07			
		Cl_2	0.01	0.01			
130	Solution Preparation	VOC	4.75	0.44		9	
131	Solution Preparation Blower Vent	VOC	0.98	0.04		9	
139	Large Gas Holder	VCM	2.04	0.41		9	
		VOC/Non-VCM HAP	2.58	0.52			
140	Small Gas Holder	VCM	0.56	0.11		9	
		VOC/Non-VCM HAP	0.03	0.01			
75	Flare	VOC	<0.01	0.01	13	9	

Major NSR Summary Table

Permit Numbers: 18384 and N002					Issuance Date: March 7, 2022		
Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates		Monitoring and Testing Requirements	Recordkeeping Requirements	Reporting Requirements
			lbs/hour	TPY (4)	Special Condition/Application Information	Special Condition/Application Information	Special Condition/Application Information
		NO_x	0.09	0.39			
		CO	0.17	0.74			
		SO_2	0.01	0.01			
91	Gas-Fired ZO1-F6 Boiler (203.6 MMBtu/hr)	VOC	1.09	3.47	32, 33, 34, 36, 39, 41	35, 43, 45	39, 44
		PM	1.50	4.80			
		PM_{10}	1.50	4.80			
		$PM_{2.5}$	1.50	4.80			
		NO_x	12.22	39.00			
		SO_2	0.13	0.42			
		CO	19.52	85.50			
25	F4 Steam Boiler	VOC	0.91	3.98	32, 33, 34, 36, 40, 42	40	
		NO_x	10.20	44.68			
		CO	12.07	52.87			
		SO_2	0.10	0.43			
		PM	1.25	5.49			
		PM_{10}	1.25	5.49			
		$PM_{2.5}$	1.25	5.49			
26	F7 Steam Boiler	VOC	0.80	3.50	32, 33, 34, 36, 40, 42	40	

Major NSR Summary Table

Permit Numbers: 18384 and N002					Issuance Date: March 7, 2022		
Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates		Monitoring and Testing Requirements	Recordkeeping Requirements	Reporting Requirements
			lbs/hour	TPY (4)	Special Condition/Application Information	Special Condition/Application Information	Special Condition/Application Information
		NO_x	4.00	8.76			
		CO	7.20	31.54			
		SO_2	0.13	0.57			
		PM	1.48	6.46			
		PM_{10}	1.48	6.46			
		$PM_{2.5}$	1.48	6.46			
F-74-MSS	Equipment Opening	VOC-Total	143.78	1.97	48, 49, 50 ,51, 52	47, 50	
		VCM	94.41	1.70			
		Non-VCM VOC	-	0.27			
		Other VOC (7)	0.04	-			
		OMS	9.44	-			
		MeOH	9.44	-			
		Ethanol	9.44	-			
		Acetaldehyde	1.92	-			
		Acetophenone	9.38	-			
		Formaldehyde	0.32	-			
		Cumene	9.39	-			

(1) Emission point identification - either specific equipment designation or emission point number from plot plan.
(2) Specific point source name. For fugitive sources, use area name or fugitive source name.
(3) VOC - volatile organic compounds as defined in Title 30 Texas Administrative Code § 101.1 including VCM.

NO_x - total oxides of nitrogen
SO_2 - sulfur dioxide
PM - total particulate matter, suspended in the atmosphere, including PM_{10} and $PM_{2.5}$, as represented
PM_{10} - total particulate matter equal to or less than 10 microns in diameter, including $PM_{2.5}$, as represented
$PM_{2.5}$ - particulate matter equal to or less than 2.5 microns in diameter
CO - carbon monoxide
VCM - vinyl chloride monomer
HCl - hydrogen chloride
OMS - odorless mineral spirits
Cl_2 - chlorine
MeOH - methanol

(4) Compliance with annual emission limits (tons per year) is based on a 12 month rolling period.
(5) Emission rate is an estimate and is enforceable through compliance with the applicable special condition(s) and permit application representations.
(6) Dryer VOC hourly emission limits and the annual emission cap also apply to all EPNs downstream of the dryers (PVC Storage and Loading Silos [EPNs 77A-H, 77J-N, 77P-Y, 78A, 78B]; and PVC Loading [EPNs 77A-L-77H-L, 77J-L-77N-L, 77P-L-77Y-L, 78A-L, and 78B-L].
(7) Unspeciated VOCs, each having a short-term ESL ≥ 2 $\mu g/m^3$ and an annual ESL ≥ 10 percent of a compound's short-term ESL.
(8) VCM emissions are included in the allowable VOC emission rates.
(9) VCM is limited to 6.30 lb/hr for 72 hours per month (when processing coarse batches) and is limited to 3.15 lb/hr for all other hours.
(10) The Methanol emission rate sub-cap has been authorized as a result of an application for Emission Reduction Credits (EBT Project 410326). This emission limit cannot be relaxed for the service life of the facilities (V-301, V-302, V-303, V-304, V-305, V-306, and V-307).

Texas Commission on Environmental Quality
Air Quality Permit

A Permit Is Hereby Issued To
Oxy Vinyls, LP
Authorizing the Continued Operation of
Pasadena PVC
Located at **Pasadena, Harris County, Texas**
Latitude 29° 43' 3" Longitude −95° 9' 6"

Permit: 18384 and N002

Issuance Date: March 7, 2022

Expiration Date: March 7, 2032

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
°F = Temperature in degrees Fahrenheit
°K = Temperature in degrees Kelvin
µg = microgram
$\mu g/m^3$ = microgram per cubic meter
acfm = actual cubic feet per minute
AMOC = alternate means of control
AOS = alternative operating scenario
AP-42 = Air Pollutant Emission Factors, 5th edition
APD = Air Permits Division
API = American Petroleum Institute
APWL = air pollutant watch list
BPA = Beaumont/ Port Arthur
BACT = best available control technology
BAE = baseline actual emissions
bbl = barrel
bbl/day = barrel per day
bhp = brake horsepower
BMP = best management practices
Btu = British thermal unit
Btu/scf = British thermal unit per standard cubic foot or feet
CAA = Clean Air Act
CAM = compliance-assurance monitoring
CEMS = continuous emissions monitoring systems
cfm = cubic feet (per) minute
CFR = Code of Federal Regulations
CN = customer ID number
CNG = compressed natural gas
CO = carbon monoxide
COMS = continuous opacity monitoring system
CPMS = continuous parametric monitoring system
DFW = Dallas/ Fort Worth (Metroplex)
DE = destruction efficiency
DRE = destruction and removal efficiency
dscf = dry standard cubic foot or feet
dscfm = dry standard cubic foot or feet per minute
ED = (TCEQ) Executive Director
EF = emissions factor
EFR = external floating roof tank
EGU = electric generating unit
EI = Emissions Inventory
ELP = El Paso
EPA = (United States) Environmental Protection Agency
EPN = emission point number
ESL = effects screening level
ESP = electrostatic precipitator
FCAA = Federal Clean Air Act
FCCU = fluid catalytic cracking unit
FID = flame ionization detector
FIN = facility identification number
ft = foot or feet
ft/sec = foot or feet per second
g = gram
gal/wk = gallon per week
gal/yr = gallon per year
GLC = ground level concentration
GLC_{max} = maximum (predicted) ground-level concentration
gpm = gallon per minute
gr/1000scf = grain per 1000 standard cubic feet
gr/dscf = grain per dry standard cubic feet
H_2CO = formaldehyde
H_2S = hydrogen sulfide
H_2SO_4 = sulfuric acid
HAP = hazardous air pollutant as listed in § 112(b) of the Federal Clean Air Act or Title 40 Code of Federal Regulations Part 63, Subpart C
HC = hydrocarbons
HCl = hydrochloric acid, hydrogen chloride
Hg = mercury
HGB = Houston/Galveston/Brazoria
hp = horsepower
hr = hour
IFR = internal floating roof tank
in H_2O = inches of water
in Hg = inches of mercury
IR = infrared
ISC3 = Industrial Source Complex, a dispersion model
ISCST3 = Industrial Source Complex Short-Term, a dispersion model
K = Kelvin; extension of the degree Celsius scaled-down to absolute zero
LACT = lease automatic custody transfer
LAER = lowest achievable emission rate
lb = pound
hp = horsepower
hr = hour lb/day = pound per day
lb/hr = pound per hour
lb/MMBtu = pound per million British thermal units
LDAR = Leak Detection and Repair (Requirements)
LNG = liquefied natural gas
LPG = liquefied petroleum gas
LT/D = long ton per day
m = meter
m^3 = cubic meter
m/sec = meters per second
MACT = maximum achievable control technology
MAERT = Maximum Allowable Emission Rate Table
MERA = Modeling and Effects Review Applicability
mg = milligram
mg/g = milligram per gram
mL = milliliter
MMBtu = million British thermal units
MMBtu/hr = million British thermal units per hour
MSDS = material safety data sheet
MSS = maintenance, startup, and shutdown
MW = megawatt
NAAQS = National Ambient Air Quality Standards
NESHAP = National Emission Standards for Hazardous Air Pollutants
NGL = natural gas liquids
NNSR = nonattainment new source review
NO_x = total oxides of nitrogen

NSPS = New Source Performance Standards
PAL = plant-wide applicability limit
PBR = Permit(s) by Rule
PCP = pollution control project
PEMS = predictive emission monitoring system
PID = photo ionization detector
PM = periodic monitoring
PM = total particulate matter, suspended in the atmosphere, including PM_{10} and $PM_{2.5}$, as represented
$PM_{2.5}$ = particulate matter equal to or less than 2.5 microns in diameter
PM_{10} = total particulate matter equal to or less than 10 microns in diameter, including $PM_{2.5}$, as represented
POC = products of combustion
ppb = parts per billion
ppm = parts per million
ppmv = parts per million (by) volume
psia = pounds (per) square inch, absolute
psig = pounds (per) square inch, gage
PTE = potential to emit
RA = relative accuracy
RATA = relative accuracy test audit
RM = reference method
RVP = Reid vapor pressure
scf = standard cubic foot or feet
scfm = standard cubic foot or feet (per) minute
SCR = selective catalytic reduction
SIL = significant impact levels
SNCR = selective non-catalytic reduction
SO_2 = sulfur dioxide
SOCMI = synthetic organic chemical manufacturing industry
SRU = sulfur recovery unit
TAC = Texas Administrative Code
TCAA = Texas Clean Air Act
TCEQ = Texas Commission on Environmental Quality
TD = Toxicology Division
TLV = threshold limit value
TMDL = total maximum daily load
tpd = tons per day
tpy = tons per year
TVP = true vapor pressure
VOC = volatile organic compounds as defined in Title 30 Texas Administrative Code § 101.1
VRU = vapor recovery unit or system

Emission Sources - Maximum Allowable Emission Rates

Permit Numbers 18384 and N002

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)
70A/B	Dryer/Centrifuge No. 1	VOC	25.20	-
		VCM (8)	7.35	-
		PM	1.48	6.48
		PM_{10}	1.48	6.48
		$PM_{2.5}$	1.48	6.48
71A/B	Dryer/Centrifuge No. 2	VOC	19.08	40.00
		VCM (8)	7.00	-
		PM	1.48	6.48
		PM_{10}	1.48	6.48
		$PM_{2.5}$	1.48	6.48
72A/B	Dryer/Centrifuge No. 3	VOC	21.00	40.00
		VCM (8)	7.00	-
		PM	1.48	6.48
		PM_{10}	1.48	6.48
		$PM_{2.5}$	1.48	6.48
83A/B	Dryer/Centrifuge No. 4	VOC	13.30	28.57
		VCM (8) (9)	6.30	-
		PM	1.13	4.95
		PM_{10}	1.13	4.95
		$PM_{2.5}$	1.13	4.95

Emission Sources - Maximum Allowable Emission Rates

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates	
			lbs/hour	TPY (4)
89A/B	Dryer/Centrifuge No. 5	VOC	20.00	-
		VCM (8)	8.80	-
		PM	1.48	6.48
		PM_{10}	1.48	6.48
		$PM_{2.5}$	1.48	6.48
90A/B	Dryer/Centrifuge No. 6	VOC	20.00	-
		VCM (8)	8.80	-
		PM	1.48	6.48
		PM_{10}	1.48	6.48
		$PM_{2.5}$	1.48	6.48
92A/B/C	Dryer/Centrifuge No. 7	VOC	26.50	-
		VCM (8)	11.66	-
		PM	2.26	9.90
		PM_{10}	2.26	9.90
		$PM_{2.5}$	2.26	9.90
70A/B, 71A/B, 72A/B, 83A/B, 89A/B, 90A/B, and 92A/B/C	PVC Dryer Emission Caps: Production Lines 1 – 7 (6)	VOC	-	128.30
		VCM (8)	-	11.00
		MeOH (10)		14.00
77A-H, 77J-N, and 77P-Y	PVC Storage Silos (6)	PM	1.31	5.74
		PM_{10}	1.31	5.74
		$PM_{2.5}$	1.31	5.74
78A	Off-Loading Silos (6)	PM	0.09	0.07
		PM_{10}	0.09	0.07
		$PM_{2.5}$	0.09	0.07

Emission Sources - Maximum Allowable Emission Rates

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates	
			lbs/hour	TPY (4)
78B	Off-Loading Silos (6)	PM	0.09	0.07
		PM_{10}	0.09	0.07
		$PM_{2.5}$	0.09	0.07
F-74	Process Fugitives (5)	VOC	6.39	27.22
		VCM (8)	6.05	25.74
		PM	0.01	0.01
		PM_{10}	0.01	0.01
		$PM_{2.5}$	0.01	0.01
88	A Incinerator System	VOC	0.28	0.55
		VCM (8)	0.06	0.26
		HCl	0.44	1.94
		SO_2	<0.01	0.01
		NO_x	0.49	2.15
		PM	0.08	0.33
		PM_{10}	0.08	0.33
		$PM_{2.5}$	0.08	0.33
		CO	0.41	1.80
87 .	B Incinerator System	VOC	0.28	0.55
		VCM (8)	0.06	0.26
		HCl	0.44	1.94
		SO_2	<0.01	0.01
		NO_x	0.30	1.31
		PM	0.08	0.33
		PM_{10}	0.08	0.33
		$PM_{2.5}$	0.08	0.33

Emission Sources - Maximum Allowable Emission Rates

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates	
			lbs/hour	TPY (4)
		CO	0.41	1.80
120	Cooling Tower 120	VOC	1.40	6.14
		VCM (8)	0.35	1.53
		PM	1.68	7.36
		PM_{10}	0.84	3.68
		$PM_{2.5}$	0.02	0.07
		Cl_2	0.01	0.01
130	Solution Preparation	VOC	4.75	0.44
131	Solution Preparation Blower Vent	VOC	0.98	0.04
139	Large Gas Holder	VCM	2.04	0.41
		VOC/Non-VCM HAP	2.58	0.52
140	Small Gas Holder	VCM	0.56	0.11
		VOC/Non-VCM HAP	0.03	0.01
75	Flare	VOC	<0.01	0.01
		NO_x	0.09	0.39
		CO	0.17	0.74
		SO_2	0.01	0.01
91	Gas-Fired ZO1-F6 Boiler (203.6 MMBtu/hr)	VOC	1.09	3.47
		PM	1.50	4.80
		PM_{10}	1.50	4.80
		$PM_{2.5}$	1.50	4.80
		NO_x	12.22	39.00
		SO_2	0.13	0.42
		CO	19.52	85.50
25	F4 Steam Boiler	VOC	0.91	3.98
		NO_x	10.20	44.68
		CO	12.07	52.87
		SO_2	0.10	0.43

Emission Sources - Maximum Allowable Emission Rates

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates	
			lbs/hour	TPY (4)
		PM	1.25	5.49
		PM_{10}	1.25	5.49
		$PM_{2.5}$	1.25	5.49
26	F7 Steam Boiler	VOC	0.80	3.50
		NO_x	4.00	8.76
		CO	7.20	31.54
		SO_2	0.13	0.57
		PM	1.48	6.46
		PM_{10}	1.48	6.46
		$PM_{2.5}$	1.48	6.46
F-74-MSS	Equipment Opening	VOC-Total	143.78	1.97
		VCM	94.41	1.70
		Non-VCM VOC	-	0.27
		Other VOC (7)	0.04	-
		OMS	9.44	-
		MeOH	9.44	-
		Ethanol	9.44	-
		Acetaldehyde	1.92	-
		Acetophenone	9.38	-
		Formaldehyde	0.32	-
		Cumene	9.39	-

(1) Emission point identification - either specific equipment designation or emission point number from plot plan.
(2) Specific point source name. For fugitive sources, use area name or fugitive source name.
(3) VOC - volatile organic compounds as defined in Title 30 Texas Administrative Code § 101.1 including VCM.
NO_x - total oxides of nitrogen
SO_2 - sulfur dioxide
PM - total particulate matter, suspended in the atmosphere, including PM_{10} and $PM_{2.5}$, as represented
PM_{10} - total particulate matter equal to or less than 10 microns in diameter, including $PM_{2.5}$, as represented
$PM_{2.5}$ - particulate matter equal to or less than 2.5 microns in diameter
CO - carbon monoxide
VCM - vinyl chloride monomer
HCl - hydrogen chloride
OMS - odorless mineral spirits
Cl_2 - chlorine
MeOH - methanol
(4) Compliance with annual emission limits (tons per year) is based on a 12 month rolling period.
(5) Emission rate is an estimate and is enforceable through compliance with the applicable special condition(s) and permit application representations.

Emission Sources - Maximum Allowable Emission Rates

(6) Dryer VOC hourly emission limits and the annual emission cap also apply to all EPNs downstream of the dryers (PVC Storage and Loading Silos [EPNs 77A-H, 77J-N, 77P-Y, 78A, 78B]; and PVC Loading [EPNs 77A-L-77H-L, 77J-L-77N-L, 77P-L-77Y-L, 78A-L, and 78B-L].

(7) Unspeciated VOCs, each having a short-term ESL ≥ 2 $\mu g/m^3$ and an annual ESL ≥ 10 percent of a compound's short-term ESL.

(8) VCM emissions are included in the allowable VOC emission rates.

(9) VCM is limited to 6.30 lb/hr for 72 hours per month (when processing coarse batches) and is limited to 3.15 lb/hr for all other hours.

(10) The Methanol emission rate sub-cap has been authorized as a result of an application for Emission Reduction Credits (EBT Project 410326). This emission limit cannot be relaxed for the service life of the facilities (V-301, V-302, V-303, V-304, V-305, V-306, and V-307).

Date: March 7, 2022

Special Conditions

Permit Numbers 18384 and N002

1. This permit authorizes polyvinyl chloride production operations for a facility located at 4403 Pasadena Freeway, Pasadena, Harris County, Texas. This permit authorizes emissions only from those points listed in the attached table entitled “Emission Sources – Maximum Allowable Emission Rates” (MAERT) and the facilities covered by this permit are authorized to emit subject to the emission rate limits on that table and other operating conditions specified in this permit.

2. Non-fugitive emissions from relief valves, safety valves, or rupture discs of gases containing VOC at a concentration of greater than 1 percent are not authorized by this permit unless authorized on the maximum allowable emission rates table. 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 with the exception of the following: 21-PSV-22, 21-PSV-79, 21-PSV-179, 21-PSV-197, 22-PSV-197, 22-PSV-216, 23-PSV-247, 24-PSV-238, 24-PSV-239, 41-PSV-45, 44-PSV-36, 44-PSV-65, 44-PSV-334, 54-PSV-142, 54-PSV-563, 83-PSV-13, 83-PSV-85, 83-PSV-122, 83-PSV-142, 83-PSV-149, 83-PSV-172, and Reactor and Degasser PSV-77 Valves.

Federal Applicability

3. Boiler ZO1-F6 (EPN 91) and F7 Steam Boiler (EPN 26) shall comply with all applicable requirements of the U.S. Environmental Protection Agency (EPA) regulations on Standards of Performance for New Stationary Sources promulgated in Title 40 Code of Federal Regulations Part 60 (40 CFR Part 60):

   A. Subpart A, General Provisions.

   B. Subpart Db, Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units.

4. These facilities shall comply with all applicable requirements of the U.S. Environmental Protection Agency (EPA) regulations on National Emission Standards for Hazardous Air Pollutants in 40 CFR Part 61:

   A. Subpart A, General Provisions.

   B. Subpart FF, National Emission Standard for Benzene Waste Operations.

5. These facilities shall comply with all applicable requirements of the U.S. Environmental Protection Agency (EPA) regulations on National Emission Standards for Hazardous Air Pollutants for Source Categories in 40 CFR Part 63:

   A. Subpart A, General Provisions.

   B. Subpart EEEE, National Emission Standards for Hazardous Air Pollutants: Organic Liquids (Non-Gasoline).

   C. Subpart HHHHHHH, National Emission Standards for Hazardous Air Pollutant Emissions for Polyvinyl Chloride and Copolymers Production

Standards and Operational Specifications

6. The vinyl chloride monomer (VCM) content of the dewatered stripped slurry produced in these facilities shall not exceed 10.0 parts per million by weight (ppmw) on a 12-month rolling average basis and

   A. 220 ppmw on a daily average basis for Dryer Nos. 2, 5, and 6;

   B. 175 ppmw on a daily average basis for Dryer No. 1;

   C. 166 ppmw on a daily average basis for Dryer No. 3;

   D. 167 ppmw on a daily average basis for Dryer No. 7; and

   E. 150 ppmw on a daily average basis for Dryer No. 4.

   The volatile organic compound (VOC) content of the dewatered stripped slurry for all seven dryers shall not exceed 101.7 ppmw on a weighted 12-month rolling average.

7. Suspending agents used in the manufacturing of resins dried in Facility Identification Numbers (FINs) V-301, V-302, V-303, V-304, V-305, V-306, and V-307 shall be low-VOC, containing maximum 25% VOC, as applied. This special condition shall apply during the service life of these dryers.

8. The annual methanol emissions for the PVC Dryer Emission Caps, also known as Emission Point Number (EPN) 70A/B, 71A/B, 72A/B, 83A/B, 89A/B, 90A/B, and 92A/B/C, will be verified to ensure that they are below the authorized rates of the Maximum Allowable Emission Rate Table (MAERT). This will be accomplished by using the Emissions Inventory methodology for the site.

9. The 12-month rolling production of polyvinyl chloride (PVC) from these facilities shall not exceed 2200 Million (MM) pounds per year. Monthly PVC production records shall be maintained.

10. Reactor opening losses for Emission Point Nos. (EPNs) 73 A-H, 73 J-K, 76 L-M, and 73 N-O may not be emitted to the atmosphere from more than one reactor at a time.

11. No more than eight of the PVC Storage Silos, EPNs 77 A-H, 77 J-N, and 77 P-Y shall be operated simultaneously.

Compliance Assurance Monitoring

12. The following requirements apply to capture systems for the Incinerators/Scrubbers (EPNs 87 and 88):

   A. If used to control pollutants other than particulate, either:

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

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

   B. The control device shall not have a bypass.

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

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

Flare Requirements

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

A. The flare systems shall be designed such that the combined assist natural gas and waste stream to each flare meets the 40 CFR § 60.18 specifications of minimum heating value and maximum tip velocity at all times when emissions may be vented to them.

B. 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.

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

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

Baghouse Requirements

14. Properly installed fabric filter baghouses in good working order shall control particulate matter emissions from the dryer stacks. Particulate matter grain loading shall not exceed 0.003 grain per dscf of air from Dryer No. 4 (EPNs 83A). Particulate matter grain loading from low flow silos (EPNs 77A-B, F, H, J, L-N, P-T, and Y) and high flow silos (EPNs 77U-X) shall not exceed 0.01 grain per dscf. Particulate matter grain loading from mid flow silos (EPNs 77C-E, G, and K) shall not exceed 0.005 grain per dscf.

15. There shall be no visible emissions exceeding 30 seconds in any six-minute period as determined using U.S. Environmental Protection Agency (EPA) Test Method 22. Except for those periods described in Title 30 Texas Administrative Code (30 TAC) § 111.111(a)(1)(E), opacity from the other dryer stacks shall not exceed 5 percent averaged over a six-minute period using EPA Test Method 9.

16. The facilities authorized by this permit shall not be operated unless all associated air pollution emission capture and abatement equipment is in good working order and operated properly during normal facility operations. All capture and collection systems shall be effective in controlling emissions produced by the facility's equipment.

17. Cleaning and maintenance of the abatement equipment shall be performed as recommended by the manufacturer. The capture and collection systems shall be maintained free of holes, cracks, and other conditions which would reduce the collection efficiency of the control system.

18. These compliance assurance monitoring requirements are for Dryer Baghouses EPNs 70A, 71A, 72A, 83A, 89A, 90A, and 92A. Quality-assured (or valid) data must be generated each day the baghouse is operating. The measurements missed shall be estimated using engineering judgment and the methods used recorded. The control device shall not have a bypass.

    A. The differential pressure across each baghouse, with the exception of Dryer No. 4, shall be monitored and recorded at least once a day. The differential pressure on the Dryer No. 4 baghouse shall be monitored and recorded at least once an hour. The pressure drop shall be at least 0.2 inch water gauge pressure and shall not exceed 12.0 inches water gauge pressure. Quality-assured (or valid) data must be generated when Dryer No. 4 is operating except during the performance of a daily zero check. Loss of valid data due to periods of monitor breakdown, out-0f-control operation (producing inaccurate data), repair, maintenance, or calibration is acceptable provided it does not exceed 5 percent of the time (in hours) that Dryer No. 4 operated over the previous rolling 12-month period. The measurements missed shall be estimated using engineering judgment and the methods used recorded.

    B. Each monitoring device shall be calibrated annually or at a frequency in accordance with the manufacturer's specifications whichever is more frequent, and shall be accurate to within 0.5 inches water gauge pressure of 5% of span. The holder of the permit shall inspect the capture systems to verify there are no cracks, holes, tears, and other defects once a year. The date and results of each inspection performed shall be recorded. If the results of any inspection are not satisfactory, the deficiencies shall be recorded and the permit holder shall promptly take necessary corrective action, recording each action with the date completed.

    C. The facility must maintain sufficient replacement bags on-site at all times.

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

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

Fugitive Emissions Leak Detection and Repair Program

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

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

    A. The requirements of paragraphs F and G shall not apply (1) where the VOC has an aggregate partial pressure or vapor pressure of less than 0.044 pounds per square inch, absolute (psia) at 68°F or (2) operating pressure is at least 5 kilopascals (0.725 psi) below

ambient pressure. Equipment excluded from this condition shall be identified in a list or by one of the methods described below to be made readily available upon request.

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

(1) piping and instrumentation diagram (PID);

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

(3) color coding;

(4) a form of weatherproof identification; or

(5) designation of exempted process unit boundaries.

B. Construction of new and reworked piping, valves, pump systems, and compressor systems shall conform to applicable American National Standards Institute (ANSI), American Petroleum Institute (API), American Society of Mechanical Engineers (ASME), or equivalent codes.

C. New and reworked underground process pipelines shall contain no buried valves such that fugitive emission monitoring is rendered impractical. New and reworked buried connectors shall be welded.

D. To the extent that good engineering practice will permit, new and reworked valves and piping connections shall be so located to be reasonably accessible for leak-checking during plant operation. Difficult-to-monitor and unsafe-to-monitor valves, as defined by 30 TAC Chapter 115, shall be identified in a list to be made readily available upon request. The difficult-to-monitor and unsafe-to-monitor valves may be identified by one or more of the methods described in subparagraph A above. If an unsafe-to-monitor component is not considered safe to monitor within a calendar year, then it shall be monitored as soon as possible during safe-to-monitor times. A difficult-to-monitor component for which quarterly monitoring is specified may instead be monitored annually.

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

Connectors shall be inspected by visual, audible, and/or olfactory means at least weekly by operating personnel walk-through. In addition, all connectors shall be monitored by leak-checking for fugitive emissions at least quarterly using an approved gas analyzer with a directed maintenance program in accordance with items F thru J of this special condition.

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

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

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

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

(Cl + Cs) x 100/Ct = Cp

Where:

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

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

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

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

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

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

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

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

The gas analyzer shall conform to requirements listed in Method 21 of 40 CFR part 60, appendix A. The gas analyzer shall be calibrated with methane. In addition, the response factor of the instrument for a specific VOC of interest shall be determined and meet the requirements of Section 8 of Method 21. If a mixture of VOCs are 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, than the instrument may be calibrated with one of the VOC to be measured or any other VOC so long as the instrument has a response factor of less than 10 for each of the VOC to be measured.

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

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

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

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

I. Records of repairs shall include date of repairs, repair results, justification for delay of repairs, and corrective actions taken for all components. Records of instrument monitoring shall indicate dates 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.

J. Compliance with the requirements of this condition does not assure compliance with requirements of 30 TAC Chapter 115, an applicable New Source Performance Standard

(NSPS), or an applicable National Emission Standard for Hazardous Air Pollutants (NESHAPS), and does not constitute approval of alternative standards for these regulations.

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

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

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

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

(Vl + Vs) x 100/Vt = Vp

Where:

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

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

Vt = 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.

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

M. Any component found to be leaking by physical inspection (i.e., sight, sound, or smell) shall be repaired or monitored with an approved gas analyzer within 15 days to determine whether the component is leaking in excess of 500 ppmv of VOC. If the component is found to be leaking in excess of 500 ppmv of VOC, it shall be subject to the repair and replacement requirements contained in this special condition.

20. In addition to the weekly inspections and the annual instrument monitoring for connectors specified in Special Condition No. 19E, all accessible connectors adjacent to valves shall be monitored at least quarterly with an approved gas analyzer under a directed maintenance program as specified in Special Condition No. 19H.

21. Process lines containing no more than 2 percent VOC are exempt from the requirements of Special Condition Nos. 19 and 20.

22. All pumps and compressors in VCM service shall be vented to one of the Incinerators (EPNs 87 and 88).

23. Area monitors shall be installed and properly maintained throughout these facilities to alert operations personnel of VCM leaks.

Cooling Tower Requirements

24. The Cooling Tower (EPN 120) shall be operated and monitored in accordance with the following:

A. The VOC associated with Cooling Tower water shall be monitored monthly with an air stripping system meeting the requirements of the TCEQ Sampling Procedures Manual, Appendix P (dated January 2003 or a later edition) or an approved equivalent sampling method. The results of the monitoring, cooling water flow rate, and maintenance activities on the cooling water system shall be recorded. The monitoring results and cooling water hourly mass flow rate shall be used to determine cooling tower hourly VOC emissions. The rolling 12-month cooling water emission rate shall be recorded on a monthly basis and be determined by summing the VOC emissions between VOC monitoring periods over the rolling 12 month period. The emissions between VOC monitoring periods shall be obtained by multiplying the total cooling water mass flow between cooling water monitoring periods by the higher of the 2 VOC monitored results. The VOC concentration in the circulating water for Cooling Tower 120 shall not exceed 0.05 ppmw.

B. Cooling towers shall each be equipped with drift eliminators having manufacturer's design assurance of 0.002% drift or less. Drift eliminators shall be maintained and inspected at least annually. The permit holder shall maintain records of all inspections and repairs.

C. Total dissolved solids (TDS) shall not exceed 3000 parts per million by weight (ppmw). Dissolved solids in the cooling water drift are considered to be emitted as PM, PM_{10}, and $PM_{2.5}$ as represented in the permit application calculations.

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

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

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

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

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

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

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

(2) The analysis method for conductivity shall be either EPA Method 120.1 (field or routine testing), ASTM D1125-95A (field or routine laboratory testing) or ASTM D1125-95B (continuous monitoring). The analysis may be conducted at the sample site or with a calibrated process conductivity meter. If a conductivity meter is used, it shall be calibrated at least annually. Documentation of the method and any associated calibration records shall be maintained.

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

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

F. Emission rates of PM, PM_{10} and $PM_{2.5}$ shall be calculated using the measured TDS and the ratio or correlation of TDS to conductivity measurements, the design drift rate, the appropriate Reisman-Frisbie reduction factors, and the daily maximum hourly 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.

Incinerators/Scrubbers

25. The Incinerators/Scrubbers (EPNs 87 and 88) shall maintain the Vinyl Chloride Monomer (VCM) concentrations in the exhaust gases less than 10 ppmv, 3-hour average on a dry basis, or achieve VOC destruction efficiencies greater than 99.9 percent.

26. The Incinerators' firebox temperatures shall be maintained at not less than 1300°F and exhaust oxygen concentrations not less than 3 percent while waste gas is being fed to the incinerators.

27. The Incinerators' firebox temperatures shall be continuously monitored and recorded when waste gas is directed to the incinerators. The temperature measurement devices shall reduce the temperature readings to an averaging period of 6 minutes or less and record them at that frequency. The temperature measurement devices shall be installed, calibrated, and maintained according to accepted practice and the manufacturer's specifications. The devices shall have an accuracy of the greater of ±0.75 percent of the temperature being measured expressed in degrees Celsius or ±2.5 °C.

28. The incinerators' scrubbers (EPNs 87 and 88) shall each operate with no less than 99 percent removal efficiency for HCl on an hourly average basis.

29. The minimum liquid flow rate to each incinerator's scrubber shall be 15 gallons per minute (GPM) averaged hourly. The circulation rates shall be monitored and recorded hourly. The flow monitoring devices shall be calibrated at a frequency in accordance with the manufacturer's specifications, or at least annually, whichever is more frequent, and shall be accurate to within 2 percent of span or 5 percent of the design values.

30. The scrubbing solutions shall be maintained at or above a pH of 7. The pH shall be continuously analyzed and recorded. The pH monitoring device(s) shall be cleaned with an automatic cleaning system, or cleaned weekly using hydraulic, chemical, or mechanical cleaning. Each monitoring device shall be calibrated at a frequency in accordance with the manufacturer's specifications, or at least weekly, whichever is more frequent, and shall be accurate to within ±0.5 pH unit.

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

Boiler Requirements

32. The following emission limits apply to the boilers:

    A. Emissions from the Boiler ZO1-F6 (EPN 91) stack shall not exceed the following:

        (1) Nitrogen oxides (NO_x): 0.06 pound per Million British thermal units (lb/MMBtu) and 50 parts per million by volume, dry (ppmvd).

        (2) Carbon monoxide (CO): 115 ppmvd

        The concentration limits are expressed on a dry basis, at 3 percent (by volume) stack gas oxygen (O_2), averaged over a 1-hour period.

    B. Emissions from Boiler F-4 (EPN 25) shall not exceed the following limits:

        (1) NO_x: 0.06 lb/MMBtu

        (2) CO: 100 ppmvd corrected to 3 percent oxygen

        The concentration limits are expressed on a dry basis, at 3 percent (by volume) stack gas oxygen (O2), averaged over a 1-hour period.

    C. Emission from Boiler F-7 (EPN 26) shall not exceed the following limits:

        (1) NO_x: 0.02 lb/MMBtu

        (2) CO: 50ppmvd corrected to 3 percent oxygen

        The concentration limits are expressed on a dry basis, at 3 percent (by volume) stack gas oxygen (O2), averaged over a 1-hour period.

        Specified concentration limits for all three boilers shall only apply during load operations greater than 25 percent capacity. The emission limits specified in the MAERT shall apply during all boiler load conditions.

33. Fuel used in Boilers ZO1-F6, F-4 and F-7 (EPNs 91, 25 and 26) shall be limited to pipeline-quality sweet natural gas containing no more than 0.25 grain (gr) of hydrogen sulfide. Use of any other fuel will require an amendment to the permit. Fuel input into Boiler ZO1-F6 shall not exceed 8,703 pounds per hour (lbs/hr). The firing rate for Boiler F-4 shall not exceed 170 MMBtu/hr, and the firing rate for Boiler F-7 shall not exceed 200 MMBtu/hr as determined by the fuel flow at the higher heating value (HHV) of the fuel.

34. Opacity for the boilers shall not exceed five percent averaged over a six-minute period. This determination shall be made by first observing for visible emissions while the facility is operating. Observations shall be made at least 15 feet and no more than 0.25 mile from the emission point(s). If visible emissions are observed from the stack(s), then within 24 hours opacity shall be determined by 40 CFR Part 60, Appendix A, Test Method 9. Contributions from uncombined water shall not be included when determining compliance with this condition. Observations shall be

performed and recorded quarterly. If opacity exceeds five percent, corrective action to eliminate the source of visible emissions shall be taken promptly and documented within one week of first observation.

35. Emissions from Boiler ZO1-F6 shall not exceed 39.00 tons per year of NO_x, based on a 12-month rolling period. The holder of this permit shall make and maintain records of the monthly fuel consumption of the boiler. These records may, at the discretion of the Texas Commission on Environmental Quality (TCEQ), be used to determine compliance with the emissions limitations of the special conditions and the MAERT. Records of the fuel usage of the boiler shall be maintained in order to demonstrate that the annual capacity factor of the boiler does not exceed 72.9 percent. Natural gas usage shall be limited to 1,262 million standard cubic feet for any 12-month rolling period. The capacity factor is defined as the total sum of annual fuel consumed by the boiler divided by the total sum of fuel which could be consumed by the boiler at maximum firing rate for 8,760 hours a year. These records shall be maintained by the holder of this permit for a period of five years and shall be made available upon request to representatives of the TCEQ or any air pollution control program having jurisdiction.

36. Any request to the TCEQ by the holder of this permit for a change in the concentration limits imposed on NO_x and CO in this permit must be based on verifiable test data under the conditions of this permit.

Initial Demonstration of Compliance

37. The permit holder shall perform stack sampling and other testing as required to establish the actual pattern and quantities of air contaminants being emitted into the atmosphere from Dryer No. 4 (EPN 83A/B) to demonstrate compliance with the MAERT. The permit holder is responsible for providing sampling and testing facilities and conducting the sampling and testing operations at his expense. Sampling shall be conducted in accordance with the appropriate procedures of the Texas Commission on Environmental Quality (TCEQ) Sampling Procedures Manual and the U.S. Environmental Protection Agency (EPA) Reference Methods.

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

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

        (1) Proposed date for pretest meeting.

        (2) Date sampling will occur.

        (3) Name of firm conducting sampling.

        (4) Type of sampling equipment to be used.

        (5) Method or procedure to be used in sampling.

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

        (7) Procedure/parameters to be used to determine worst case emissions

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

B. Air contaminants emitted from the dryer to be tested for include (but are not limited to) VCM, HAPs, and VOC. The permit holder shall also take samples for slurry residual VOC and VCM in accordance with Special Condition 38 during the stack sampling and present results with the test report.

C. Sampling shall occur within 60 days after achieving the maximum operating rate, but no later than 180 days after initial start-up of the facilities (or increase in production, as appropriate) and at such other times (identify the need for any periodic sampling here) as may be required by the TCEQ Executive Director. Requests for additional time to perform sampling shall be submitted to the appropriate regional office.

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

During subsequent operations, if the Line 4 production rate is greater than that recorded during the test period, stack sampling shall be performed at the new operating conditions within 120 days. This sampling may be waived by the TCEQ Air Section Manager for the region.

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

One copy to the appropriate TCEQ Regional Office.

One copy to each local air pollution control program.

F. The permit holder shall submit a permit alteration to the TCEQ Air Permits Division within 180 days of the stack test to lower the VOC allowable emission rate if the sampled VOC emission rate is less than two thirds of the allowable emission rates.

38. The daily and rolling 12-month average dewatered stripped slurry VCM concentration shall be determined per EPA approved sampling procedure and the results recorded on a monthly basis in accordance with 40 CFR Part 61, Subpart F or TCEQ-approved procedure. The total VOC in the Line 4 dewatered stripped slurry shall be determined at least monthly using the methods specified for other HAPs in the proposed or final National Emission Standards for Hazardous Air Pollutants for Polyvinyl Chloride and Copolymers Production published in the Federal Register on May 20, 2011. The annual averages shall be computed by adding the daily averages and dividing by the number of production days. Records of the sample results for each resin grade and rolling 12-month average VCM and total VOC concentrations shall be maintained.

39. The holder of this permit shall perform stack sampling and other testing as required to establish the actual pattern and quantities of air contaminants being emitted into the atmosphere by Boiler ZO1-F6. The testing required by this special condition for NO_x and CO shall be used to determine initial compliance with the lb/hr and lb/MMBtu of Special Condition No. 32. Initial compliance with the permit opacity limit of Special Condition No. 34 shall be demonstrated on the basis of 30 six-minute averages as described in 40 CFR § 60.11(b). Sampling must be conducted in accordance with appropriate procedures of the TCEQ Sampling Procedures Manual and in accordance with the U.S. Environmental Protection Agency (EPA) Reference Method 9 for opacity, Reference Method 10 for CO, Reference Method 7E for NO_x, and Reference Method 3 for O_2 or equivalent methods. The holder of this permit is responsible for providing sampling and testing facilities and conducting the sampling and testing operation at his expense.

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

        The notice shall include:

        (1) Date for pretest meeting.

        (2) Date sampling will occur.

        (3) Name of firm conducting sampling.

        (4) Type of sampling equipment to be used.

        (5) Method or procedure to be used in sampling.

        (6) Proposed method of demonstrating compliance with 40 CFR § 60.48b.

            The purpose of the pretest meeting is to review the necessary sampling and testing procedures, to provide the proper data forms for recording pertinent data, and to review the format procedures for submitting the test reports.

            A written proposed description of any deviation from sampling procedures specified in permit conditions or TCEQ or EPA sampling procedures shall be made available to the TCEQ prior to the pretest meeting. The TCEQ Regional Director shall approve or disapprove of any deviation from specified sampling procedures.

            Requests to waive testing for any pollutant specified in Special Condition No. 39B shall be submitted to the TCEQ Office of Air, Air Permits Division. Test waivers and alternate/equivalent procedure proposals for New Source Performance Standards testing which must have the EPA approval shall be submitted to the TCEQ Air Permits Division in Austin.

    B. Air contaminants emitted from Boiler ZO1-F6 to be tested for at full load include (but are not limited to) NO_x, CO, O_2, and opacity.

    C. The holder of this permit shall conduct the performance test as required under 40 CFR § 60.8 using the NO_x continuous emission monitoring system (CEMS). Emissions of NO_x shall be monitored to demonstrate compliance with the NO_x limits of Special Condition No. 32.

    D. Sampling ports and platforms shall be incorporated into the design of the boiler stack according to the specifications set forth in the attachment entitled “Chapter 2, Stack Sampling Facilities.” Alternate sampling facility designs may be submitted for approval by the Executive Director of the TCEQ.

E. Sampling shall occur within 60 days after the facilities achieve maximum production, but not later than 180 days after initial start-up of the facilities and at such other times as may be required by the Executive Director of the TCEQ. Requests for additional time to perform stack sampling shall be submitted to the TCEQ Regional Office. Additional time to comply with the requirements of 40 CFR Part 60 cannot be granted.

F. Sampling reports shall comply with the conditions of Chapter 14 of the TCEQ Sampling Procedures Manual. Two copies of the sampling report shall be distributed as follows:

One copy to the TCEQ Houston Regional Office.

One copy to the appropriate local air pollution control program.

40. The holder of this permit shall perform stack sampling and other testing as required to establish the actual pattern and quantities of air contaminants being emitted into the atmosphere by Boilers F-4 and F-7 (EPNs 25 and 26) as prescribed in Title 30 Texas Administrative Code § 117.335, 117.8000, and 117.8010 (30 TAC § 117.335, 117.8000, and 117.8010). The testing required by this special condition for NO_x and CO shall be used to determine initial compliance with the limits of Special Condition No. 32. Testing performed on March 4, 2003 and June 6, 2007, respectively, satisfied these testing requirements.

Continuous Demonstration of Compliance

41. In order to demonstrate continuous compliance with the NO_x limit of Special Condition No. 32 and the MAERT for Boiler ZO1-F6, the holder of this permit shall comply with the monitoring conditions of 40 CFR § 60.48b.

The continuous emission monitoring system (CEMS) used to measure and record the in-stack concentration of NO_x and O_2 from Boiler ZO1-F6 (EPN 91) shall be installed, calibrated, and maintained in accordance with the requirements of 40 CFR §§ 60.13 and 60.48b. In addition, the holder of this permit shall comply with the following:

A. The CEMS shall meet the design and performance specifications, pass the field tests, and meet the installation requirements and data analysis and reporting requirements specified in the applicable Performance Specifications in 40 CFR Part 60, Appendix B. The Performance Specification tests shall be conducted prior to or during the sampling required by Special Condition No. 39, and written copies of the results shall be submitted within 60 days of completion of the tests to the TCEQ Houston Regional Office and the TCEQ Office of Air, Air Permits Division in Austin.

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 40 CFR Part 60, Appendix B. Each gaseous monitor shall be quality-assured at least quarterly using cylinder gas audits (CGA). The CGA method to be used is contained in 40 CFR Part 60, Appendix F, Procedure 1, § 5.1.2.

C. The gaseous 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. At least 23 hourly averages shall be generated per day.

D. All CGA exceedances greater than ±15 percent accuracy and any unscheduled CEMS downtime shall be reported to the TCEQ Houston Regional Office, and necessary corrective

action shall be taken. Supplemental stack concentration measurements may be required at the discretion of the TCEQ Regional Director.

E. The CEMS shall demonstrate a system reliability of at least 90 percent (downtime does not include daily zero and span measurement time or unit downtime) or options to increase system reliability to an acceptable value, including a redundant CEMS, may be required by the TCEQ Houston Regional Director.

42. In order to demonstrate continuous compliance with the NO_x and CO limits of Special Condition 32 and the MAERT for the F4 Steam Boiler (EPN 25) and the F7 Steam Boiler (EPN 26), the holder of this permit shall comply with the monitoring conditions of 40 CFR § 60.48b.The continuous emission monitoring system (CEMS) used to measure and record the in-stack concentration of NO_x, CO, and O_2 from the F4 Steam Boiler and the F7 Steam Boiler shall be installed, calibrated, and maintained in accordance with the requirements of 40 CFR §§ 60.13 and 60.48b. In addition, the holder of this permit shall comply with the following:

A. The CEMS shall meet the design and performance specifications, pass the field tests, and meet the installation requirements and data analysis and reporting requirements specified in the applicable Performance Specifications in 40 CFR Part 60, Appendix B. The Performance Specification tests shall be conducted prior to or during the sampling required by Special Condition No. 39, and written copies of the results shall be submitted within 60 days of completion of the tests to the TCEQ Houston Regional Office and the TCEQ Office of Air, Air Permits in Austin.

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 40 CFR Part 60, Appendix B. Each gaseous monitor shall be quality-assured at least quarterly using cylinder gas audits (CGA). The CGA method to be used is contained in 40 CFR Part 60, Appendix F, Procedure 1, § 5.1.2.

C. The gaseous 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. At least 23 hourly averages shall be generated per day.

D. All CGA exceedances greater than ±15 percent accuracy and any unscheduled CEMS downtime shall be reported to the TCEQ Houston Regional Office, and necessary corrective action shall be taken. Supplemental stack concentration measurements may be required at the discretion of the TCEQ Regional Director.

E. The CEMS shall demonstrate a system reliability of at least 90 percent (downtime does not include daily zero and span measurement time or unit downtime) or options to increase system reliability to an acceptable value, including a redundant CEMS, may be required by the TCEQ Houston Regional Director.

Recordkeeping and Reporting Requirements

43. The following monitoring data for Boiler ZO1-F6 shall be maintained by the source for a period of five years and shall be made available to the TCEQ Executive Director or her designated representative upon request:

A. Average hourly NO_x concentration in ppmvd, average hourly emissions in lb/hr, and 30-day rolling average NO_x emissions in lb/MMBtu of heat input.

B. Keep records of initial performance test. After the initial determination of compliance, the holder of this permit shall maintain a raw data file of all CEMS measurements, including CEMS performance testing measurements, all CEMS calibration checks and adjustments, and maintenance performed on these systems; or measurements of operating conditions monitored, including steam generating unit load, identified in the monitoring plan. This data shall be maintained in a permanent form suitable for inspection.

C. Keep records of hours of operation of the boiler at less than 25 percent capacity.

44. For purposes of semiannual reporting, noncomplying emissions will be each rolling 30-day period, as recorded by the CEMS, during which the average emissions exceed the lb/MMBtu limit specified in Special Condition No. 32, and each hour during which the average hourly emissions in lbs/hr and the average hourly ppmvd exceed the permit allowable stated in Special Condition No. 32 and the MAERT. All occurrences of noncomplying emissions/conditions must be logged and copies sent to the TCEQ Houston Regional Office on a semiannual basis.

As long as noncomplying emissions/conditions have not occurred, reporting shall consist only of an annual letter to the TCEQ Houston Regional Office stating that no such conditions have occurred.

45. Steam production records to demonstrate compliance with Special Condition No. 35 shall be maintained by the source for a period of five years and shall be made available to the TCEQ Executive Director or his designated representative upon request.

46. The records required by these special conditions shall be maintained in 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.

Planned Maintenance, Startup, and Shutdown

47. This permit authorizes the emissions from planned maintenance, startup, and shutdown (MSS) activities performed on the following facilities:

FINs	Equipment Type
C301-C314	Reactors
C343, C356, C443	VCM Process Tanks*
D340	Large Gas Holder*
D346	Small Gas Holder*
D5, D6	Spheres
D374	Wastewater Process Tank*
D302-D304	Process Slurry Tanks*
D364-D367	Process Slurry Tanks*
D391, C668	Process Slurry Tanks*

*These are non-atmospheric low-pressure tanks.

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

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

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

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

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

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

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

48. Process units and facilities shall be depressurized, emptied, degassed, and placed in service in accordance with the following requirements.

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

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

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

D. If the VOC partial pressure is greater than 0.50 psi at the normal process temperature or 95°F, facilities shall be degassed using good engineering practice to ensure air contaminants are removed from the system through the control device or controlled recovery system to the extent allowed by process equipment or storage vessel design. The vapor pressure at 95°F may be used if the actual temperature of the liquid is verified to be less than 95°F and the temperature is recorded. The facilities to be degassed shall not be vented directly to atmosphere, except as necessary to establish isolation of the work area or to monitor VOC

concentration following controlled depressurization. The venting shall be minimized to the maximum extent practicable and actions taken recorded. The control device or recovery system utilized shall be recorded with the estimated emissions from controlled and uncontrolled degassing calculated using the methods that were used to determine allowable emissions for the permit application.

The locations and/or identifiers where the purge gas or steam enters the process equipment or storage vessel and the exit points for the exhaust gases shall be recorded (process flow diagrams [PFDs] or piping and instrumentation diagrams [P&IDs] may be used to demonstrate compliance with the requirement). If the process equipment is purged with a gas, two system volumes of purge gas must have passed through the control device or controlled recovery system before the vent stream may be sampled to verify acceptable VOC concentration prior to uncontrolled venting. The VOC sampling and analysis shall be performed using an instrument meeting the requirements of Special Condition 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. 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.

49. Air contaminant concentration shall be measured using an instrument/detector or method 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:

VOC Concentration = Concentration as read from the instrument*RF

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

(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.

(3) If a TVA-1000 series Flame Ionization Detector (FID) analyzer or equivalent calibrated with methane is used to determine the VOC concentration, a measured concentration of 34,000 ppmv may be considered equivalent to 10,000 ppmv as VOC.

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 daily functionality test shall be performed on each detector within 24 hours of use using 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.

50. 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.

51. Planned MSS activities requiring the use of a control device shall be routed to one or both of the incinerators (EPNs 87 and 88).

52. Planned maintenance activities must be conducted in a manner consistent with good practice for minimizing emission, including the use of air pollution control equipment, practices, and processes. All reasonable and practical efforts to comply with Special Conditions 47 through 51 must be used when conducting the planned maintenance activity, until the commission determines that the efforts and unreasonable or impractical, or that the activity is an unplanned maintenance activity.

Incorporation by Reference

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

Authorization	Source or Activity
PBR No. 99798	PVC Resin Packaging Facility
PBR No. 156631	Truck and rail car loading operations

Date: March 7, 2022