

FEDERAL OPERATING PERMIT

A FEDERAL OPERATING PERMIT IS HEREBY ISSUED TO
Shintech Incorporated

AUTHORIZING THE OPERATION OF
Shintech Freeport Plant
Plastics Materials

LOCATED AT
Brazoria County, Texas
Latitude 28° 59' 44" Longitude 95° 21' 26"
Regulated Entity Number: RN100213198

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: O1361 Issuance Date: February 11, 2015

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 DDDDD and HHHHHHH as identified in the attached Applicable Requirements Summary table are subject to 30 TAC Chapter 113, Subchapter C, §§ 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 § 101.358 (relating to Emission Monitoring and Compliance Demonstration)
 - (vi) Title 30 TAC § 101.359 (relating to Reporting)
 - (vii) Title 30 TAC § 101.360 (relating to Level of Activity Certification)
 - (viii) The terms and conditions by which the emission limits are established to meet or exceed the cap are applicable requirements of this permit
- H. For the purpose of generating discrete emission reduction credits through 30 TAC Chapter 101, Subchapter H, Division 4 (Discrete Emission Credit Banking and Trading), the permit holder shall comply with the following requirements:
- (i) Title 30 TAC § 101.372 (relating to General Provisions)
 - (ii) Title 30 TAC § 101.373 (relating to Discrete Emission Reduction Credit Generation and Certification)
 - (iii) Title 30 TAC § 101.374 (relating to Mobile Discrete Emission Reduction Credit Generation and Certification)
 - (iv) Title 30 TAC § 101.378 (relating to Discrete Emission Credit Banking and Trading)
 - (v) The terms and conditions by which the emission limits are established to generate the discrete reduction credit are applicable requirements of this permit
2. The permit holder shall comply with the following sections of 30 TAC Chapter 101 (General Air Quality Rules):
- A. Title 30 TAC § 101.1 (relating to Definitions), insofar as the terms defined in this section are used to define the terms used in other applicable requirements
 - B. Title 30 TAC § 101.3 (relating to Circumvention)
 - C. Title 30 TAC § 101.8 (relating to Sampling), if such action has been requested by the TCEQ
 - D. Title 30 TAC § 101.9 (relating to Sampling Ports), if such action has been requested by the TCEQ
 - E. Title 30 TAC § 101.10 (relating to Emissions Inventory Requirements)

- F. Title 30 TAC § 101.201 (relating to Emission Event Reporting and Recordkeeping Requirements)
 - G. Title 30 TAC § 101.211 (relating to Scheduled Maintenance, Start-up, and Shutdown Reporting and Recordkeeping Requirements)
 - H. Title 30 TAC § 101.221 (relating to Operational Requirements)
 - I. Title 30 TAC § 101.222 (relating to Demonstrations)
 - J. Title 30 TAC § 101.223 (relating to Actions to Reduce Excessive Emissions)
3. Permit holder shall comply with the following requirements of 30 TAC Chapter 111:
- A. Visible emissions from stationary vents with a flow rate of less than 100,000 actual cubic feet per minute and constructed after January 31, 1972 that are not listed in the Applicable Requirements Summary attachment for 30 TAC Chapter 111, Subchapter A, Division 1, shall not exceed 20% opacity averaged over a six-minute period. The permit holder shall comply with the following requirements for stationary vents at the site subject to this standard:
 - (i) Title 30 TAC § 111.111(a)(1)(B) (relating to Requirements for Specified Sources)
 - (ii) Title 30 TAC § 111.111(a)(1)(E)
 - (iii) Title 30 TAC § 111.111(a)(1)(F)(i), (ii), (iii), or (iv)
 - (iv) For emission units with vent emissions subject to 30 TAC § 111.111(a)(1)(B), complying with 30 TAC § 111.111(a)(1)(F)(ii), (iii), or (iv), and capable of producing visible emissions from, but not limited to, particulate matter, acid gases and NO_x, the permit holder shall also comply with the following periodic monitoring requirements for the purpose of annual compliance certification under 30 TAC § 122.146. These periodic monitoring requirements do not apply to vents that are not capable of producing visible emissions such as vents that emit only colorless VOCs; vents from non-fuming liquids; vents that provide passive ventilation, such as plumbing vents; or vent emissions from any other source that does not obstruct the transmission of light. Vents, as specified in the “Applicable Requirements Summary” attachment, that are subject to the emission limitation of 30 TAC § 111.111(a)(1)(B) are not subject to the following periodic monitoring requirements:

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

compliance with the applicable opacity requirement in 30 TAC § 111.111(a)(1) and (a)(1)(B).

- (b) However, if visible emissions are present during the observation, the permit holder shall either list this occurrence as a deviation on the next deviation report as required under 30 TAC § 122.145(2) or conduct the appropriate opacity test specified in 30 TAC § 111.111(a)(1)(F) as soon as practicable, but no later than 24 hours after observing visible emissions to determine if the source is in compliance with the opacity requirements. If an opacity test is performed and the source is determined to be in compliance, the RO may certify that the source is in compliance with the applicable opacity requirement. However, if an opacity test is performed and the source is determined to be out of compliance, the permit holder shall list this occurrence as a deviation on the next deviation report as required under 30 TAC § 122.145(2). The opacity test must be performed by a certified opacity reader.
- (c) Some vents may be subject to multiple visible emission or monitoring requirements. All credible data must be considered when certifying compliance with this requirement even if the observation or monitoring was performed to demonstrate compliance with a different requirement.

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

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

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

- (2) Records of all observations shall be maintained.
- (3) Visible emissions observations of air emission sources or enclosed facilities operated during daylight hours shall be conducted no earlier than one hour after sunrise and no later than one hour before sunset. Visible emissions observations of air emission sources or enclosed facilities operated only at night must be made with additional lighting and the temporary installation of contrasting backgrounds. Visible emissions shall be determined with each emissions outlet in clear view of the observer. The observer shall be at least 15 feet, but not more than 0.25 mile, away from each emissions outlet during the observation. For outdoor locations, the observer shall select a position where the sun is not directly in the observer's eyes. When condensed water vapor is present within the plume, as it emerges from the emissions outlet, observations must be made beyond the point in the plume at which condensed water vapor is no longer visible. When water vapor within the plume condenses and becomes visible at a distance from the emissions outlet, the observation shall be evaluated at the outlet prior to condensation of water vapor. A certified opacity reader is not required for visible emissions observations.
- (4) Compliance Certification:
 - (a) If visible emissions are not present during the observation, the RO may certify that the source is in compliance with the applicable opacity requirement in 30 TAC § 111.111(a)(7) and (a)(7)(A)
 - (b) However, if visible emissions are present during the observation, the permit holder shall either list this occurrence as a deviation on the next deviation report as required under 30 TAC § 122.145(2) or conduct the appropriate opacity test specified in 30 TAC § 111.111(a)(7)(B) as soon as practicable, but no later than 24 hours after observing visible emissions to determine if the source is in compliance with the opacity requirements. If an opacity test is performed and the source is determined to be in compliance, the RO may certify that the source is in

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

- C. Certification of opacity readers determining opacities under Method 9 (as outlined in 40 CFR Part 60, Appendix A) to comply with opacity monitoring requirements shall be accomplished by completing the Visible Emissions Evaluators Course, or approved agency equivalent, no more than 180 days before the opacity reading.
- D. Emission limits on nonagricultural processes, except for the steam generators specified in 30 TAC § 111.153, shall comply with the following requirements:
 - (i) Emissions of PM from any source may not exceed the allowable rates as required in 30 TAC § 111.151(a) (relating to Allowable Emissions Limits)
 - (ii) Sources with an effective stack height (h_e) less than the standard effective stack height (H_e), must reduce the allowable emission level by multiplying it by $[h_e/H_e]^2$ as required in 30 TAC § 111.151(b)
 - (iii) Effective stack height shall be calculated by the equation specified in 30 TAC § 111.151(c)
- 4. For storage vessels maintaining working pressure as specified in 30 TAC Chapter 115, Subchapter B, Division 1: Storage of Volatile Organic Compounds, the permit holder shall comply with the requirements of 30 TAC § 115.112(e)(1).
- 5. For industrial wastewater specified in 30 TAC Chapter 115, Subchapter B, the permit holder shall comply with the following requirements for wastewater drains, junction boxes, lift stations and weirs:
 - A. Title 30 TAC § 115.142(1)(E) and (F) (relating to Control Requirements)
 - B. Title 30 TAC § 115.146 (relating to Recordkeeping Requirements)
- 6. Permit holder shall comply with the following 30 TAC Chapter 115, Subchapter C requirements:
 - A. When filling stationary gasoline storage vessels (Stage I) for motor vehicle fuel dispensing facilities, 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(7) (relating to Control Requirements)
- (ii) Title 30 TAC § 115.222(3), as it applies to liquid gasoline leaks
- (iii) Title 30 TAC § 115.224(1) (relating to Inspection Requirements), as it applies to liquid gasoline leaks
- (iv) Title 30 TAC § 115.226(2)(B) (relating to Recordkeeping Requirements)

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

- A. For 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 following requirements for units subject to any subpart of 40 CFR Part 60, unless otherwise stated in the applicable subpart:

- A. Title 40 CFR § 60.7 (relating to Notification and Recordkeeping)
- B. Title 40 CFR § 60.8 (relating to Performance Tests)
- C. Title 40 CFR § 60.11 (relating to Compliance with Standards and Maintenance Requirements)
- D. Title 40 CFR § 60.12 (relating to Circumvention)
- E. Title 40 CFR § 60.13 (relating to Monitoring Requirements)
- F. Title 40 CFR § 60.14 (relating to Modification)
- G. Title 40 CFR § 60.15 (relating to Reconstruction)
- H. Title 40 CFR § 60.19 (relating to General Notification and Reporting Requirements)

9. The permit holder shall comply with the 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

10. 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 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

11. Permit holder shall comply with the requirements of New Source Review authorizations issued or claimed by the permit holder for the permitted area, including permits, permits by rule, standard permits, flexible permits, special permits, permits for existing facilities including Voluntary Emissions Reduction Permits and Electric Generating Facility Permits issued under 30 TAC Chapter 116, Subchapter I, or special exemptions referenced in the New Source Review Authorization References attachment. These requirements:
 - A. Are incorporated by reference into this permit as applicable requirements
 - B. Shall be located with this operating permit
 - C. Are not eligible for a permit shield
12. 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.
13. The permit holder shall maintain records to demonstrate compliance with any emission limitation or standard that is specified in a permit by rule (PBR) or Standard Permit listed in the New Source Review Authorizations attachment. The records shall yield reliable data from the relevant time period that are representative of the emission unit's compliance with the PBR or Standard Permit. These records may include, but are not limited to, production capacity and throughput, hours of operation, safety data sheets (SDS), chemical

composition of raw materials, speciation of air contaminant data, engineering calculations, maintenance records, fugitive data, performance tests, capture/control device efficiencies, direct pollutant monitoring (CEMS, COMS, or PEMS), or control device parametric monitoring. These records shall be made readily accessible and available as required by 30 TAC § 122.144. Any monitoring or recordkeeping data indicating noncompliance with the PBR or Standard Permit shall be considered and reported as a deviation according to 30 TAC § 122.145 (Reporting Terms and Conditions).

Compliance Requirements

14. 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.
15. 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.
16. 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)(2)
 - (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)(2)
 - (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)

- 17. 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

- 18. 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

- 19. Permit holders at a site subject to Title VI of the FCAA Amendments shall meet the following requirements for protection of stratospheric ozone.
 - A. Any on site servicing, maintenance, and repair on refrigeration and nonmotor vehicle air-conditioning appliances using ozone-depleting refrigerants or non-exempt substitutes shall be conducted in accordance with 40 CFR Part 82, Subpart F. Permit holders shall ensure that repairs on or refrigerant removal from refrigeration and nonmotor vehicle air-conditioning appliances using ozone-depleting refrigerants are performed only by properly certified technicians using certified equipment. Records shall be maintained as required by 40 CFR Part 82, Subpart F.

Permit Location

- 20. 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)

- 21. 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

Unit Summary 18

Applicable Requirements Summary 25

Note: A “none” entry may be noted for some emission sources in this permit’s “Applicable Requirements Summary” under the heading of “Monitoring and Testing Requirements” and/or “Recordkeeping Requirements” and/or “Reporting Requirements.” Such a notation indicates that there are no requirements for the indicated emission source as identified under the respective column heading(s) for the stated portion of the regulation when the emission source is operating under the conditions of the specified SOP Index Number. However, other relevant requirements pursuant to 30 TAC Chapter 122 including Recordkeeping Terms and Conditions (30 TAC § 122.144), Reporting Terms and Conditions (30 TAC § 122.145), and Compliance Certification Terms and Conditions (30 TAC § 122.146) continue to apply.

Unit Summary

Unit/Group/ Process ID No.	Unit Type	Group/Inclusive Units	SOP Index No.	Regulation	Requirement Driver
EUNLDG	LOADING/UNLOADING OPERATIONS	N/A	R5211-1	30 TAC Chapter 115, Loading and Unloading of VOC	No changing attributes.
GRP-BIO	WASTEWATER UNITS	PL1BIO, PL2BIO, PL3BIO	R5140-1	30 TAC Chapter 115, Industrial Wastewater	No changing attributes.
GRP-BOILERA	BOILERS/STEAM GENERATORS/STEAM GENERATING UNITS	UN3701A, UN3701B, UN3701C, UN752A, UN752B, UN752D	R7300-1	30 TAC Chapter 117, Subchapter B	No changing attributes.
GRP-BOILERA	BOILERS/STEAM GENERATORS/STEAM GENERATING UNITS	UN3701A, UN3701B, UN3701C, UN752A, UN752B, UN752D	60Dc-1	40 CFR Part 60, Subpart Dc	No changing attributes.
GRP-BOILERA	BOILERS/STEAM GENERATORS/STEAM GENERATING UNITS	UN3701A, UN3701B, UN3701C, UN752A, UN752B, UN752D	63DDDDD-1	40 CFR Part 63, Subpart DDDDD	No changing attributes.
GRP-BOILERB	BOILERS/STEAM GENERATORS/STEAM GENERATING UNITS	UN2701A, UN2701B, UN2701C	R7300-1	30 TAC Chapter 117, Subchapter B	No changing attributes.
GRP-BOILERB	BOILERS/STEAM GENERATORS/STEAM GENERATING UNITS	UN2701A, UN2701B, UN2701C	60Dc-1	40 CFR Part 60, Subpart Dc	No changing attributes.

Unit Summary

Unit/Group/ Process ID No.	Unit Type	Group/Inclusive Units	SOP Index No.	Regulation	Requirement Driver
GRP-BOILERB	BOILERS/STEAM GENERATORS/STEAM GENERATING UNITS	UN2701A, UN2701B, UN2701C	63DDDDD-1	40 CFR Part 63, Subpart DDDDD	No changing attributes.
GRP-DRYERA	EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS	DR2401A, DR2401B, DR2401C, DR3401A, DR3401B, DR3401C, DR401D, DR401E, DR401F, DR401G	R5121-1	30 TAC Chapter 115, Vent Gas Controls	No changing attributes.
GRP-FUG	FUGITIVE EMISSION UNITS	P1FUG, P2FUG, P3FUG	R5352-ALL	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	No changing attributes.
GRP-FUG	FUGITIVE EMISSION UNITS	P1FUG, P2FUG, P3FUG	63HHHHHHH-1	40 CFR Part 63, Subpart HHHHHHH	No changing attributes.
GRP-GH	MISCELLANEOUS UNITS	HL-2301, HL- 2302, HL-301, HL-302, HL-3301, HL-3302	63HHHHHHH-9	40 CFR Part 63, Subpart HHHHHHH	No changing attributes.

Unit Summary

Unit/Group/ Process ID No.	Unit Type	Group/Inclusive Units	SOP Index No.	Regulation	Requirement Driver
GRP-HE	HEAT EXCHANGE SYSTEMS	CM-2351A, CM- 2351B, CM-2351C, CM-2351D, CM- 2351E, CM-3351A, CM-3351B, CM- 3351C, CM-3351D, CM-3351E, CM- 351C, CM-351D, CM-351E, P1CTRETURN, P2CTRETURN, P3CTRETURN	63HHHHHHH-2	40 CFR Part 63, Subpart HHHHHHH	No changing attributes.
GRP-INCIN	INCINERATOR UNITS	LV-5, UN2703A, UN2703B, UN3703A, UN3703B	63HHHHHHH-3	40 CFR Part 63, Subpart HHHHHHH	No changing attributes.
GRP-PLT1SILO	EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS	TK503A, TK503B, TK503C, TK503D, TK503E, TK510, TK551A, TK551B, TK551C, TK551D, TK551E, TK553A, TK553B, TK561A, TK561B, TK561C	R5121-2	30 TAC Chapter 115, Vent Gas Controls	No changing attributes.
GRP-PLT1TKS2	STORAGE TANKS/VESSELS	TK120, TK121, TK2109	R5112-5	30 TAC Chapter 115, Storage of VOCs	No changing attributes.

Unit Summary

Unit/Group/ Process ID No.	Unit Type	Group/Inclusive Units	SOP Index No.	Regulation	Requirement Driver
GRP-PLT2SILO	EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS	TK2503A, TK2503B, TK2503C, TK2503D, TK2503E, TK2503F, TK2503G, TK2503H, TK2503I	R5121-2	30 TAC Chapter 115, Vent Gas Controls	No changing attributes.
GRP-PLT3SILO	EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS	TK3503A, TK3503B, TK3503C, TK3503D, TK3503E, TK3503F, TK3503G, TK3503H, TK3503I, TK3510	R5121-2	30 TAC Chapter 115, Vent Gas Controls	No changing attributes.
GRP-PLT3TKS1	STORAGE TANKS/VESSELS	TK3115, TK3116, TK3117, TK3118	R5112-5	30 TAC Chapter 115, Storage of VOCs	No changing attributes.
GRP-PVC	MISCELLANEOUS UNITS	CL-2451A, CL- 2451B, CL-2451C, CL-3451A, CL- 3451B, CL-3451C, CL-451A, CL-451B, CL-451E, CL-451F	63HHHHHHH-4	40 CFR Part 63, Subpart HHHHHHH	No changing attributes.

Unit Summary

Unit/Group/ Process ID No.	Unit Type	Group/Inclusive Units	SOP Index No.	Regulation	Requirement Driver
GRP-PVC MACH	EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS	BM-1592A, BM- 1592B	R5121-5	30 TAC Chapter 115, Vent Gas Controls	No changing attributes.
GRP-PVC SILO	EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS	BS-1551A, BS- 1551B	R5121-5	30 TAC Chapter 115, Vent Gas Controls	No changing attributes.
GRP-PVC UNL	EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS	BU-1561A, BU- 1561B, BU-1562A, BU-1562B	R5121-5	30 TAC Chapter 115, Vent Gas Controls	No changing attributes.
GRP-PWW	MISCELLANEOUS UNITS	CL-2451AWW, CL- 2451BWW, CL- 2451CWW, CL- 3451AWW, CL- 3451BWW, CL- 3451CWW, CL- 451AWW, CL- 451BWW, CL- 451EWW, CL- 451FWW, LV-5 SCRUB, P2A/BSCRUB, P3A/BSCRUB	63HHHHHHH-5	40 CFR Part 63, Subpart HHHHHHH	No changing attributes.

Unit Summary

Unit/Group/ Process ID No.	Unit Type	Group/Inclusive Units	SOP Index No.	Regulation	Requirement Driver
GRP-RXR	MISCELLANEOUS UNITS	PL-2251A, PL-2251B, PL-2251C, PL-2251D, PL-2251E, PL-2251F, PL-251A, PL-251B, PL-251C, PL-251D, PL-251E, PL-251F, PL-3251A, PL-3251B, PL-3251C, PL-3251D, PL-3251E, PL-3251F	63HHHHHHH-8	40 CFR Part 63, Subpart HHHHHHH	No changing attributes.
GRP-SPHERE	STORAGE TANKS/VESSELS	TK2901A, TK2901B, TK2901C, TK2901D, TK3901A, TK3901B	63HHHHHHH-7	40 CFR Part 63, Subpart HHHHHHH	No changing attributes.
GRP-STGTK1	STORAGE TANKS/VESSELS	TK2130	R5112-1	30 TAC Chapter 115, Storage of VOCs	No changing attributes.
GRP-STGTK3	STORAGE TANKS/VESSELS	TK2131, TK2132	R5112-3	30 TAC Chapter 115, Storage of VOCs	No changing attributes.
GRP-STGTK4	STORAGE TANKS/VESSELS	TK127, TK132, TK2133, TK2134	R5112-3	30 TAC Chapter 115, Storage of VOCs	No changing attributes.

Unit Summary

Unit/Group/ Process ID No.	Unit Type	Group/Inclusive Units	SOP Index No.	Regulation	Requirement Driver
GRP- VCMUNLDG	EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS	UNLDGA, UNLDGB, UNLDGC, UNLDGD, UNLDGE, UNLDGF, UNLDGG, UNLDGH, UNLDGJ, UNLDGK, UNLDGL, UNLDGM	R5121-3	30 TAC Chapter 115, Vent Gas Controls	No changing attributes.
GRP-VOCTK1	STORAGE TANKS/VESSELS	TK115, TK116, TK117, TK3133	R5112-3	30 TAC Chapter 115, Storage of VOCs	No changing attributes.
GRP-WWSTRIP	FUGITIVE EMISSION UNITS	PL1WWSTRIP, PL2WWSTRIP, PL3WWSTRIP	R5352-1	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	No changing attributes.
GRP-WWSTRIP	EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS	PL1WWSTRIP, PL2WWSTRIP, PL3WWSTRIP	R5121-4	30 TAC Chapter 115, Vent Gas Controls	No changing attributes.
GRP-WWSTRIP	EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS	PL1WWSTRIP, PL2WWSTRIP, PL3WWSTRIP	63HHHHHHH-6	40 CFR Part 63, Subpart HHHHHHH	No changing attributes.
MUNLDG	LOADING/UNLOADING OPERATIONS	N/A	R5211-1	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)
EUNLDG	EU	R5211-1	VOC	30 TAC Chapter 115, Loading and Unloading of VOC	§ 115.212(a)(3) § 115.212(a)(2) § 115.212(a)(3)(A) § 115.212(a)(3)(A)(i) § 115.212(a)(3)(B) [G]§ 115.212(a)(3)(C) § 115.212(a)(3)(D) § 115.214(a)(1)(B) § 115.214(a)(1)(C)	All land-based VOC transfer to or from transport vessels shall be conducted in the manner specified for leak-free operations.	§ 115.212(a)(3)(B) § 115.214(a)(1)(A) § 115.214(a)(1)(A)(i) § 115.214(a)(1)(A)(ii) § 115.214(a)(1)(A)(iii)	§ 115.216 § 115.216(3)(A) § 115.216(3)(A)(i) § 115.216(3)(A)(iii)	None
GRP-BIO	EU	R5140-1	VOC	30 TAC Chapter 115, Industrial Wastewater	[G]§ 115.142(3) § 115.142 [G]§ 115.148	In the Beaumont/Port Arthur area, and after December 31, 2002 in the Houston/Galveston area, each properly operated biotreatment unit shall meet the specified requirements. §§115.142(3)(A)-(B)	§ 115.144(4) § 115.144(4)(A) § 115.144(4)(B) § 115.145 § 115.145(1) § 115.145(10) [G]§ 115.145(2) [G]§ 115.145(3) § 115.145(4) § 115.145(5) § 115.145(6) § 115.145(7) § 115.145(9) [G]§ 115.148	§ 115.146(1) § 115.146(2) § 115.146(3) § 115.146(4)	None

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
GRP-BOILERA	EU	R7300-1	NO _x	30 TAC Chapter 117, Subchapter B	§ 117.310(d)(3) § 117.310(a) § 117.310(a)(1)(B) § 117.310(b) [G]§ 117.310(e)(1) § 117.310(e)(2) [G]§ 117.310(e)(3) § 117.310(e)(4) § 117.340(f)(1) § 117.340(l)(2) § 117.340(p)(1) § 117.340(p)(3)	An owner or operator may not use the alternative methods specified in §§ 117.315, 117.323 and 117.9800 to comply with the NO _x emission specifications but shall use the mass emissions cap and trade program in Chapter 101, Subchapter H, Division 3, except that electric generating facilities must also comply with the daily and 30-day system cap emission limitations of § 117.320. An owner or operator may use the alternative methods specified in § 117.9800 to comply with § 117.320.	[G]§ 117.335(a)(1) § 117.335(a)(4) § 117.335(b) § 117.335(c) § 117.335(d) § 117.335(f) § 117.335(f)(1) § 117.335(g) § 117.340(a) § 117.340(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)	§ 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)
GRP-BOILERA	EU	R7300-1	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) [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(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)(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)
GRP-BOILERA	EU	60Dc-1	SO ₂	40 CFR Part 60, Subpart Dc	§ 60.40c(a)	This subpart applies to each steam generating unit constructed, reconstructed, or modified after 6/9/89 and that has a maximum design heat input capacity of 2.9-29 megawatts (MW).	None	§ 60.48c(g)(1) § 60.48c(g)(2) § 60.48c(g)(3) § 60.48c(i)	[G]§ 60.48c(a) § 60.48c(j)
GRP-BOILERA	EU	60Dc-1	PM	40 CFR Part 60, Subpart Dc	§ 60.40c(a)	This subpart applies to each steam generating unit constructed, reconstructed, or modified after 6/9/89 and that has a maximum design heat input capacity of 2.9-29 megawatts (MW).	None	§ 60.48c(g)(1) § 60.48c(g)(2) § 60.48c(g)(3) § 60.48c(i)	[G]§ 60.48c(a) § 60.48c(j)
GRP-BOILERA	EU	60Dc-1	PM (OPACITY)	40 CFR Part 60, Subpart Dc	§ 60.40c(a)	This subpart applies to each steam generating unit constructed, reconstructed, or modified after 6/9/89 and that has a maximum design heat input capacity of 2.9-29 megawatts (MW).	None	§ 60.48c(g)(1) § 60.48c(g)(2) § 60.48c(g)(3) § 60.48c(i)	[G]§ 60.48c(a) § 60.48c(j)

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
GRP-BOILERA	EU	63DDDDD-1	112(B) HAPS	40 CFR Part 63, Subpart DDDDD	§ 63.7505 The permit holder shall comply with the applicable limitation, standard and/or equipment specification requirements of 40 CFR Part 63, Subpart DDDDD	The permit holder shall comply with the applicable requirements of 40 CFR Part 63, Subpart DDDDD	The permit holder shall comply with the applicable monitoring and testing requirements of 40 CFR Part 63, Subpart DDDDD	The permit holder shall comply with the applicable recordkeeping requirements of 40 CFR Part 63, Subpart DDDDD	The permit holder shall comply with the applicable reporting requirements of 40 CFR Part 63, Subpart DDDDD

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
GRP-BOILERB	EU	R7300-1	NO _x	30 TAC Chapter 117, Subchapter B	§ 117.310(d)(3) § 117.310(a) § 117.310(a)(1)(B) § 117.310(b) [G]§ 117.310(e)(1) § 117.310(e)(2) [G]§ 117.310(e)(3) § 117.310(e)(4) § 117.340(f)(1) § 117.340(l)(2) § 117.340(p)(1) § 117.340(p)(3)	An owner or operator may not use the alternative methods specified in §§ 117.315, 117.323 and 117.9800 to comply with the NO _x emission specifications but shall use the mass emissions cap and trade program in Chapter 101, Subchapter H, Division 3, except that electric generating facilities must also comply with the daily and 30-day system cap emission limitations of § 117.320. An owner or operator may use the alternative methods specified in § 117.9800 to comply with § 117.320.	[G]§ 117.335(a)(1) § 117.335(a)(4) § 117.335(b) § 117.335(c) § 117.335(d) § 117.335(f) § 117.335(f)(1) § 117.335(g) § 117.340(a) § 117.340(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)	§ 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)
GRP-BOILERB	EU	R7300-1	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) [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(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)(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)
GRP-BOILERB	EU	60Dc-1	SO ₂	40 CFR Part 60, Subpart Dc	§ 60.40c(a)	This subpart applies to each steam generating unit constructed, reconstructed, or modified after 6/9/89 and that has a maximum design heat input capacity of 2.9-29 megawatts (MW).	None	§ 60.48c(g)(1) § 60.48c(g)(2) § 60.48c(g)(3) § 60.48c(i)	[G]§ 60.48c(a) § 60.48c(j)
GRP-BOILERB	EU	60Dc-1	PM	40 CFR Part 60, Subpart Dc	§ 60.40c(a)	This subpart applies to each steam generating unit constructed, reconstructed, or modified after 6/9/89 and that has a maximum design heat input capacity of 2.9-29 megawatts (MW).	None	§ 60.48c(g)(1) § 60.48c(g)(2) § 60.48c(g)(3) § 60.48c(i)	[G]§ 60.48c(a) § 60.48c(j)
GRP-BOILERB	EU	60Dc-1	PM (OPACITY)	40 CFR Part 60, Subpart Dc	§ 60.40c(a)	This subpart applies to each steam generating unit constructed, reconstructed, or modified after 6/9/89 and that has a maximum design heat input capacity of 2.9-29 megawatts (MW).	None	§ 60.48c(g)(1) § 60.48c(g)(2) § 60.48c(g)(3) § 60.48c(i)	[G]§ 60.48c(a) § 60.48c(j)

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
GRP-BOILERB	EU	63DDDDD-1	112(B) HAPS	40 CFR Part 63, Subpart DDDDD	§ 63.7505 The permit holder shall comply with the applicable limitation, standard and/or equipment specification requirements of 40 CFR Part 63, Subpart DDDDD	The permit holder shall comply with the applicable requirements of 40 CFR Part 63, Subpart DDDDD	The permit holder shall comply with the applicable monitoring and testing requirements of 40 CFR Part 63, Subpart DDDDD	The permit holder shall comply with the applicable recordkeeping requirements of 40 CFR Part 63, Subpart DDDDD	The permit holder shall comply with the applicable reporting requirements of 40 CFR Part 63, Subpart DDDDD
GRP-DRYERA	EP	R5121-1	VOC	30 TAC Chapter 115, Vent Gas Controls	§ 115.127(a)(2)(B) [G]§ 115.122(a)(4) § 115.127(a)(2)	A vent gas stream specified in § 115.121(a)(1) of this title with a concentration of VOC < 612 ppmv is exempt from § 115.121(a)(1).	[G]§ 115.125 § 115.126(2)	§ 115.126 § 115.126(2) § 115.126(4)	None

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
GRP-FUG	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.357(6)	Components at a petroleum refinery or synthetic organic chemical, polymer, resin, or methyl-tert-butyl ether manufacturing process, that contact a process fluid that contains less than 10% VOC by weight and components at a natural gas/gasoline processing operation that contact a process fluid that contains less than 1.0% VOC by weight are exempt from the requirements of this division except §115.356(3)(C) of this title.	None	§ 115.356 § 115.356(3) [G]§ 115.356(3)(C)	None
GRP-FUG	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.357(5)	Reciprocating compressors and positive displacement pumps used in natural gas/gasoline processing operations are exempt from the requirements of this division except §115.356(3)(C) of this title.	None	§ 115.356 § 115.356(3) [G]§ 115.356(3)(C)	None

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
GRP-FUG	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.357(10)	Instrumentation systems, as defined in 40 CFR §63.161 (January 17, 1997), that meet 40 CFR §63.169 (June 20, 1996) are exempt from the requirements of this division except §115.356(3)(C) of this title.	None	§ 115.356 § 115.356(3) [G]§ 115.356(3)(C)	None
GRP-FUG	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.357(11)	Sampling connection systems, as defined in 40 CFR §63.161 (January 17, 1997), that meet the requirements of 40 CFR §63.166(a) and (b) (June 20, 1996) are exempt from the requirements of this division except §115.356(3)(C) of this title.	None	§ 115.356 § 115.356(3) [G]§ 115.356(3)(C)	None

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
GRP-FUG	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.357(13)	Components/systems that contact a process fluid containing VOC having a true vapor pressure equal to or less than 0.002 psia at 68 degrees Fahrenheit are exempt from the requirements of this division except §115.356(3)(C) of this title.	None	§ 115.356 § 115.356(3) [G]§ 115.356(3)(C)	None
GRP-FUG	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.357(2) § 115.352(9)	Each pressure relief valve equipped with a rupture disk must comply with §115.352(9) and §115.356(3)(C).	None	§ 115.356 § 115.356(3) [G]§ 115.356(3)(C)	None

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
GRP-FUG	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.353(a) § 115.353(b) § 115.910	For all affected persons in the Beaumont-Port Arthur, Dallas-Fort Worth, El Paso, and Houston-Galveston areas, as defined in §115.10, any alternate methods of demonstrating and documenting continuous compliance with the applicable control requirements or exemption criteria in this division may be approved by the executive director in accordance with §115.910 if emission reductions are demonstrated to be substantially equivalent.	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)
GRP-FUG	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.352(1)(C) § 115.352(1) § 115.352(10) § 115.352(2) § 115.352(2)(A) § 115.352(2)(B) § 115.352(2)(C) § 115.352(2)(C)(i) § 115.352(2)(C)(ii) § 115.352(2)(C)(iii) § 115.352(3) § 115.352(4) § 115.352(5) § 115.352(6) § 115.352(7) § 115.352(8) § 115.357(8) § 115.358(c)(1) [G]§ 115.358(h)	No component shall be allowed to have a VOC leak, for more than 15 days, after discovery. If the owner or operator elects to use the alternative work practice in §115.358 of this title, any leak detected as defined in §115.358 of this title, including any leak detected using the alternative work practice on a component that is subject to the requirements of this division but not specifically selected for alternative work practice monitoring.	§ 115.354(1) § 115.354(11) § 115.354(13)(A) § 115.354(13)(B) § 115.354(13)(C) § 115.354(13)(D) § 115.354(13)(E) § 115.354(13)(F) § 115.354(4) § 115.354(5) § 115.354(9) [G]§ 115.355 § 115.358(c)(2) § 115.358(d) [G]§ 115.358(e) § 115.358(f)	§ 115.352(7) § 115.354(13)(D) § 115.354(13)(E) § 115.356 [G]§ 115.356(1) [G]§ 115.356(2) § 115.356(3) § 115.356(3)(A) § 115.356(3)(B) [G]§ 115.356(3)(C) [G]§ 115.356(4) § 115.356(5)	[G]§ 115.358(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)
GRP-FUG	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.352(1)(A) § 115.352(1) § 115.352(10) § 115.352(2) § 115.352(2)(A) § 115.352(3) § 115.352(7) § 115.357(1)	No process drains shall be allowed to have a VOC leak, for more than 15 days after discovery, which exceeds a screening concentration greater than 500 parts per million by volume above background as methane, or the dripping or exuding of process fluid based on sight, smell, or sound.	§ 115.354(1) § 115.354(5) § 115.354(6) § 115.354(9) [G]§ 115.355 § 115.357(1)	§ 115.352(7) § 115.356 [G]§ 115.356(1) [G]§ 115.356(2) § 115.356(3) § 115.356(3)(A) § 115.356(3)(B) [G]§ 115.356(3)(C) § 115.356(5)	None
GRP-FUG	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.352(1)(A) § 115.352(1) § 115.352(10) § 115.352(2) § 115.352(2)(A) § 115.352(3) § 115.352(7)	No process drains shall be allowed to have a VOC leak, for more than 15 days after discovery, which exceeds a screening concentration greater than 500 parts per million by volume above background as methane, or the dripping or exuding of process fluid based on sight, smell, or sound.	§ 115.354(1) § 115.354(10) § 115.354(5) § 115.354(6) § 115.354(9) [G]§ 115.355	§ 115.352(7) § 115.354(10) § 115.356 [G]§ 115.356(1) [G]§ 115.356(2) § 115.356(3) § 115.356(3)(A) § 115.356(3)(B) § 115.356(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)
GRP-FUG	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.352(1)(A) § 115.352(1) § 115.352(10) § 115.352(2) § 115.352(2)(A) § 115.352(2)(B) § 115.352(3) § 115.352(5) § 115.352(7) § 115.352(9) § 115.357(1) § 115.357(8) § 115.357(9)	No pressure relief valves shall be allowed to have a VOC leak, for more than 15 days after discovery, which exceeds a screening concentration greater than 500 parts per million by volume above background as methane, or the dripping or exuding of process fluid based on sight, smell, or sound.	§ 115.354(1) § 115.354(2) § 115.354(4) § 115.354(5) § 115.354(6) [G]§ 115.354(7) § 115.354(9) [G]§ 115.355 § 115.357(1)	§ 115.352(7) § 115.356 [G]§ 115.356(1) [G]§ 115.356(2) § 115.356(3) [G]§ 115.356(3)(C) § 115.356(5)	[G]§ 115.354(7)
GRP-FUG	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.352(1)(A) § 115.352(1) § 115.352(10) § 115.352(2) § 115.352(2)(A) § 115.352(2)(B) § 115.352(3) § 115.352(5) § 115.352(7) § 115.352(9) § 115.357(12) § 115.357(8) § 115.357(9)	No pressure relief valves shall be allowed to have a VOC leak, for more than 15 days after discovery, which exceeds a screening concentration greater than 500 parts per million by volume above background as methane, or the dripping or exuding of process fluid based on sight, smell, or sound.	§ 115.354(1) § 115.354(10) § 115.354(2) § 115.354(4) § 115.354(5) § 115.354(6) [G]§ 115.354(7) § 115.354(9) [G]§ 115.355	§ 115.352(7) § 115.354(10) § 115.356 [G]§ 115.356(1) [G]§ 115.356(2) § 115.356(3) § 115.356(3)(A) § 115.356(3)(B) [G]§ 115.356(3)(C) § 115.356(5)	[G]§ 115.354(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)
GRP-FUG	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.352(1)(A) § 115.352(1) § 115.352(10) § 115.352(2) § 115.352(2)(A) § 115.352(2)(B) § 115.352(3) § 115.352(4) § 115.352(5) § 115.352(6) § 115.352(7) § 115.357(1) § 115.357(8) § 115.357(9)	No open-ended valves or lines shall be allowed to have a VOC leak, for more than 15 days after discovery, which exceeds a screening concentration greater than 500 parts per million by volume above background as methane, or the dripping or exuding of process fluid based on sight, smell, or sound.	§ 115.354(1) § 115.354(2) § 115.354(5) § 115.354(6) [G]§ 115.354(7) § 115.354(9) [G]§ 115.355 § 115.357(1)	§ 115.352(7) § 115.356 [G]§ 115.356(1) [G]§ 115.356(2) § 115.356(3) [G]§ 115.356(3)(C) § 115.356(5)	[G]§ 115.354(7)
GRP-FUG	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.352(1)(A) § 115.352(1) § 115.352(10) § 115.352(2) § 115.352(2)(A) § 115.352(2)(B) § 115.352(3) § 115.352(4) § 115.352(5) § 115.352(6) § 115.352(7) § 115.357(12) § 115.357(8) § 115.357(9)	No open-ended valves or lines shall be allowed to have a VOC leak, for more than 15 days after discovery, which exceeds a screening concentration greater than 500 parts per million by volume above background as methane, or the dripping or exuding of process fluid based on sight, smell, or sound.	§ 115.354(1) § 115.354(10) § 115.354(2) § 115.354(5) § 115.354(6) [G]§ 115.354(7) § 115.354(9) [G]§ 115.355	§ 115.352(7) § 115.354(10) § 115.356 [G]§ 115.356(1) [G]§ 115.356(2) § 115.356(3) § 115.356(3)(A) § 115.356(3)(B) [G]§ 115.356(3)(C) § 115.356(5)	[G]§ 115.354(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)
GRP-FUG	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.352(1)(A) § 115.352(1) § 115.352(10) § 115.352(2) § 115.352(2)(A) § 115.352(2)(B) § 115.352(3) § 115.352(4) § 115.352(5) § 115.352(6) § 115.352(7) § 115.357(1) § 115.357(8) § 115.357(9)	No valves shall be allowed to have a VOC leak, for more than 15 days after discovery, which exceeds a screening concentration greater than 500 parts per million by volume above background as methane, or the dripping or exuding of process fluid based on sight, smell, or sound.	§ 115.354(1) § 115.354(2) § 115.354(5) § 115.354(6) [G]§ 115.354(7) § 115.354(9) [G]§ 115.355 § 115.357(1)	§ 115.352(7) § 115.356 [G]§ 115.356(1) [G]§ 115.356(2) § 115.356(3) [G]§ 115.356(3)(C) § 115.356(5)	[G]§ 115.354(7)
GRP-FUG	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.352(1)(A) § 115.352(1) § 115.352(10) § 115.352(2) § 115.352(2)(A) § 115.352(2)(B) § 115.352(3) § 115.352(4) § 115.352(5) § 115.352(6) § 115.352(7) § 115.357(12) § 115.357(8) § 115.357(9)	No valves shall be allowed to have a VOC leak, for more than 15 days after discovery, which exceeds a screening concentration greater than 500 parts per million by volume above background as methane, or the dripping or exuding of process fluid based on sight, smell, or sound.	§ 115.354(1) § 115.354(10) § 115.354(2) § 115.354(5) § 115.354(6) [G]§ 115.354(7) § 115.354(9) [G]§ 115.355	§ 115.352(7) § 115.354(10) § 115.356 [G]§ 115.356(1) [G]§ 115.356(2) § 115.356(3) § 115.356(3)(A) § 115.356(3)(B) [G]§ 115.356(3)(C) § 115.356(5)	[G]§ 115.354(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)
GRP-FUG	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.352(1)(A) § 115.352(1) § 115.352(10) § 115.352(2) § 115.352(2)(A) § 115.352(3) § 115.352(5) § 115.352(7) § 115.352(8) § 115.357(1) § 115.357(12) § 115.357(8)	No flanges or other connectors shall be allowed to have a VOC leak, for more than 15 days after discovery which exceeds a screening concentration greater than 500 parts per million by volume above background as methane, or the dripping or exuding of process fluid based on sight, smell, or sound.	§ 115.354(1) § 115.354(11) § 115.354(3) § 115.354(5) § 115.354(6) § 115.354(9) [G]§ 115.355 § 115.357(1)	§ 115.352(7) § 115.356 [G]§ 115.356(1) [G]§ 115.356(2) § 115.356(3) § 115.356(3)(A) § 115.356(3)(B) [G]§ 115.356(3)(C) § 115.356(5)	None
GRP-FUG	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.352(1)(A) § 115.352(1) § 115.352(10) § 115.352(2) § 115.352(2)(A) § 115.352(3) § 115.352(5) § 115.352(7) § 115.352(8) § 115.357(12) § 115.357(8)	No flanges or other connectors shall be allowed to have a VOC leak, for more than 15 days after discovery which exceeds a screening concentration greater than 500 parts per million by volume above background as methane, or the dripping or exuding of process fluid based on sight, smell, or sound.	§ 115.354(1) § 115.354(10) § 115.354(11) § 115.354(3) § 115.354(5) § 115.354(6) § 115.354(9) [G]§ 115.355 § 115.357(1)	§ 115.352(7) § 115.354(10) § 115.356 [G]§ 115.356(1) [G]§ 115.356(2) § 115.356(3) § 115.356(3)(A) § 115.356(3)(B) [G]§ 115.356(3)(C) § 115.356(5)	None

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
GRP-FUG	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.352(1)(A) § 115.352(1) § 115.352(10) § 115.352(2) § 115.352(2)(A) § 115.352(2)(C) § 115.352(2)(C)(i) § 115.352(2)(C)(ii) § 115.352(2)(C)(iii) § 115.352(3) § 115.352(7) § 115.357(1) § 115.357(12) § 115.357(8)	No agitators shall be allowed to have a VOC leak, for more than 15 days after discovery which exceeds a screening concentration greater than 500 parts per million by volume above background as methane, or the dripping or exuding of process fluid based on sight, smell, or sound.	§ 115.354(1) § 115.354(10) § 115.354(5) § 115.354(6) § 115.354(9) [G]§ 115.355 § 115.357(1)	§ 115.352(7) § 115.354(10) § 115.356 [G]§ 115.356(1) [G]§ 115.356(2) § 115.356(3) § 115.356(3)(A) § 115.356(3)(B) [G]§ 115.356(3)(C) § 115.356(5)	None
GRP-FUG	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.352(1)(A) § 115.352(1) § 115.352(10) § 115.352(2) § 115.352(2)(A) § 115.352(2)(C) § 115.352(2)(C)(i) § 115.352(2)(C)(ii) § 115.352(2)(C)(iii) § 115.352(3) § 115.352(7) § 115.357(1) § 115.357(12) § 115.357(8)	No agitators shall be allowed to have a VOC leak, for more than 15 days after discovery which exceeds a screening concentration greater than 500 parts per million by volume above background as methane, or the dripping or exuding of process fluid based on sight, smell, or sound.	§ 115.354(1) § 115.354(5) § 115.354(6) § 115.354(9) [G]§ 115.355 § 115.357(1)	§ 115.352(7) § 115.356 [G]§ 115.356(1) [G]§ 115.356(2) § 115.356(3) § 115.356(3)(A) § 115.356(3)(B) [G]§ 115.356(3)(C) § 115.356(5)	None

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
GRP-FUG	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.352(1)(A) § 115.352(1) § 115.352(10) § 115.352(2) § 115.352(2)(A) § 115.352(2)(C) § 115.352(2)(C)(i) § 115.352(2)(C)(ii) § 115.352(2)(C)(iii) § 115.352(3) § 115.352(7) § 115.357(12) § 115.357(8)	No agitators shall be allowed to have a VOC leak, for more than 15 days after discovery which exceeds a screening concentration greater than 500 parts per million by volume above background as methane, or the dripping or exuding of process fluid based on sight, smell, or sound.	§ 115.354(1) § 115.354(10) § 115.354(5) § 115.354(6) § 115.354(9) [G]§ 115.355 § 115.357(1)	§ 115.352(7) § 115.354(10) § 115.356 [G]§ 115.356(1) [G]§ 115.356(2) § 115.356(3) § 115.356(3)(A) § 115.356(3)(B) [G]§ 115.356(3)(C) § 115.356(5)	None
GRP-FUG	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.352(1)(B) § 115.352(1) § 115.352(10) § 115.352(2) § 115.352(2)(A) § 115.352(2)(C) § 115.352(2)(C)(i) § 115.352(2)(C)(ii) § 115.352(2)(C)(iii) § 115.352(3) § 115.352(5) § 115.352(7) § 115.357(3) § 115.357(8)	No compressor seals shall be allowed to have a VOC leak, for more than 15 days after discovery which exceeds a screening concentration greater than 10,000 parts per million by volume above background as methane, or the dripping or exuding of process fluid based on sight, smell, or sound.	[G]§ 115.355	§ 115.352(7) § 115.356 [G]§ 115.356(1) [G]§ 115.356(2) § 115.356(3) [G]§ 115.356(3)(C) § 115.356(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)
GRP-FUG	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.352(1)(B) § 115.352(1) § 115.352(10) § 115.352(2) § 115.352(2)(A) § 115.352(2)(C) § 115.352(2)(C)(i) § 115.352(2)(C)(ii) § 115.352(2)(C)(iii) § 115.352(3) § 115.352(5) § 115.352(7) § 115.357(4) § 115.357(8)	No compressor seals shall be allowed to have a VOC leak, for more than 15 days after discovery which exceeds a screening concentration greater than 10,000 parts per million by volume above background as methane, or the dripping or exuding of process fluid based on sight, smell, or sound.	[G]§ 115.355	§ 115.352(7) § 115.356 [G]§ 115.356(1) [G]§ 115.356(2) § 115.356(3) [G]§ 115.356(3)(C) § 115.356(5)	None
GRP-FUG	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.352(1)(B) § 115.352(1) § 115.352(10) § 115.352(2) § 115.352(2)(A) § 115.352(2)(C) § 115.352(2)(C)(i) § 115.352(2)(C)(ii) § 115.352(2)(C)(iii) § 115.352(3) § 115.352(5) § 115.352(7) § 115.357(1) § 115.357(8)	No compressor seals shall be allowed to have a VOC leak, for more than 15 days after discovery which exceeds a screening concentration greater than 10,000 parts per million by volume above background as methane, or the dripping or exuding of process fluid based on sight, smell, or sound.	§ 115.354(1) § 115.354(2) § 115.354(5) § 115.354(6) § 115.354(9) [G]§ 115.355 § 115.357(1)	§ 115.352(7) § 115.356 [G]§ 115.356(1) [G]§ 115.356(2) § 115.356(3) [G]§ 115.356(3)(C) § 115.356(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)
GRP-FUG	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.352(1)(B) § 115.352(1) § 115.352(10) § 115.352(2) § 115.352(2)(A) § 115.352(2)(C) § 115.352(2)(C)(i) § 115.352(2)(C)(ii) § 115.352(2)(C)(iii) § 115.352(3) § 115.352(5) § 115.352(7) § 115.357(12) § 115.357(8)	No compressor seals shall be allowed to have a VOC leak, for more than 15 days after discovery which exceeds a screening concentration greater than 10,000 parts per million by volume above background as methane, or the dripping or exuding of process fluid based on sight, smell, or sound.	§ 115.354(1) § 115.354(10) § 115.354(2) § 115.354(5) § 115.354(6) § 115.354(9) [G]§ 115.355	§ 115.352(7) § 115.354(10) § 115.356 [G]§ 115.356(1) [G]§ 115.356(2) § 115.356(3) § 115.356(3)(A) § 115.356(3)(B) [G]§ 115.356(3)(C) § 115.356(5)	None
GRP-FUG	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.352(1)(B) § 115.352(1) § 115.352(10) § 115.352(2) § 115.352(2)(A) § 115.352(2)(C) § 115.352(2)(C)(i) § 115.352(2)(C)(ii) § 115.352(2)(C)(iii) § 115.352(3) § 115.352(5) § 115.352(7) § 115.357(4) § 115.357(8)	No pump seals shall be allowed to have a VOC leak, for more than 15 days after discovery which exceeds a screening concentration greater than 10,000 parts per million by volume above background as methane, or the dripping or exuding of process fluid based on sight, smell, or sound.	[G]§ 115.355	§ 115.352(7) § 115.356 [G]§ 115.356(1) [G]§ 115.356(2) § 115.356(3) [G]§ 115.356(3)(C) § 115.356(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)
GRP-FUG	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.352(1)(B) § 115.352(1) § 115.352(10) § 115.352(2) § 115.352(2)(A) § 115.352(2)(C) § 115.352(2)(C)(i) § 115.352(2)(C)(ii) § 115.352(2)(C)(iii) § 115.352(3) § 115.352(5) § 115.352(7) § 115.357(1) § 115.357(8)	No pump seals shall be allowed to have a VOC leak, for more than 15 days after discovery which exceeds a screening concentration greater than 10,000 parts per million by volume above background as methane, or the dripping or exuding of process fluid based on sight, smell, or sound.	§ 115.354(1) § 115.354(2) § 115.354(5) § 115.354(6) § 115.354(9) [G]§ 115.355 § 115.357(1)	§ 115.352(7) § 115.356 [G]§ 115.356(1) [G]§ 115.356(2) § 115.356(3) [G]§ 115.356(3)(C) § 115.356(5)	None
GRP-FUG	EU	R5352-ALL	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.352(1)(B) § 115.352(1) § 115.352(10) § 115.352(2) § 115.352(2)(A) § 115.352(2)(C) § 115.352(2)(C)(i) § 115.352(2)(C)(ii) § 115.352(2)(C)(iii) § 115.352(3) § 115.352(5) § 115.352(7) § 115.357(12) § 115.357(8)	No pump seals shall be allowed to have a VOC leak, for more than 15 days after discovery which exceeds a screening concentration greater than 10,000 parts per million by volume above background as methane, or the dripping or exuding of process fluid based on sight, smell, or sound.	§ 115.354(1) § 115.354(10) § 115.354(2) § 115.354(5) § 115.354(6) § 115.354(9) [G]§ 115.355	§ 115.352(7) § 115.354(10) § 115.356 [G]§ 115.356(1) [G]§ 115.356(2) § 115.356(3) § 115.356(3)(A) § 115.356(3)(B) [G]§ 115.356(3)(C) § 115.356(5)	None

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
GRP-FUG	EU	63HHHH HHH-1	112(B)HAPS	40 CFR Part 63, Subpart HHHHHHH	§ 63.11880 The permit holder shall comply with the applicable limitation, standard and/or equipment specification requirements of 40 CFR Part 63, Subpart HHHHHHH	The permit holder shall comply with the applicable requirements of 40 CFR Part 63, Subpart HHHHHHH	The permit holder shall comply with the applicable monitoring and testing requirements of 40 CFR Part 63, Subpart HHHHHHH	The permit holder shall comply with the applicable recordkeeping requirements of 40 CFR Part 63, Subpart HHHHHHH	The permit holder shall comply with the applicable reporting requirements of 40 CFR Part 63, Subpart HHHHHHH
GRP-GH	EU	63HHHH HHH-9	112(B)HAPS	40 CFR Part 63, Subpart HHHHHHH	§ 63.11880 The permit holder shall comply with the applicable limitation, standard and/or equipment specification requirements of 40 CFR Part 63, Subpart HHHHHHH	The permit holder shall comply with the applicable requirements of 40 CFR Part 63, Subpart HHHHHHH	The permit holder shall comply with the applicable monitoring and testing requirements of 40 CFR Part 63, Subpart HHHHHHH	The permit holder shall comply with the applicable recordkeeping requirements of 40 CFR Part 63, Subpart HHHHHHH	The permit holder shall comply with the applicable reporting requirements of 40 CFR Part 63, Subpart HHHHHHH
GRP-HE	EU	63HHHH HHH-2	112(B)HAPS	40 CFR Part 63, Subpart HHHHHHH	§ 63.11880 The permit holder shall comply with the applicable limitation, standard and/or equipment specification requirements of 40 CFR Part 63, Subpart HHHHHHH	The permit holder shall comply with the applicable requirements of 40 CFR Part 63, Subpart HHHHHHH	The permit holder shall comply with the applicable monitoring and testing requirements of 40 CFR Part 63, Subpart HHHHHHH	The permit holder shall comply with the applicable recordkeeping requirements of 40 CFR Part 63, Subpart HHHHHHH	The permit holder shall comply with the applicable reporting requirements of 40 CFR Part 63, Subpart HHHHHHH

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
GRP-INCIN	EU	63HHHH HHH-3	112(B)HAPS	40 CFR Part 63, Subpart HHHHHHH	§ 63.11880 The permit holder shall comply with the applicable limitation, standard and/or equipment specification requirements of 40 CFR Part 63, Subpart HHHHHHH	The permit holder shall comply with the applicable requirements of 40 CFR Part 63, Subpart HHHHHHH	The permit holder shall comply with the applicable monitoring and testing requirements of 40 CFR Part 63, Subpart HHHHHHH	The permit holder shall comply with the applicable recordkeeping requirements of 40 CFR Part 63, Subpart HHHHHHH	The permit holder shall comply with the applicable reporting requirements of 40 CFR Part 63, Subpart HHHHHHH
GRP-PLT1SILO	EP	R5121-2	VOC	30 TAC Chapter 115, Vent Gas Controls	§ 115.127(a)(2)(A) [G]§ 115.122(a)(4) § 115.127(a)(2)	A vent gas stream having a combined weight of volatile organic compounds (VOC) < 100 lbs (45.4 kg) in any continuous 24-hour period is exempt from the requirements of § 115.121(a)(1).	[G]§ 115.125 § 115.126(2)	§ 115.126 § 115.126(2) § 115.126(4)	None
GRP-PLT1SILO	EP	R5121-2	VOC	30 TAC Chapter 115, Vent Gas Controls	§ 115.127(a)(2)(B) [G]§ 115.122(a)(4) § 115.127(a)(2)	A vent gas stream specified in § 115.121(a)(1) of this title with a concentration of VOC < 612 ppmv is exempt from § 115.121(a)(1).	[G]§ 115.125 § 115.126(2)	§ 115.126 § 115.126(2) § 115.126(4)	None

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
GRP-PLT1TKS2	EU	R5112-5	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
GRP-PLT2SILO	EP	R5121-2	VOC	30 TAC Chapter 115, Vent Gas Controls	§ 115.127(a)(2)(A) [G]§ 115.122(a)(4) § 115.127(a)(2)	A vent gas stream having a combined weight of volatile organic compounds (VOC) < 100 lbs (45.4 kg) in any continuous 24-hour period is exempt from the requirements of § 115.121(a)(1).	[G]§ 115.125 § 115.126(2)	§ 115.126 § 115.126(2) § 115.126(4)	None
GRP-PLT2SILO	EP	R5121-2	VOC	30 TAC Chapter 115, Vent Gas Controls	§ 115.127(a)(2)(B) [G]§ 115.122(a)(4) § 115.127(a)(2)	A vent gas stream specified in § 115.121(a)(1) of this title with a concentration of VOC < 612 ppmv is exempt from § 115.121(a)(1).	[G]§ 115.125 § 115.126(2)	§ 115.126 § 115.126(2) § 115.126(4)	None

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
GRP-PLT3SILO	EP	R5121-2	VOC	30 TAC Chapter 115, Vent Gas Controls	§ 115.127(a)(2)(A) [G]§ 115.122(a)(4) § 115.127(a)(2)	A vent gas stream having a combined weight of volatile organic compounds (VOC) < 100 lbs (45.4 kg) in any continuous 24-hour period is exempt from the requirements of § 115.121(a)(1).	[G]§ 115.125 § 115.126(2)	§ 115.126 § 115.126(2) § 115.126(4)	None
GRP-PLT3SILO	EP	R5121-2	VOC	30 TAC Chapter 115, Vent Gas Controls	§ 115.127(a)(2)(B) [G]§ 115.122(a)(4) § 115.127(a)(2)	A vent gas stream specified in § 115.121(a)(1) of this title with a concentration of VOC < 612 ppmv is exempt from § 115.121(a)(1).	[G]§ 115.125 § 115.126(2)	§ 115.126 § 115.126(2) § 115.126(4)	None
GRP-PLT3TKS1	EU	R5112-5	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.111(a)(1)	Except as provided in § 115.118, a storage tank storing VOC with a true vapor pressure less than 1.5 psia is exempt from the requirements of this division.	[G]§ 115.117	§ 115.118(a)(1) § 115.118(a)(5) § 115.118(a)(7)	None

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
GRP-PVC	EU	63HHHH HHH-4	112(B)HAPS	40 CFR Part 63, Subpart HHHHHHH	§ 63.11880 The permit holder shall comply with the applicable limitation, standard and/or equipment specification requirements of 40 CFR Part 63, Subpart HHHHHHH	The permit holder shall comply with the applicable requirements of 40 CFR Part 63, Subpart HHHHHHH	The permit holder shall comply with the applicable monitoring and testing requirements of 40 CFR Part 63, Subpart HHHHHHH	The permit holder shall comply with the applicable recordkeeping requirements of 40 CFR Part 63, Subpart HHHHHHH	The permit holder shall comply with the applicable reporting requirements of 40 CFR Part 63, Subpart HHHHHHH
GRP-PVC MACH	EP	R5121-5	VOC	30 TAC Chapter 115, Vent Gas Controls	§ 115.127(a)(2)(B) [G]§ 115.122(a)(4) § 115.127(a)(2)	A vent gas stream specified in § 115.121(a)(1) of this title with a concentration of VOC < 612 ppmv is exempt from § 115.121(a)(1).	[G]§ 115.125 § 115.126(2)	§ 115.126 § 115.126(2) § 115.126(4)	None
GRP-PVC SILO	EP	R5121-5	VOC	30 TAC Chapter 115, Vent Gas Controls	§ 115.127(a)(2)(B) [G]§ 115.122(a)(4) § 115.127(a)(2)	A vent gas stream specified in § 115.121(a)(1) of this title with a concentration of VOC < 612 ppmv is exempt from § 115.121(a)(1).	[G]§ 115.125 § 115.126(2)	§ 115.126 § 115.126(2) § 115.126(4)	None
GRP-PVC UNL	EP	R5121-5	VOC	30 TAC Chapter 115, Vent Gas Controls	§ 115.127(a)(2)(B) [G]§ 115.122(a)(4) § 115.127(a)(2)	A vent gas stream specified in § 115.121(a)(1) of this title with a concentration of VOC < 612 ppmv is exempt from § 115.121(a)(1).	[G]§ 115.125 § 115.126(2)	§ 115.126 § 115.126(2) § 115.126(4)	None

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
GRP-PWW	EU	63HHHH HHH-5	112(B)HAPS	40 CFR Part 63, Subpart HHHHHHH	§ 63.11880 The permit holder shall comply with the applicable limitation, standard and/or equipment specification requirements of 40 CFR Part 63, Subpart HHHHHHH	The permit holder shall comply with the applicable requirements of 40 CFR Part 63, Subpart HHHHHHH	The permit holder shall comply with the applicable monitoring and testing requirements of 40 CFR Part 63, Subpart HHHHHHH	The permit holder shall comply with the applicable recordkeeping requirements of 40 CFR Part 63, Subpart HHHHHHH	The permit holder shall comply with the applicable reporting requirements of 40 CFR Part 63, Subpart HHHHHHH
GRP-RXR	EU	63HHHH HHH-8	112(B)HAPS	40 CFR Part 63, Subpart HHHHHHH	§ 63.11880 The permit holder shall comply with the applicable limitation, standard and/or equipment specification requirements of 40 CFR Part 63, Subpart HHHHHHH	The permit holder shall comply with the applicable requirements of 40 CFR Part 63, Subpart HHHHHHH	The permit holder shall comply with the applicable monitoring and testing requirements of 40 CFR Part 63, Subpart HHHHHHH	The permit holder shall comply with the applicable recordkeeping requirements of 40 CFR Part 63, Subpart HHHHHHH	The permit holder shall comply with the applicable reporting requirements of 40 CFR Part 63, Subpart HHHHHHH
GRP-SPHERE	EU	63HHHH HHH-7	112(B)HAPS	40 CFR Part 63, Subpart HHHHHHH	§ 63.11880 The permit holder shall comply with the applicable limitation, standard and/or equipment specification requirements of 40 CFR Part 63, Subpart HHHHHHH	The permit holder shall comply with the applicable requirements of 40 CFR Part 63, Subpart HHHHHHH	The permit holder shall comply with the applicable monitoring and testing requirements of 40 CFR Part 63, Subpart HHHHHHH	The permit holder shall comply with the applicable recordkeeping requirements of 40 CFR Part 63, Subpart HHHHHHH	The permit holder shall comply with the applicable reporting requirements of 40 CFR Part 63, Subpart HHHHHHH

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
GRP-STGTK1	EU	R5112-1	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.111(a)(1)	Except as provided in § 115.118, a storage tank storing VOC with a true vapor pressure less than 1.5 psia is exempt from the requirements of this division.	[G]§ 115.117	§ 115.118(a)(1) § 115.118(a)(5) § 115.118(a)(7)	None
GRP-STGTK3	EU	R5112-3	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.111(a)(1)	Except as provided in § 115.118, a storage tank storing VOC with a true vapor pressure less than 1.5 psia is exempt from the requirements of this division.	[G]§ 115.117	§ 115.118(a)(1) § 115.118(a)(5) § 115.118(a)(7)	None

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
GRP-STGTK4	EU	R5112-3	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.112(e)(1)	No person shall place, store, or hold VOC in any storage tank unless the storage tank is capable of maintaining working pressure sufficient at all times to prevent any vapor or gas loss to the atmosphere or is in compliance with the control requirements specified in Table 1 of this paragraph for VOC other than crude oil and condensate or Table 2 of subsection (a)(1) of this paragraph for crude oil and condensate.	[G]§ 115.117 ** See Periodic Monitoring Summary	§ 115.118(a)(5) § 115.118(a)(7)	None
GRP-VCMUNLDG	EP	R5121-3	VOC	30 TAC Chapter 115, Vent Gas Controls	§ 115.127(a)(2)(A) [G]§ 115.122(a)(4) § 115.127(a)(2)	A vent gas stream having a combined weight of volatile organic compounds (VOC) < 100 lbs (45.4 kg) in any continuous 24-hour period is exempt from the requirements of § 115.121(a)(1).	[G]§ 115.125 § 115.126(2)	§ 115.126 § 115.126(2) § 115.126(4)	None

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
GRP-VOCTK1	EU	R5112-3	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
GRP-WWSTRIP	EU	R5352-1	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.357(2) § 115.352(9)	Each pressure relief valve equipped with a rupture disk must comply with §115.352(9) and §115.356(3)(C).	None	§ 115.356 § 115.356(3) [G]§ 115.356(3)(C)	None
GRP-WWSTRIP	EU	R5352-1	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.352(1)(A) § 115.352(1) § 115.352(10) § 115.352(2) § 115.352(2)(A) § 115.352(3) § 115.352(5) § 115.352(7) § 115.352(8) § 115.357(12) § 115.357(8)	No flanges or other connectors shall be allowed to have a VOC leak, for more than 15 days after discovery which exceeds a screening concentration greater than 500 parts per million by volume above background as methane, or the dripping or exuding of process fluid based on sight, smell, or sound.	§ 115.354(1) § 115.354(10) § 115.354(11) § 115.354(3) § 115.354(5) § 115.354(6) § 115.354(9) [G]§ 115.355 § 115.357(1)	§ 115.352(7) § 115.354(10) § 115.356 [G]§ 115.356(1) [G]§ 115.356(2) § 115.356(3) § 115.356(3)(A) § 115.356(3)(B) [G]§ 115.356(3)(C) § 115.356(5)	None

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
GRP-WWSTRIP	EP	R5121-4	VOC	30 TAC Chapter 115, Vent Gas Controls	§ 115.127(a)(2)(A) [G]§ 115.122(a)(4) § 115.127(a)(2)	A vent gas stream having a combined weight of volatile organic compounds (VOC) < 100 lbs (45.4 kg) in any continuous 24-hour period is exempt from the requirements of § 115.121(a)(1).	[G]§ 115.125 § 115.126(2)	§ 115.126 § 115.126(2) § 115.126(4)	None
GRP-WWSTRIP	EP	R5121-4	VOC	30 TAC Chapter 115, Vent Gas Controls	§ 115.127(a)(2)(B) [G]§ 115.122(a)(4) § 115.127(a)(2)	A vent gas stream specified in § 115.121(a)(1) of this title with a concentration of VOC < 612 ppmv is exempt from § 115.121(a)(1).	[G]§ 115.125 § 115.126(2)	§ 115.126 § 115.126(2) § 115.126(4)	None
GRP-WWSTRIP	EU	63HHHH HHH-6	112(B)HAPS	40 CFR Part 63, Subpart HHHHHHH	§ 63.11880 The permit holder shall comply with the applicable limitation, standard and/or equipment specification requirements of 40 CFR Part 63, Subpart HHHHHHH	The permit holder shall comply with the applicable requirements of 40 CFR Part 63, Subpart HHHHHHH	The permit holder shall comply with the applicable monitoring and testing requirements of 40 CFR Part 63, Subpart HHHHHHH	The permit holder shall comply with the applicable recordkeeping requirements of 40 CFR Part 63, Subpart HHHHHHH	The permit holder shall comply with the applicable reporting requirements of 40 CFR Part 63, Subpart HHHHHHH

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)
MUNLDG	EU	R5211-1	VOC	30 TAC Chapter 115, Loading and Unloading of VOC	§ 115.212(a)(3) § 115.212(a)(2) § 115.212(a)(3)(A) § 115.212(a)(3)(A)(i) § 115.212(a)(3)(B) [G]§ 115.212(a)(3)(C) § 115.212(a)(3)(D) § 115.214(a)(1)(B) § 115.214(a)(1)(C)	All land-based VOC transfer to or from transport vessels shall be conducted in the manner specified for leak-free operations.	§ 115.212(a)(3)(B) § 115.214(a)(1)(A) § 115.214(a)(1)(A)(i) § 115.214(a)(1)(A)(ii) § 115.214(a)(1)(A)(iii)	§ 115.216 § 115.216(3)(A) § 115.216(3)(A)(i) § 115.216(3)(A)(iii)	None

Additional Monitoring Requirements

Periodic Monitoring Summary..... 61

Periodic Monitoring Summary

Unit/Group/Process Information	
ID No.: GRP-STGTK4	
Control Device ID No.: N/A	Control Device Type: N/A
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 115, Storage of VOCs	SOP Index No.: R5112-3
Pollutant: VOC	Main Standard: § 115.112(e)(1)
Monitoring Information	
Indicator: Structural Integrity of the Pipe	
Minimum Frequency: Emptied and degassed	
Averaging Period: n/a	
Deviation Limit: It shall be considered a deviation if the repairs are not completed prior to refilling the storage vessel.	
Periodic Monitoring Text: Inspect to determine the structural integrity of the fill pipe and record each time the storage vessel is emptied and degassed to ensure that it continues to meet the specifications in the above requirement. If the structural integrity of the fill pipe is in question, repairs shall be made before the storage vessel is refilled. It shall be considered and reported as a deviation if the repairs are not completed prior to refilling the storage vessel.	

Periodic Monitoring Summary

Unit/Group/Process Information	
ID No.: GRP-STGTK4	
Control Device ID No.: N/A	Control Device Type: N/A
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 115, Storage of VOCs	SOP Index No.: R5112-3
Pollutant: VOC	Main Standard: § 115.112(e)(1)
Monitoring Information	
Indicator: Record of Tank Construction Specifications	
Minimum Frequency: n/a	
Averaging Period: n/a	
Deviation Limit: It shall be considered a deviation if a record of tank construction specifications is not kept.	
<p>Periodic Monitoring Text: Keep a record of tank construction specifications (e.g. engineering drawings) that show a fill pipe that extends from the top of a tank to have a maximum clearance of six inches (15.2 centimeters) from the bottom or, when the tank is loaded from the side, a discharge opening entirely submerged when the pipe used to withdraw liquid from the tank can no longer withdraw liquid in normal operation.</p>	

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

Unit/Group/Process		Regulation	Basis of Determination
ID No.	Group/Inclusive Units		
GRP-BOILERA	UN3701A, UN3701B, UN3701C, UN752A, UN752B, UN752D	40 CFR Part 60, Subpart D	Heat input rate is less than 250 MMBtu/hr.
GRP-BOILERA	UN3701A, UN3701B, UN3701C, UN752A, UN752B, UN752D	40 CFR Part 60, Subpart Db	Heat input rate is less than 100 MMBtu/hr.
GRP-BOILERB	UN2701A, UN2701B, UN2701C	40 CFR Part 60, Subpart D	Heat input rate is less than 250 MMBtu/hr.
GRP-BOILERB	UN2701A, UN2701B, UN2701C	40 CFR Part 60, Subpart Db	Heat input rate is less than 100 MMBtu/hr.
GRP-INCIN	LV-5, UN2703A, UN2703B, UN3703A, UN3703B	30 TAC Chapter 111, Incineration	Does not burn domestic, municipal, commercial, or industrial solid waste.
GRP-INCIN	LV-5, UN2703A, UN2703B, UN3703A, UN3703B	30 TAC Chapter 117, Subchapter B	Rated capacity is less than 40 MMBtu/hr.
GRP-INCIN	LV-5, UN2703A, UN2703B, UN3703A, UN3703B	40 CFR Part 60, Subpart E	Incinerator is less than 45 metric tons per day charging rate.
GRP-PLT1TKS1	TK107, TK108, TK109, TK110, TK111, TK2108, TK2113, TK2114, TK353	30 TAC Chapter 115, Storage of VOCs	Storage capacity is less than 1,000 gallons.
GRP-PLT1TKS1	TK107, TK108, TK109, TK110, TK111, TK2108, TK2113, TK2114, TK353	40 CFR Part 60, Subpart Kb	Storage capacity is less than 10,500 gallons.

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		Regulation	Basis of Determination
ID No.	Group/Inclusive Units		
GRP-PLT1TKS2	TK120, TK121, TK2109	40 CFR Part 60, Subpart Kb	Storage capacity is less than 10,500 gallons.
GRP-PLT1TKS3	TK122	30 TAC Chapter 115, Storage of VOCs	Storage tanks store brine which is not a VOC.
GRP-PLT1TKS3	TK122	40 CFR Part 60, Subpart Kb	Storage capacity is less than 10,500 gallons.
GRP-PLT2TKS1	TK2119, TK2120, TK2121, TK2122, TK2125, TK2126	30 TAC Chapter 115, Storage of VOCs	Storage capacity is less than 1,000 gallons.
GRP-PLT2TKS1	TK2119, TK2120, TK2121, TK2122, TK2125, TK2126	40 CFR Part 60, Subpart Kb	Storage capacity is less than 10,500 gallons.
GRP-PLT3TKS1	TK3115, TK3116, TK3117, TK3118	40 CFR Part 60, Subpart Kb	Storage capacity is less than 10,500 gallons.
GRP-PLT3TKS2	TK3119, TK3120, TK3121, TK3122, TK3124	30 TAC Chapter 115, Storage of VOCs	Storage capacity is less than 1,000 gallons.
GRP-PLT3TKS2	TK3119, TK3120, TK3121, TK3122, TK3124	40 CFR Part 60, Subpart Kb	Storage capacity is less than 10,500 gallons.
GRP-SPHERE	TK2901A, TK2901B, TK2901C, TK2901D, TK3901A, TK3901B	40 CFR Part 60, Subpart Kb	Spheres are pressure vessels designed to operate in excess of 204.9 kPa and without emissions to the atmosphere.

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		Regulation	Basis of Determination
ID No.	Group/Inclusive Units		
GRP-SPHERE	TK2901A, TK2901B, TK2901C, TK2901D, TK3901A, TK3901B	40 CFR Part 63, Subpart OO	Not subject to another subpart within 40 CFR Part 60, 61, or 63 that references 40 CFR Part 63 OO for air emission control.
GRP-STGTK1	TK2130	40 CFR Part 60, Subpart Kb	Storage capacity is less than 10,500 gallons.
GRP-STGTK2	TK123, TK124, TK2115A, TK2115B, TK3132, TK3134, TK795, TK796, TK797, TK798	30 TAC Chapter 115, Storage of VOCs	Storage vessels store something other than a VOC.
GRP-STGTK2	TK123, TK124, TK2115A, TK2115B, TK3132, TK3134, TK795, TK796, TK797, TK798	40 CFR Part 60, Subpart Kb	Storage capacity is less than 10,500 gallons.
GRP-STGTK2	TK123, TK124, TK2115A, TK2115B, TK3132, TK3134, TK795, TK796, TK797, TK798	40 CFR Part 63, Subpart OO	Not subject to another subpart within 40 CFR Part 60, 61, or 63 that references 40 CFR Part 63 OO for air emission control.
GRP-STGTK3	TK2131, TK2132	40 CFR Part 60, Subpart Kb	Storage capacity is less than 10,500 gallons.
GRP-STGTK3	TK2131, TK2132	40 CFR Part 63, Subpart OO	Not subject to another subpart within 40 CFR Part 60, 61, or 63 that references 40 CFR Part 63 OO for air emission control.

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		Regulation	Basis of Determination
ID No.	Group/Inclusive Units		
GRP-STGTK4	TK127, TK132, TK2133, TK2134	40 CFR Part 60, Subpart Kb	Storage capacity is less than 10,500 gallons.
GRP-STGTK4	TK127, TK132, TK2133, TK2134	40 CFR Part 63, Subpart OO	Not subject to another subpart within 40 CFR Part 60, 61, or 63 that references 40 CFR Part 63 OO for air emission control.
GRP-VOCTK1	TK115, TK116, TK117, TK3133	40 CFR Part 60, Subpart Kb	Storage capacity is less than 10,500 gallons.
GRP-VOCTK1	TK115, TK116, TK117, TK3133	40 CFR Part 63, Subpart OO	Not subject to another subpart within 40 CFR Part 60, 61, or 63 that references 40 CFR Part 63 OO for air emission control.

New Source Review Authorization References

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New Source Review Authorization References

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

Prevention of Significant Deterioration (PSD) Permits	
PSD Permit No.: PSDTX285M5	Issuance Date: 06/16/2014
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.: 112757	Issuance Date: 10/01/2013
Authorization No.: 9347	Issuance Date: 06/16/2014
Permits By Rule (30 TAC Chapter 106) for the Application Area	
Number: 106.227	Version No./Date: 09/04/2000
Number: 106.263	Version No./Date: 11/01/2001
Number: 106.264	Version No./Date: 09/04/2000
Number: 106.371	Version No./Date: 09/04/2000
Number: 106.393	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: 106.478	Version No./Date: 03/14/1997
Number: 106.478	Version No./Date: 09/04/2000
Number: 106.511	Version No./Date: 03/14/1997

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
BM-1592A	BAG A - PVC BAGGING TRAIN A	106.393/09/04/2000
BM-1592B	BAG B - PVC BAGGING TRAIN B	106.393/09/04/2000
BS-1551A	BAG A - PVC SILO TRAIN A	106.393/09/04/2000
BS-1551B	BAG B - PVC SILO TRAIN B	106.393/09/04/2000
BU-1561A	BAG A - PVC UNLOADING TRAIN A	106.393/09/04/2000
BU-1561B	BAG B - PVC UNLOADING TRAIN B	106.393/09/04/2000
BU-1562A	BAG A - PVC UNLOADING TRAIN A	106.393/09/04/2000
BU-1562B	BAG B - PVC UNLOADING TRAIN B	106.393/09/04/2000
CL-2451A	PLANT 2 RESIN STRIPPER A	9347, PSDTX285M5
CL-2451AWW	PROCESS WASTEWATER	9347, PSDTX285M5
CL-2451B	PLANT 2 RESIN STRIPPER B	9347, PSDTX285M5
CL-2451BWW	PROCESS WASTEWATER	9347, PSDTX285M5
CL-2451C	PLANT 2 RESIN STRIPPER C	9347, PSDTX285M5
CL-2451CWW	PROCESS WASTEWATER	9347, PSDTX285M5
CL-3451A	PLANT 3 RESIN STRIPPER A	9347, PSDTX285M5
CL-3451AWW	PROCESS WASTEWATER	9347, PSDTX285M5
CL-3451B	PLANT 3 RESIN STRIPPER B	9347, PSDTX285M5
CL-3451BWW	PROCESS WASTEWATER	9347, PSDTX285M5

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
CL-3451C	PLANT 3 RESIN STRIPPER C	9347, PSDTX285M5
CL-3451CWW	PROCESS WASTEWATER	9347, PSDTX285M5
CL-451A	PLANT 1 RESIN STRIPPER A	9347, PSDTX285M5
CL-451AWW	PROCESS WASTEWATER	9347, PSDTX285M5
CL-451B	PLANT 1 RESIN STRIPPER B	9347, PSDTX285M5
CL-451BWW	PROCESS WASTEWATER	9347, PSDTX285M5
CL-451E	PLANT 1 RESIN STRIPPER E	9347, PSDTX285M5
CL-451EWW	PROCESS WASTEWATER	9347, PSDTX285M5
CL-451F	PLANT 1 RESIN STRIPPER F	9347, PSDTX285M5
CL-451FWW	PROCESS WASTEWATER	9347, PSDTX285M5
CM-2351A	PLANT 2 VC COMPRESSOR A	9347, PSDTX285M5
CM-2351B	PLANT 2 VC COMPRESSOR B	9347, PSDTX285M5
CM-2351C	PLANT 2 VC COMPRESSOR C	9347, PSDTX285M5
CM-2351D	PLANT 2 VC COMPRESSOR D	9347, PSDTX285M5
CM-2351E	PLANT 2 VC COMPRESSOR E	9347, PSDTX285M5
CM-3351A	PLANT 3 VC COMPRESSOR A	9347, PSDTX285M5
CM-3351B	PLANT 3 VC COMPRESSOR B	9347, PSDTX285M5
CM-3351C	PLANT 3 VC COMPRESSOR C	9347, PSDTX285M5

New Source Review Authorization References by Emissions Unit

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Unit/Group/Process ID No.	Emission Unit Name/Description	New Source Review Authorization
CM-3351D	PLANT 3 VC COMPRESSOR D	9347, PSDTX285M5
CM-3351E	PLANT 3 VC COMPRESSOR E	9347, PSDTX285M5
CM-351C	PLANT 1 VC COMPRESSOR C	9347, PSDTX285M5
CM-351D	PLANT 1 VC COMPRESSOR D	9347, PSDTX285M5
CM-351E	PLANT 1 VC COMPRESSOR E	9347, PSDTX285M5
DR2401A	PLANT 2 DRYER	9347, PSDTX285M5
DR2401B	PLANT 2 DRYER	9347, PSDTX285M5
DR2401C	PLANT 2 DRYER	9347, PSDTX285M5
DR3401A	PLANT 3 DRYER	9347, PSDTX285M5
DR3401B	PLANT 3 DRYER	9347, PSDTX285M5
DR3401C	PLANT 3 DRYER	9347, PSDTX285M5
DR401D	PLANT 1 DRYER	9347, PSDTX285M5
DR401E	PLANT 1 DRYER	9347, PSDTX285M5
DR401F	PLANT 1 DRYER	9347, PSDTX285M5
DR401G	PLANT 1 DRYER	9347, PSDTX285M5
EUNLDG	ETHANOL UNLOADING	9347, PSDTX285M5
HL-2301	PLANT 2 PRIMARY GAS HOLDER	9347, PSDTX285M5
HL-2302	PLANT 2 SECONDARY GAS HOLDER	9347, PSDTX285M5

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
HL-301	PLANT 1 PRIMARY GAS HOLDER	9347, PSDTX285M5
HL-302	PLANT 1 SECONDARY GAS HOLDER	9347, PSDTX285M5
HL-3301	PLANT 3 PRIMARY GAS HOLDER	9347, PSDTX285M5
HL-3302	PLANT 3 SECONDARY GAS HOLDER	9347, PSDTX285M5
LV-5 SCRUB	PLANT 1 INCINERATOR CAUSTIC SCRUBBER EFFLUENT	9347, PSDTX285M5
LV-5	PLANT 1 INCINERATOR	9347, PSDTX285M5
MUNLDG	METHANOL UNLOADING	9347, PSDTX285M5
P1CTRETURN	PLANT 1 COOLING TOWER RETURN	106.371/09/04/2000
P1FUG	PLANT 1 FUGITIVES	9347, PSDTX285M5
P2A/BSCRUB	PLANT 2 INCINERATOR CAUSTIC SCRUBBER EFFLUENT	9347, PSDTX285M5
P2CTRETURN	PLANT 2 COOLING TOWER RETURN	106.371/09/04/2000
P2FUG	PLANT 2 FUGITIVES	9347, PSDTX285M5
P3A/BSCRUB	PLANT 3 INCINERATOR CAUSTIC SCRUBBER EFFLUENT	9347, PSDTX285M5
P3CTRETURN	PLANT 3 COOLING TOWER RETURN	106.371/09/04/2000
P3FUG	PLANT 3 FUGITIVES	9347, PSDTX285M5
PL1BIO	PLANT 1 BIO TREATMENT	9347, PSDTX285M5
PL1WWSTRIP	PLANT 1 WASTEWATER STRIPPER	9347, PSDTX285M5
PL-2251A	PLANT 2 REACTOR 1	9347, PSDTX285M5

New Source Review Authorization References by Emissions Unit

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Unit/Group/Process ID No.	Emission Unit Name/Description	New Source Review Authorization
PL-2251B	PLANT 2 REACTOR 2	9347, PSDTX285M5
PL-2251C	PLANT 2 REACTOR 3	9347, PSDTX285M5
PL-2251D	PLANT 2 REACTOR 4	9347, PSDTX285M5
PL-2251E	PLANT 2 REACTOR 5	9347, PSDTX285M5
PL-2251F	PLANT 2 REACTOR 6	9347, PSDTX285M5
PL-251A	PLANT 1 REACTOR 1	9347, PSDTX285M5
PL-251B	PLANT 1 REACTOR 2	9347, PSDTX285M5
PL-251C	PLANT 1 REACTOR 3	9347, PSDTX285M5
PL-251D	PLANT 1 REACTOR 4	9347, PSDTX285M5
PL-251E	PLANT 1 REACTOR 5	9347, PSDTX285M5
PL-251F	PLANT 1 REACTOR 6	9347, PSDTX285M5
PL2BIO	PLANT 2 BIO TREATMENT	9347, PSDTX285M5
PL2WWSTRIP	PLANT 2 WASTEWATER STRIPPER	9347, PSDTX285M5
PL-3251A	PLANT 3 REACTOR 1	9347, PSDTX285M5
PL-3251B	PLANT 3 REACTOR 2	9347, PSDTX285M5
PL-3251C	PLANT 3 REACTOR 3	9347, PSDTX285M5
PL-3251D	PLANT 3 REACTOR 4	9347, PSDTX285M5
PL-3251E	PLANT 3 REACTOR 5	9347, PSDTX285M5

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
PL-3251F	PLANT 3 REACTOR 6	9347, PSDTX285M5
PL3BIO	PLANT 3 BIO TREATMENT	9347, PSDTX285M5
PL3WWSTRIP	PLANT 3 WASTEWATER STRIPPER	9347, PSDTX285M5
TK107	PLANT 1 UM DISSOLVING TANK	9347, PSDTX285M5
TK108	PLANT 1 UM MEASURING TANK	9347, PSDTX285M5
TK109	PLANT 1 CGF DISSOLVING TANK	9347, PSDTX285M5
TK110	PLANT 1 UJ MAKE-UP TANK	9347, PSDTX285M5
TK111	PLANT 1 UJ MAKE-UP TANK	9347, PSDTX285M5
TK115	PLANT 1 VOC STORAGE TANK (ETOH)	9347, PSDTX285M5
TK116	PLANT 1 VOC STORAGE TANK (ETOH)	9347, PSDTX285M5
TK117	PLANT 1 VOC STORAGE TANK (ETOH)	9347, PSDTX285M5
TK120	PLANT 1 LH TANK	9347, PSDTX285M5
TK121	PLANT 1 LH TANK	9347, PSDTX285M5
TK122	PLANT 1 BRINE TANK	106.478/09/04/2000
TK123	PLANT 1 STORAGE TANK	9347, PSDTX285M5
TK124	PLANT 1 STORAGE TANK	9347, PSDTX285M5
TK127	PLANT 1 UG2 TANK	106.478/03/14/1997
TK132	PLANT 1 IF TANK	106.478/03/14/1997

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
TK2108	PLANT 2 IF M/U TANK	106.478/09/04/2000
TK2109	PLANT 2 IF MEASURING TANK	106.478/09/04/2000
TK2113	PLANT 2 OZ2 M/U TANK	106.478/09/04/2000
TK2114	PLANT 2 OZ2 MEASURING TANK	106.478/09/04/2000
TK2115A	PLANT 2 STORAGE TANK	9347, PSDTX285M5
TK2115B	PLANT 2 STORAGE TANK	9347, PSDTX285M5
TK2119	PLANT 2 UG MAKE-UP TANK	9347, PSDTX285M5
TK2120	PLANT 2 UG MEASURING TANK	9347, PSDTX285M5
TK2121	PLANT 2 CG MAKE-UP TANK	9347, PSDTX285M5
TK2122	PLANT 2 CG MEASURING TANK	9347, PSDTX285M5
TK2125	PLANT 2 UH MIX-UP TANK	9347, PSDTX285M5
TK2126	PLANT 2 UH MEASURING TANK	9347, PSDTX285M5
TK2130	PLANT 2 STORAGE TANK (LJ)	9347, PSDTX285M5
TK2131	PLANT 2 STORAGE TANK (CGF)	9347, PSDTX285M5
TK2132	PLANT 2 STORAGE TANK (CGF)	9347, PSDTX285M5
TK2133	PLANT 2 VOC STORAGE TANK (ETOH)	9347, PSDTX285M5
TK2134	PLANT 2 VOC STORAGE TANK (ETOH)	106.478/03/14/1997
TK2503A	PLANT 2 SILO	9347, PSDTX285M5

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
TK2503B	PLANT 2 SILO	9347, PSDTX285M5
TK2503C	PLANT 2 SILO	9347, PSDTX285M5
TK2503D	PLANT 2 SILO	9347, PSDTX285M5
TK2503E	PLANT 2 SILO	9347, PSDTX285M5
TK2503F	PLANT 2 SILO	9347, PSDTX285M5
TK2503G	PLANT 2 SILO	9347, PSDTX285M5
TK2503H	PLANT 2 SILO	9347, PSDTX285M5
TK2503I	PLANT 2 SILO	9347, PSDTX285M5
TK2901A	PLANT 2 VCM PRESSURE SPHERE	9347, PSDTX285M5
TK2901B	PLANT 2 VCM PRESSURE SPHERE	9347, PSDTX285M5
TK2901C	PLANT 2 VCM PRESSURE SPHERE	9347, PSDTX285M5
TK2901D	PLANT 2 VCM PRESSURE SPHERE	9347, PSDTX285M5
TK3115	PLANT 3 LB MAKE-UP TANK	9347, PSDTX285M5
TK3116	PLANT 3 LD MAKE-UP TANK	9347, PSDTX285M5
TK3117	PLANT 3 LH MAKE-UP TANK	9347, PSDTX285M5
TK3118	PLANT 3 LC MAKE-UP TANK	9347, PSDTX285M5
TK3119	PLANT 3 UH MAKE-UP TANK	9347, PSDTX285M5
TK3120	PLANT 3 UH MEASURING TANK	9347, PSDTX285M5

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
TK3121	PLANT 3 CG MAKE-UP TANK	9347, PSDTX285M5
TK3122	PLANT 3 CG MEASURING TANK	9347, PSDTX285M5
TK3124	PLANT 3 UG MAKE-UP TANK	9347, PSDTX285M5
TK3132	PLANT 3 STORAGE TANK	9347, PSDTX285M5
TK3133	PLANT 3 VOC STORAGE TANK (ETOH)	9347, PSDTX285M5
TK3134	PLANT 3 STORAGE TANK	9347, PSDTX285M5
TK3503A	PLANT 3 SILO	9347, PSDTX285M5
TK3503B	PLANT 3 SILO	9347, PSDTX285M5
TK3503C	PLANT 3 SILO	9347, PSDTX285M5
TK3503D	PLANT 3 SILO	9347, PSDTX285M5
TK3503E	PLANT 3 SILO	9347, PSDTX285M5
TK3503F	PLANT 3 SILO	9347, PSDTX285M5
TK3503G	PLANT 3 SILO	9347, PSDTX285M5
TK3503H	PLANT 3 SILO	9347, PSDTX285M5
TK3503I	PLANT 3 SILO	9347, PSDTX285M5
TK3510	PLANT 3 SILO	9347, PSDTX285M5
TK353	PLANT 1 STOPPER TANK	9347, PSDTX285M5
TK3901A	PLANT 3 VCM PRESSURE SPHERE	9347, PSDTX285M5

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
TK3901B	PLANT 3 VCM PRESSURE SPHERE	9347, PSDTX285M5
TK503A	PLANT 1 SILO	9347, PSDTX285M5
TK503B	PLANT 1 SILO	9347, PSDTX285M5
TK503C	PLANT 1 SILO	9347, PSDTX285M5
TK503D	PLANT 1 SILO	9347, PSDTX285M5
TK503E	PLANT 1 SILO	9347, PSDTX285M5
TK510	PLANT 1 SILO	9347, PSDTX285M5
TK551A	PLANT 1 SILO	9347, PSDTX285M5
TK551B	PLANT 1 SILO	9347, PSDTX285M5
TK551C	PLANT 1 SILO	9347, PSDTX285M5
TK551D	PLANT 1 SILO	9347, PSDTX285M5
TK551E	PLANT 1 SILO	9347, PSDTX285M5
TK553A	PLANT 1 SILO	9347, PSDTX285M5
TK553B	PLANT 1 SILO	9347, PSDTX285M5
TK561A	PLANT 1 SILO	9347, PSDTX285M5
TK561B	PLANT 1 SILO	9347, PSDTX285M5
TK561C	PLANT 1 SILO	9347, PSDTX285M5
TK795	PLANT 1 STORAGE TANK	9347, PSDTX285M5

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
TK796	PLANT 1 STORAGE TANK	9347, PSDTX285M5
TK797	PLANT 1 STORAGE TANK	9347, PSDTX285M5
TK798	PLANT 1 STORAGE TANK	9347, PSDTX285M5
UN2701A	PLANT 2 BOILER	9347, PSDTX285M5
UN2701B	PLANT 2 BOILER	9347, PSDTX285M5
UN2701C	PLANT 2 BOILER	9347, PSDTX285M5
UN2703A	PLANT 2 INCINERATOR	9347, PSDTX285M5
UN2703B	PLANT 2 INCINERATOR	9347, PSDTX285M5
UN3701A	PLANT 3 BOILER	9347, PSDTX285M5
UN3701B	PLANT 3 BOILER	9347, PSDTX285M5
UN3701C	PLANT 3 BOILER	9347, PSDTX285M5
UN3703A	PLANT 3 INCINERATOR	9347, PSDTX285M5
UN3703B	PLANT 3 INCINERATOR	9347, PSDTX285M5
UN752A	PLANT 1 BOILER	9347, PSDTX285M5
UN752B	PLANT 1 BOILER	9347, PSDTX285M5
UN752D	PLANT 1 BOILER	9347, PSDTX285M5
UNLDGA	PLANT 2 VCM UNLOADING SPOT	9347, PSDTX285M5
UNLDGB	PLANT 2 VCM UNLOADING SPOT	9347, PSDTX285M5

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
UNLDGC	PLANT 2 VCM UNLOADING SPOT	9347, PSDTX285M5
UNLDGD	PLANT 2 VCM UNLOADING SPOT	9347, PSDTX285M5
UNLDGE	PLANT 2 VCM UNLOADING SPOT	9347, PSDTX285M5
UNLDGF	PLANT 2 VCM UNLOADING SPOT	9347, PSDTX285M5
UNLDGG	PLANT 2 VCM UNLOADING SPOT	9347, PSDTX285M5
UNLDGH	PLANT 2 VCM UNLOADING SPOT	9347, PSDTX285M5
UNLDGJ	PLANT 2 VCM UNLOADING SPOT	9347, PSDTX285M5
UNLDGK	PLANT 2 VCM UNLOADING SPOT	9347, PSDTX285M5
UNLDGL	PLANT 2 VCM UNLOADING SPOT	9347, PSDTX285M5
UNLDGM	PLANT 2 VCM UNLOADING SPOT	9347, PSDTX285M5

Appendix A

Acronym List 83

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
COMS.....	continuous opacity monitoring system
CVS.....	closed-vent system
D/FW	Dallas/Fort Worth (nonattainment area)
DR	Designated Representative
EIP	El Paso (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
GF.....	grandfathered
gr/100 scf.....	grains per 100 standard cubic feet
HAP.....	hazardous air pollutant
H/G/B.....	Houston/Galveston/Brazoria (nonattainment area)
H ₂ S	hydrogen sulfide
ID No.....	identification number
lb/hr	pound(s) per hour
MMBtu/hr.....	Million British thermal units per hour
MRRT.....	monitoring, recordkeeping, reporting, and testing
NA	nonattainment
N/A.....	not applicable
NADB	National Allowance Data Base
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
PM.....	particulate matter
ppmv	parts per million by volume
PSD	prevention of significant deterioration
RO	Responsible Official
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..... 85

Major NSR Summary Table

Permit Number: NSR 9347; PSDTX285M5				Issuance Date: 6-16-14			
Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates *		Monitoring and Testing Requirements	Recordkeeping Requirements	Reporting Requirements
			lb/hr	TPY**	Spec. Cond.	Spec. Cond.	Spec. Cond.
DR401D	PVC Dryer	PM/PM10/PM 2.5	1.80		7,24	6,29,33	3,5
		NVVOG	8.50				
		VCM	5.10				
DR401E	PVC Dryer	PM/PM10/PM 2.5	1.80		7,24	6,29,33	3,5
		NVVOG	8.50				
		VCM	5.10				
DR401F	PVC Dryer	PM/PM10/PM 2.5	1.80		7,24	6,29,33	3,5
		NVVOG	8.50				
		VCM	5.10				
DR401G	PVC Dryer	PM/PM10/PM 2.5	1.80		7,24	6,29,33	3,5
		NVVOG	8.50				
		VCM	5.10				
LV-5	VCM Incinerator	CO	0.10		7,8,16,18,24,26,27	6,8,9,16,18,26,27	3,5
		HCl	0.20				
		CL2	0.02				
		NOX	2.10				
		VCM	0.10				

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Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates *		Monitoring and Testing Requirements	Recordkeeping Requirements	Reporting Requirements
			lb/hr	TPY**	Spec. Cond.	Spec. Cond.	Spec. Cond.
		PM/PM10/PM 2.5	0.20				
		SO2	0.01				
		VOC	0.03				
TK116	VOC Tank	VOC	0.34		6,30	6,29,30	
TK117	VOC Tank	VOC	0.34		6,30	6,29,30	
TK124	VOC Tank	VOC	1.84		6,30	6,29,30	
TK115	VOC Tank	VOC	0.24		6,30	6,29,30	
TK123	VOC Tank	VOC	0.85		6,30	6,29,30	
TK502A, TK502B, TK502C, TK502D, TK503A, TK503C, TK503D, TK503E, TK551A, TK551E	Plant 1 Silos	PM/PM10/PM 2.5	3.58		6,7	6	
		VMC	2.80				
TK503B	PVC Loading Silo	PM/PM10/PM 2.5	0.35		6,7	6	
		VCM	0.30				
TK510	PVC Storage Silo	PM/PM10/PM 2.5	0.18		6,7	6	
		VCM	0.01				

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Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates *		Monitoring and Testing Requirements	Recordkeeping Requirements	Reporting Requirements
			lb/hr	TPY**	Spec. Cond.	Spec. Cond.	Spec. Cond.
TK561A	PVC Storage Silo	PM/PM10/PM 2.5	0.19		6,7	6	
		VCM	0.60				
TK561B	PVC Storage Silo	PM/PM10/PM 2.5	0.19		6,7	6	
		VCM	0.60		6,7	6	
TK561C	PVC Storage Silo	PM/PM10/PM 2.5	0.25		6,7	6	
		VCM	0.60				
UN752A	Boiler	CO	13.14		4,6,9,7,8,24,25	4,6,9,8,24	4,24
		NOX	4.38				
		PM/PM10/PM 2.5	0.61				
		SO2	1.04				
		VOC	0.39				
UN752B	Boiler	CO	13.14		4,6,9,7,8,24,25	4,6,9,8,24	4,24
		NOX	4.38				
		PM/PM10/PM 2.5	0.61				
		SO2	1.04				
		VOC	0.39				
UN752D	Boiler	CO	1.08		4,6,9,7,8,24,25	4,6,9,8,24	4,24
		NOX	0.90				
		PM/PM10/PM 2.5	0.50				
		SO2	0.85				
		VOC	0.32				

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Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates *		Monitoring and Testing Requirements	Recordkeeping Requirements	Reporting Requirements
			lb/hr	TPY**	Spec. Cond.	Spec. Cond.	Spec. Cond.
FUG200	200 Area Fugitives (5)	PM/PM10/PM 2.5	0.01		11,12,27,3,5	11,12,27,3,5	3,5
		VCM	0.58				
		NVOC	0.25				
FUG300	300 Area Fugitives (5)	VCM	0.64		11,12,27,3,5	11,12,27,3,5	3,5
PL1WWSTRIP	Wastewater Stripper	VCM	0.14		21,22	22	3,5
PL1BIO	Biological Treatment	VCM	0.15		22	22	3,5
Plant 2							
DR-2401A	PVC Dryer	PM/PM10/PM 2.5	1.76		7	6,29,33	3,5
		NVOC	8.50				
		VCM	6.80				
DR-2401B	PVC Dryer	PM/PM10/PM 2.5	1.76		7	6,29,33	3,5
		NVOC	8.50				
		VCM	6.80				
DR-2401C	PVC Dryer	PM/PM10/PM 2.5	1.80		7	6,29,33	3,5
		NVOC	10.00				
		VCM	8.00				

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Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates *		Monitoring and Testing Requirements	Recordkeeping Requirements	Reporting Requirements
			lb/hr	TPY**	Spec. Cond.	Spec. Cond.	Spec. Cond.
TK551B, TK551C, TK551D, TK553A, TK553B, TK2503A, TK2503B, TK2503C, TK2503D, TK2503E, TK2503F, TK2503G, TK2503H, TK2503I	Plant 2 Silos	PM/PM10/PM 2.5	2.95		6,7	6	
		VCM	2.10				
TK2901A	VCM Storage Sphere	VCM	0.10			29	
TK2901B	VCM Storage Sphere	VCM	0.10			29	
TK2901C	VCM Storage Sphere	VCM	0.10			29	
TK2901D	VCM Storage Sphere	VCM	0.10			29	
UNLDGA	VCM Unloading	VCM	0.02			29	
UNLDGB	VCM Unloading	VCM	0.02			29	

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Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates *		Monitoring and Testing Requirements	Recordkeeping Requirements	Reporting Requirements
			lb/hr	TPY**	Spec. Cond.	Spec. Cond.	Spec. Cond.
UNLDGC	VCM Unloading	VCM	0.02			29	
UNLDGD	VCM Unloading	VCM	0.02			29	
UNLDGE	VCM Unloading	VCM	0.02			29	
UNLDGF	VCM Unloading	VCM	0.02			29	
UNLDGG	VCM Unloading	VCM	0.02			29	
UNLDGH	VCM Unloading	VCM	0.02			29	
UNLDGJ	VCM Unloading	VCM	0.02			29	
UNLDGK	VCM Unloading	VCM	0.02			29	
UNLDGL	VCM Unloading	VCM	0.02			29	
UNLDGM	VCM Unloading	VCM	0.02			29	
UNLDGJFUG	VCM Unloading (5)	VCM	0.17		11,12,27,3,5	11,12,27,3,5	3,5
UNLDGKFUG	VCM Unloading (5)	VCM	0.17		11,12,27,3,5	11,12,27,3,5	3,5
UNLDGLFUG	VCM Unloading (5)	VCM	0.17		11,12,27,3,5	11,12,27,3,5	3,5
UNLDGMFUG	VCM Unloading (5)	VCM	0.17		11,12,27,3,5	11,12,27,3,5	3,5

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Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates *		Monitoring and Testing Requirements	Recordkeeping Requirements	Reporting Requirements
			lb/hr	TPY**	Spec. Cond.	Spec. Cond.	Spec. Cond.
UNLDGKFUG	VCM Unloading (5)	VCM	0.17		11,12,27,3,5	11,12,27,3,5	3,5
UNLDGLFUG	VCM Unloading (5)	VCM	0.17		11,12,27,3,5	11,12,27,3,5	3,5
UNLDGMFUG	VCM Unloading (5)	VCM	0.17		11,12,27,3,5	11,12,27,3,5	3,5
UN2701A	Boiler	PM/PM10/PM 2.5	0.63		4,6,9,7,8,24,25	4,6,9,8,24	4,24
		VOC	0.41				
		NOX	4.56				
		SO2	1.09				
		CO	8.36				
UN2701B	Boiler	PM/PM10/PM 2.5	0.63		4,6,9,7,8,24,25	4,6,9,8,24	4,24
		VOC	0.41				
		NOX	4.56				
		SO2	1.09				
		CO	8.36				
UN2701C	Boiler	PM/PM10/PM 2.5	0.63		4,6,9,7,8,24,25	4,6,9,8,24	4,24
		VOC	0.41				
		NOX	4.56				
		SO2	1.09				
		CO	8.36				
UN2703A	VCM Incinerator	PM/PM10/PM 2.5	0.20		7,8,16,18,26,27	6,8,9,16,18,26,27	3,5
		NOX	2.10				

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Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates *		Monitoring and Testing Requirements	Recordkeeping Requirements	Reporting Requirements
			lb/hr	TPY**	Spec. Cond.	Spec. Cond.	Spec. Cond.
		SO2	0.01				
		CO	0.16				
		VCM	0.60				
		HCl	0.20				
		CL2	0.02				
		VOC	0.03				
UN2703B	VCM Incinerator	PM/PM10/PM 2.5	0.20		7,8,16,18,26,27	6,8,9,16,18,26,27	3,5
		NOX	2.10				
		SO2	0.01				
		CO	0.16				
		VCM	0.60				
		HCl	0.20				
		CL2	0.02				
		VOC	0.03				
FUG2200	200 Area Fugitives (5)	PM/PM10/PM 2.5	0.01		11,12,27,3,5	11,12,27,3,5	3,5
		VCM	0.69				
		NVOC	0.16				
FUG2300	300 Area Fugitives (5)	VCM	1.26		11,12,27,3,5	11,12,27,3,5	3,5
		NVOC	0.01				
PL2WWSTRIP	Wastewater Stripper	VCM	0.14		21,22	22	3,5
PLBIO	Biological Treatment	VCM	0.15		22	22	3,5

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Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates *		Monitoring and Testing Requirements	Recordkeeping Requirements	Reporting Requirements
			lb/hr	TPY**	Spec. Cond.	Spec. Cond.	Spec. Cond.
TL2115A	VOC Storage Tank	VOC	0.01		6,30	6,29,30	
TK2115B	VOC Storage Tank	VOC	0.01		6,30	6,29,30	
TK2131	VOC Storage Tank	VOC	7.86		6,30	6,29,30	
TK2132	VOC Storage Tank	VOC	1.79		6,30	6,29,30	
TK2133	VOC Storage Tank	VOC	17.50		6,30	6,29,30	
Plant 3							
DR3401A	PVC Dryer	NVVO	11.50		7	6,24,29,33	3,5
		PM/PM10/PM 2.5	2.05				
		VCM	6.90				
DR3401B	PVC Dryer	NVVO	11.50		7,24	6,24,29,33	3,5
		PM/PM10/PM 2.5	2.05				
		VCM	6.90				
DR3401C	PVC Dryer	NVVO	13.13		7,24	6,24,29,33	3,5,24
		PM/PM10/PM 2.5	2.40				
		VCM	7.88				

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Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates *		Monitoring and Testing Requirements	Recordkeeping Requirements	Reporting Requirements
			lb/hr	TPY**	Spec. Cond.	Spec. Cond.	Spec. Cond.
TK3503A, TK3503B, TK3503C, TK3503D, TK3503E, TK3503F, TK3503G, TK3503H, TK3503I	Plant 3 Silos	PM/PM10/PM 2.5	1.44		6,7	6	
		VCM	0.90				
TK3901A	VCM Storage Sphere (5)	VCM	0.10			29	
TK3901B	VCM Storage Sphere (5)	VCM	0.10			29	
UN3701A	Boiler	CO	1.31		4,6,9,7,8,25	4,6,9,8	4
		NOX	1.10				
		PM/PM10/PM 2.5	0.63				
		SO2	1.04				
		VOC	0.39				
UN3701B	Boiler	CO	1.10		4,6,9,7,8,24,25	4,6,9,8,24	4,24
		NOX	4.63				
		PM/PM10/PM 2.5	0.63				
		SO2	1.04				
		VOC	0.39				
UN3701C	Boiler	CO	1.10		4,6,9,7,8,24,25	4,6,9,8,24	4,24

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Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates *		Monitoring and Testing Requirements	Recordkeeping Requirements	Reporting Requirements
			lb/hr	TPY**	Spec. Cond.	Spec. Cond.	Spec. Cond.
		NOX	4.63				
		PM/PM10/PM 2.5	0.63				
		SO2	1.04				
		VOC	0.39				
UN3703A	Incinerator	Cl2	0.02		7,8,16,18,24,26,27	6,8,9,16,18,24,26,27	3,5,24
		CO	0.41				
		HCl	0.05				
		NOX	1.03				
		VCM	0.06				
		SO2	0.01				
		PM/PM10/PM 2.5	0.20				
		VOC	0.03				
UN3703B	Incinerator	Cl2	0.02		7,8,16, 18, 24,26,27	6,8,9,16, 18, 24,26,27	3,5,24
		CO	0.41				
		HCl	0.05				
		NOX	1.03				
		VCM	0.06				
		SO2	0.01				
		PM/PM10/PM 2.5	0.20				
		VOC	0.03				
TK3132	VOC Storage Tank	VOC	2.68		6,30	6,29,30	

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Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates *		Monitoring and Testing Requirements	Recordkeeping Requirements	Reporting Requirements
			lb/hr	TPY**	Spec. Cond.	Spec. Cond.	Spec. Cond.
TK3133	VOC Storage Tank	VOC	16.00		6,30	6,29,30	
TK3134	VOC Storage Tank	VOC	0.98		6,30	6,29,30	
TK3510	PVC Storage Silo	PM/PM10/PM 2.5	0.18		6,7	6	
		VCM	0.01				
FUG3200	Fugitive (5)	NVVOG	0.18		11,12,27,3,5	11,12,27,3,5	3,5
		PM/PM10/PM 2.5	0.01				
		VCM	0.54				
FUG3300	Fugitive (5)	VCM	0.65		11,12,27,3,5	11,12,27,3,5	3,5
PL3WWSTRIP	Wastewater	VCM	0.14		21,22	22	3,5
PL3BIO	Lagoon	VCM	0.10		22	22	3,5
Small Organic Liquid Storage Vessels							
TK107	Tank TK107	VOC	0.20		6,30	6,29,30	
TK108	Tank TK108	VOC	0.20		6,30	6,29,30	
TK109	Tank TK109	VOC	0.44		6,30	6,29,30	
TK110	Tank TK110	VOC	0.05		6,30	6,29,30	
TK111	Tank TK111	VOC	0.05		6,30	6,29,30	
TK120	Tank TK120	VOC	0.27		6,30	6,29,30	
TK121	Tank TK121	VOC	0.62		6,30	6,29,30	
TK353	Tank TK353	VOC	0.13		6,30	6,29,30	
TK2119	Tank TK2119	VOC	0.66		6,30	6,29,30	
TK2120	Tank TK2120	VOC	0.66		6,30	6,29,30	

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			lb/hr	TPY**	Spec. Cond.	Spec. Cond.	Spec. Cond.
TK2121	Tank TK2121	VOC	0.26		6,30	6,29,30	
TK2122	Tank TK2122	VOC	0.26		6,30	6,29,30	
TK2125	Tank TK2125	VOC	0.46		6,30	6,29,30	
TK2126	Tank TK2126	VOC	0.46		6,30	6,29,30	
TK2130	Tank TK2130	VOC	0.02		6,30	6,29,30	
TK3115	Tank TK3115	VOC	0.24		6,30	6,29,30	
TK3116	Tank TK3116	VOC	0.01		6,30	6,29,30	
TK3117	Tank TK3117	VOC	0.09		6,30	6,29,30	
TK3118	Tank TK3118	VOC	0.01		6,30	6,29,30	
TK3119	Tank TK3119	VOC	0.64		6,30	6,29,30	
TK3120	Tank TK3120	VOC	0.64		6,30	6,29,30	
TK3121	Tank TK3121	VOC	0.57		6,30	6,29,30	
TK3122	Tank TK3122	VOC	0.57		6,30	6,29,30	
TK3124	Tank TK3124	VOC	0.72		6,30	6,29,30	
TK3125	Tank TK3125	VOC	0.72		6,30	6,29,30	
Emission Caps							
Total Site Emissions (all EPNs) for Routine Operations		CO		257.8			
		CL ₂		0.6			
		HCl		2.2			
		NOX		151.6			
		SO ₂		40.9			

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			lb/hr	TPY**	Spec. Cond.	Spec. Cond.	Spec. Cond.
		PM10/PM2.5		22.6			
		PM		140.6			
		VCM		65.1			
		VOC		151.0			
Sitewide Reactors, Refer to Footnote (6) for EPNs		VCM	7.99		19,29,30	19,20,29,30	3.5
Maintenance, Start-Up and Shutdown Emissions							
MSSSPHERE	VCM Storage Sphere MSS includes TK2901 A-D, TK3901 A-B and TK4901 A-F	VCM	21.81	0.26	30,31	29,30,33	3.5
MSSSOLV	Solvent Usage	VOC	1.32	1.37	31	29	3.5
MSSMISC	Turnarounds, Process Vessels, Fugitive Component Repair	VCM	12.40	0.22	30,31	29,30,33	3.5

Footnotes

(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) PM - Total particulate matter, suspended in the atmosphere

PM10 - particulate matter equal to or less than 10 microns in diameter

PM2.5 - particulate matter equal to or less than 2.5 microns in diameter

NVOC - non-vinyl chloride volatile organic compounds

VCM - vinyl chloride monomer

VOC - volatile organic compounds as defined in Title 30 Texas Administrative Code §101.1

CO - carbon monoxide

NOX -total oxides of nitrogen

SO2 - sulfur dioxide

HCl - hydrogen chloride

CL2 – chlorine

(4) Compliance with annual emission limits (tons per year) is based on a 12 month rolling period.

(5) Emission rate is an estimate and is enforceable through compliance with the applicable special condition(s) and permit application representations.

(6) The following EPNs are included: PL251A, PL251B, PL251C, PL251D, PL251E, PL251F, PL2251A, PL2251B, PL2251C, PL2251D, PL2261E, PL2251F, PL3251A, PL3251B, PL3251C, PL3251D, PL3251E, PL3251F.



TEXAS COMMISSION ON ENVIRONMENTAL QUALITY
AIR QUALITY PERMIT



A Permit Is Hereby Issued To
Shintech Incorporated
Authorizing the Construction and Operation of
PVC Resins Production
Located at **Freeport, Brazoria County, Texas**
Latitude 28° 59' 55" Longitude 095° 21' 27"

Permits: 9347 and PSDTX285M5

Revision Date : June 16, 2014

Renewal Date: July 18, 2021

For the Commission

- Facilities** covered by this permit shall be constructed and operated as specified in the application for the permit. All representations regarding construction plans and operation procedures contained in the permit application shall be conditions upon which the permit is issued. Variations from these representations shall be unlawful unless the permit holder first makes application to the Texas Commission on Environmental Quality (commission) Executive Director to amend this permit in that regard and such amendment is approved. [Title 30 Texas Administrative Code 116.116 (30 TAC 116.116)]
- 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(a), (b) and (c)]
- Construction Progress.** Start of construction, construction interruptions exceeding 45 days, and completion of construction shall be reported to the appropriate regional office of the commission not later than 15 working days after occurrence of the event. [30 TAC 116.115(b)(2)(A)]
- Start-up Notification.** The appropriate air program regional office shall be notified prior to the commencement of operations of the facilities authorized by the permit in such a manner that a representative of the commission may be present. The permit holder shall provide a separate notification for the commencement of operations for each unit of phased construction, which may involve a series of units commencing operations at different times. Prior to operation of the facilities authorized by the permit, the permit holder shall identify the source or sources of allowances to be utilized for compliance with Chapter 101, Subchapter H, Division 3 of this title (relating to Mass Emissions Cap and Trade Program). [30 TAC 116.115(b)(2)(B)(iii)]
- 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; comply with any additional recordkeeping requirements specified in special conditions attached to 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)]
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 for upsets and maintenance 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, regulations, 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 a condition of "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.

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1. This permit authorizes emissions only from those points listed in the attached table entitled "Emission Sources - Maximum Allowable Emission Rates," and the facilities covered by this permit are authorized to emit subject to the emission rate limits on that table and other operating conditions specified in this permit. **(06/05)**
2. Non-fugitive emissions from relief valves, safety valves, or rupture discs of gases containing volatile organic compounds (VOC) at a concentration of greater than 1 percent are not authorized by this permit unless authorized on the maximum allowable emission rates table (MAERT). Any releases directly to atmosphere from relief valves, safety valves, or rupture discs of gases containing VOC at a concentration greater than 1 weight percent are not consistent with good practice for minimizing emissions with the exception of the relief valves on the vinyl chloride monomer (VCM) storage spheres, polyvinyl chloride (PVC) reactors, and PVC reactor charge tanks. **(02/04)**

Federal Applicability

3. 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 (NESHAPS) promulgated for Vinyl Chloride in Title 40 Code of Federal Regulations (40 CFR) Part 61, Subparts A and F.
4. These facilities shall comply with all applicable requirements of EPA regulations on Standards of Performance for New Stationary Sources promulgated for Volatile Organic Liquid Storage Vessels and Small Industrial-Commercial-Institutional Steam Generating Units in 40 CFR Part 60, Subparts A, Kb and Dc.
5. These facilities shall comply with all applicable requirements of the EPA regulations on NESHAPS for Source Categories promulgated for Polyvinyl Chloride and Copolymers Manufacture in 40 CFR Part 63, Subparts A and J.

These facilities shall comply with all applicable requirements of the EPA regulations on NESHAPS for Source Categories promulgated for Industrial, Commercial, and Institutional Boilers and Process Heaters in 40 CFR Part 63, Subparts A and DDDDD.

General Requirements

6. Records of the 12-month rolling production from each plant shall be maintained and updated on a monthly basis. The rolling 12-month actual emissions shall be updated on a monthly basis and determined as follows: **(02/04)**

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Dryers/PVC Storage and Handling - The VOC and VCM emissions shall be determined using the production rate and the sample results obtained as required by Special Condition No. 21 for each line. The particulate matter (PM) emissions shall be determined using the applicable exhaust flow rate and the particulate loading identified in the permit amendment application, PI-1, dated June 2003.

Incinerators - Emissions shall be estimated using the results and control efficiencies determined during the last stack test performed.

Reactor Vents - The monitored VCM concentration and equipment volume shall be used for each reactor opening.

Liquid Storage Tanks - Using recorded throughput and Texas Commission on Environmental Quality (TCEQ) "Liquid Storage Tanks" technical guidance.

Wastewater - Using measured VCM concentration and cumulative flow rate.

Boilers - Using actual firing rates and emission factors based on the last stack test (if performed for pollutant) or using the appropriate AP-42 emission factor if stack test results are not available.

7. Opacity of emission sources shall not exceed 5 percent averaged over a six-minute period. Compliance with the opacity limitation shall be determined in accordance with the test methods and procedures specified in Appendix A, 40 CFR Part 60, Method 9.
8. Fuel for all combustion units shall be sweet natural gas. The natural gas fuel shall contain no more than 0.25 grain of hydrogen sulfide (H₂S) and 5 grains of total sulfur per 100 dry standard cubic feet of gas. A monthly natural gas analysis shall be performed to determine the concentration of H₂S and total sulfur. The results and the organization (supplier, testing company, etc.) conducting the sample shall be recorded. If the natural gas streams fueling the boilers and the incinerators are different, a separate natural gas analysis is required for each stream. This requirement may be satisfied with a contractual requirement that the natural gas supplier meet the above specifications. **(02/04)**
9. Hourly fuel usage (standard cubic feet per hour) shall be monitored and recorded for all boilers. Record of any boiler tuning performed including date and nature of work performed shall also be maintained. **(02/04)**
10. The holder of this permit shall physically identify (by tagging, engraving, labeling, etc.) and mark in a conspicuous location all equipment that has the potential of emitting air contaminants as follows:

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- A. The facility identification numbers as submitted to the Emissions Inventory Section of the TCEQ.
- B. The emission point numbers (EPNs) as listed on the MAERT.

Fugitive Monitoring

11. Intensive Directed Maintenance (28MID) Program. Except as may be provided for in the special conditions of this permit, the following requirements apply to the above-referenced equipment: **(02/04)**
- A. These conditions shall not apply (1) where the VOC has an aggregate partial pressure or vapor pressure of less than 0.044 pound per square inch, absolute at 68°F or (2) operating pressure is at least 5 kilopascals (0.725 pound per square inch) below ambient pressure. Equipment excluded from this condition shall be identified in a list to be made available upon request.
 - B. Construction of new and reworked piping, valves, pump systems, and compressor systems shall conform to applicable American National Scientific Institute, American Petroleum Institute, American Society of Mechanical Engineers, or equivalent codes.
 - C. New and reworked underground process pipelines shall contain no buried valves such that fugitive emission monitoring is rendered impractical.
 - 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. Non-accessible valves, as defined by Title 30 Texas Administrative Code (30 TAC) Chapter 115, shall be identified in a list to be made available upon request.
 - E. New and reworked piping connections shall be welded or flanged. Screwed connections are permissible only on piping smaller than two-inch diameter. No later than the next scheduled quarterly monitoring after initial installation or replacement, all new or reworked connections shall be gas-tested or hydraulically-tested at no less than normal operating pressure and adjustments made as necessary to obtain leak-free performance. Connectors shall be inspected by visual, audible, and/or olfactory means at least weekly by operating personnel walk-through.

Each open-ended valve or line shall be equipped with a cap, blind flange, plug, or a second valve. Except during sampling, the second valve shall be closed.

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- F. Accessible valves shall be monitored by leak-checking for fugitive emissions at least quarterly using an approved gas analyzer with a directed maintenance program. Sealless/leakless valves (including, but not limited to, welded bonnet bellows and diaphragm valves) and relief valves equipped with a rupture disc upstream or venting to a control device are not required to be monitored. For valves equipped with rupture discs, a pressure-sensing device shall be installed between the relief valve and rupture disc to monitor disc integrity. All leaking discs shall be replaced at the earliest opportunity but no later than the next process shutdown.

An approved gas analyzer shall conform to requirements listed in 40 CFR § 60.485(a) - (b).

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 and compressors 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 and compressor seals emitting VOC shall be monitored with an approved gas analyzer at least quarterly.

- H. Damaged or leaking valves, connectors, compressor seals, and pump 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. Every reasonable effort shall be made to repair a leaking component, as specified in this paragraph, within 15 days after the leak is found. If the repair of a component would require a unit shutdown, 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. At the discretion of the TCEQ Executive Director or designated representative, early unit shutdown or other appropriate action may be required based on the number and severity of tagged leaks awaiting shutdown.

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

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

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

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

$$(Vl + Vs) \times 100/Vt = Vp$$

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.

- K. The results of the required fugitive instrument monitoring and maintenance program shall be made available to the TCEQ Executive Director or designated representative upon request. Records shall indicate appropriate dates, test methods, instrument readings, repair results, justification for delay of repairs, and corrective actions taken for all components. Records of physical inspections are not required unless a leak is detected.

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- L. Compliance with the requirements of this condition does not assure compliance with requirements of 30 TAC Chapter 115, an applicable New Source Performance Standard (NSPS), or an applicable NESHAPS and does not constitute approval of alternative standards for these regulations.
12. In addition to the weekly physical inspection required by Item E of Special Condition No. 11, all accessible connectors in gas/vapor and light liquid service shall be monitored quarterly with an approved gas analyzer in accordance with Items F through J of Special Condition No. 11. **(02/04)**

- A. 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.

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

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

Where:

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

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13. The holder of this permit may substitute their own inspection and maintenance program to control fugitive leaks of VOCs for the programs described in Special Conditions Nos. 11 and 12 of this permit, if and only if, the minimum requirements concerning leak detection level, production and storage equipment inspected, means of inspection, frequency of inspection, and repair/replacement described in Special Condition Nos. 11 and 12 are met. **(02/04)**
14. Any relief valves in VOC service venting directly to atmosphere shall be equipped with a rupture disc upstream. A pressure gauge 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. **(02/04)**

Other Requirements

15. The incinerators shall be operated such that the VCM destruction efficiency is no less than 99.99 percent, unless the VCM concentration in the exhaust gas stream is 10 ppmv on a dry basis (3-hour average) or less. **(06/14)**
16. The temperature in the combustion chamber of all incinerators shall be continuously monitored and recorded when VOC waste gases are directed to the incinerator. If the most recent compliance test documents the ability to achieve compliance with the authorized emission rates for VCM and VOC at a lower temperature than 2000°F, then that temperature shall become the minimum combustion temperature. **(06/14)**
17. The incinerators located at Plant No. 1 (LV-5), Plant No. 2 (UN2703A and UN2703B), and Plant No. 3 (UN3703A and UN3703B) may be shared and used to incinerate waste streams originating from any of the three plants.
18. When VOC waste gas is directed to the absorbers, the pH of the solution exiting the absorbers shall be continuously monitored and recorded and shall maintain a pH value of no less than eight. When VOC waste gas is directed to the absorbers, the solution flow rate to the absorbers shall be 26 gallons per minute (gpm) for LV-5, 22 gpm for UN2703A, 25 gpm for UN2703B, and 27 gpm for UN3703A and UN3703B. **(07/11)**

The flow monitoring device shall be calibrated at a frequency in accordance with the manufacturer's specifications, or at least annually, whichever is more frequent, and shall be accurate to within 2 percent of span or 5 percent of the design value. **(07/11)**

Quality assured (or valid) pH data must be generated when the absorbers are operating except during the performance of a daily zero 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

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time (in hours) that the absorbers operated over the previous rolling 12 month period. The measurements missed shall be estimated using engineering judgment and the methods used recorded. **(07/11)**

19. The opening loss from each reactor shall not exceed the following limits:

0.02 g VCM/kg PVC when 0 to 20 batches have been run,
0.01 g VCM/kg PVC when 21 to 50 batches have been run, and
0.005 g VCM/kg PVC when more than 50 batches have been run

The holder of this permit shall maintain records of the number of batches run in each reactor and the monitored VCM concentration prior to each reactor opening.

Reactor opening losses may not be emitted to the atmosphere from more than one reactor at a time (EPNs PL251A, PL251B, PL251C, PL251D, PL251E, PL251F, PL2251A, PL2251B, PL2251C, PL2251D, PL2251E, PL2251F, PL3251A, PL3251B, PL3251C, PL3251D, PL3251E, and PL3251F). **(01/08)**

20. The holder of this permit shall continuously record reactor temperature and pressure during reactor charge preparation and VCM recovery.
21. The residual vinyl chloride monomer (RVCM) concentration in the stripper slurry is limited to the following parts per million by weight (ppmw), daily average,

Plant 1	150
Plant 2	200
Plant 3	150

and 10 ppmw on a rolling 12-month average for all plants. Representative samples are to be taken for each grade of resin processed or at intervals of 8 hours for each grade of resin being processed, whichever is more frequent. The non-VCM VOC residual differential across the dryer shall not exceed 250 ppmw and 100 ppmw on a rolling 12-month average for all plants. The rolling 12 month average shall be calculated for the stripper slurry RVCM and total VOC concentration on a monthly basis in accordance with 40 CFR Part 61, Subpart F or TCEQ-approved procedure. Records of the sample results for each resin grade and rolling 12-month average RVCM and total VOC concentrations shall be maintained. **(06/14)**

22. The RVCM concentration in the Bio Lagoons (PL1BIO, PL2BIO, and PL3BIO) shall not exceed 0.2 ppmw. The influent to the bio lagoon from each plant shall be tested at least every two weeks, and the cumulative flow rate shall be recorded daily. **(02/04)**

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The RVCM concentration exiting the Wastewater Stripper (PL1WWSTRIP, PL2WWSTRIP, and PL3WWSTRIP) shall not exceed 10 ppmw. The wastewater stripper effluent shall be sampled for RVCM at least once per day.

23. Emissions from the boiler stacks shall not exceed the levels identified below. These emission rates shall be valid at all operating loads. **(06/14)**

A. EPNs UN752A and UN752B:

- (1) Nitrogen oxides (NO_x): 50 ppmv, dry or 0.06 pound per million British Thermal Units (lb/MMBtu).
- (2) Carbon monoxide (CO): 215 parts per million by volume, dry (ppmvd) or 0.18 lb/MMBtu.

B. EPN UN752D:

- (1) NO_x: 13 ppmvd or 0.015 lb/MMBtu
- (2) CO: 25 ppmvd or 0.018 lb/MMBtu

C. EPNs UN2701A, UN2701B and UN2701C:

- (1) NO_x: 50 ppmvd or 0.06 lb/MMBtu
- (2) CO: 100 ppmvd or 0.11 lb/MMBtu

D. EPNs UN3701A:

- (1) NO_x: 13 ppmvd or 0.015 lb/MMBtu
- (2) CO: 25 ppmvd or 0.018 lb/MMBtu

E. EPN UN3701B and UN3701C:

- (1) NO_x: 50 ppmvd or 0.060 lb/MMBtu
- (2) CO: 13 ppmvd or 0.015 lb/MMBtu

All concentration limits are expressed on a dry basis at 3 percent volume stack gas oxygen (O₂), averaged over a one hour period. The heat input-based limits are based upon fuel higher heating value.

24. The holder of this permit shall perform stack sampling and other testing as required to establish the actual pattern and quantities of emissions from the following: **(02/04)**

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Boilers UN752A, UN752B, and UN752D (initial test complete)
Boilers UN2701A, UN2701B, and UN2701C (initial test complete)
Boilers UN3701B and UN3701C (initial test complete) (07/11)
Dryers DR3401B and DR3401C (initial test complete)
Incinerator Stacks UN3703A and UN3703B (initial test complete)

- A. The appropriate TCEQ Regional Office in the region where the source is located 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.

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 B of this condition shall be submitted to the TCEQ Air Permits Division in Austin. Test waivers and alternate/equivalent procedure proposals for NSPS testing which must have EPA approval shall be submitted to the TCEQ Regional Director.

- B. Air contaminants to be tested for include (but are not limited to):
- (1) Boilers: NO_x and CO
 - (2) Dryers: VCM, PVC, PM, methanol, ethanol, and odorless mineral spirits (OMS)
 - (3) Incinerators: VCM, methanol, ethanol, OMS, NO_x, CO, hydrogen chloride, and chlorine.
- C. Sampling shall occur within 60 days after initial start-up of the facilities or burner replacement, and at such other times as may be required by the Executive Director

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of the TCEQ. Requests for additional time to perform sampling shall be submitted to the TCEQ Regional Office. Additional time to comply with the applicable requirements of 40 CFR Part 60 and 40 CFR Part 61 requires EPA approval and requests shall be submitted to the TCEQ Air Permits Division in Austin.

- D. The plant shall operate at maximum production rates during stack emission testing. Primary operating parameters that enable determination of production rate shall be monitored and recorded during the stack test. These parameters are to be determined at the pretest meeting. If the plant is unable to operate at maximum rates during testing, then future production rates may be limited to the rates established during testing. Additional stack testing may be required when higher production rates are achieved.
- E. A copy of each emission report shall be forwarded to the TCEQ within 30 days after sampling is completed. The report shall be distributed as follows:
- One copy to the TCEQ Houston Regional Office
- F. Following the initial stack testing of each boiler the permit holder shall perform one of the following approaches: **(05/13)**
- (1) Conducting quarterly NO_x testing using hand-held portable analyzers, or
 - (2) Monitoring boiler operating parameters, such as stack gas O₂ content, firebox temperature, and fuel flow rate, which can be used as a surrogate for determining compliance with the NO_x limit, or
 - (3) Such other proposed recordkeeping and monitoring which will demonstrate compliance with the NO_x limit and is acceptable to the TCEQ.
- G. At the time sampling is performed on the dryers, one upwind and two downwind ambient air samples shall be obtained simultaneously at the property line. The samples shall be analyzed for VCM content. Ground-level sampling shall be performed in accordance with Chapter 12 (gaseous pollutants) of the TCEQ Sampling Procedures Manual. The TCEQ Executive Director shall approve all sampling, testing, and laboratory techniques and be afforded the opportunity to observe the sampling.
25. Stack testing of the affected unit in accordance with Special Condition No. 24 must be performed within 60 days of: **(02/04)**

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- A. Any incinerator operation with total hourly waste flow rate or VCM hourly waste flow rate greater than that maintained during the last stack test.
 - B. An increase in boiler hourly firing rate above that maintained during the last stack test.
26. The holder of this permit shall install, calibrate, and maintain a vinyl chloride monitoring system to continuously measure and record the in-stack concentration of VCM from all incinerator stacks. The incinerator stack vinyl chloride monitoring system is to be a device that obtains representative samples from the incinerators on a continuous sequential basis and analyzes the samples using gas chromatography or an alternative method as follows: the operating personnel may use infrared spectrophotometry, or flame ion detection as alternative methods if the operator has determined that all of the hydrocarbons are VCM. Other alternative methods pursuant to 40 CFR § 61.68(b) may also be used if the operator receives prior approval from the TCEQ Regional Director.
- (06/14)**
- A. The vinyl chloride monitoring system shall meet the design, installation, data validation, recordkeeping, and reporting requirements specified in 40 CFR § 61.68.
 - B. Operating personnel shall perform a daily span check of the analyzers used to monitor incinerator in-stack vinyl chloride concentrations. The daily span check is to be conducted with a concentration of vinyl chloride equal to or less than 10 ppm. The average instrument response should not vary more than 10 percent from the certified concentration value of the cylinder. If the difference between the analyzer response and the cylinder concentration for any target compound is greater than 10 percent, immediately inspect the instrument making any necessary adjustments, and conduct an additional span check.
 - C. Perform a multi-point calibration (calibration curve) of incinerator stack vinyl chloride monitoring system analyzers annually according to the requirements of 40 CFR 61, Subpart F. **(06/14)**
 - D. The gas composition of the calibration gas cylinder standard shall have been certified by the manufacturer. The manufacturer must have recommended a maximum shelf life for each cylinder so that the concentration does not change greater than ± 5 percent from the certified value. The date of gas cylinder preparation, certified vinyl chloride concentration, and recommended maximum shelf life must have been affixed to the cylinder before shipment from the manufacturer to the buyer. If a gas chromatograph is used as the vinyl chloride monitoring system, these gas mixtures may be directly used to prepare a chromatograph calibration curve. The requirements in 40 CFR Chapter 61,

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Appendix B, Method 106 for certification of cylinder standards and for establishment and verification of calibration standards are to be followed to the extent practical.

- E. The system shall collect and analyze samples from each incinerator stack on a continuous sequential basis. The system shall sample, analyze, and record data during each 15-minute period. Monitoring data recorded during periods of unavoidable monitoring system breakdowns, repairs, calibration checks, and zero and span adjustments shall not be included in any data average per 40 CFR § 61.14(e). The system shall reduce the monitoring data to hourly average and three-hour average concentrations.

The individual incinerator vinyl chloride average concentrations shall be reduced to units of the permit allowable emission rate in pounds per hour at least once every week.

- F. All incinerator monitoring data and quality-assurance data shall be maintained by the source for a period of at least two years and shall be made available to the TCEQ Executive Director or a designated representative upon request. The monitoring data may, at the discretion of the TCEQ, be used to determine compliance with the conditions of this permit.
- G. Any incinerator vinyl chloride monitoring system downtime shall be reported to the appropriate TCEQ Regional Director and necessary corrective action shall be taken. Supplemental stack concentration measurements may be required at the discretion of the appropriate TCEQ Regional Director.

Compliance Assurance Monitoring

- 27. The following requirements apply to capture systems for all incinerators:
 - A. 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. Records of the inspections required shall be maintained and if the results of the above inspections are not satisfactory, the permit holder shall promptly take necessary corrective action.

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Maintenance, Startup, and Shutdown

28. Planned maintenance, startup and shutdown (MSS) emissions due to the activities identified in Special Condition No. 29 are authorized provided the facilities and emissions are compliant with the MAERT and special conditions. This permit authorizes emissions from internal combustion engines used to support planned MSS activities at permanent site facilities. Emissions from these internal combustion engines are authorized provided: **(12/10)**
- A. Does not remain at a plant location for more than 12 consecutive months,
 - B. Are used solely to support planned MSS activities at the permanent site and
 - C. Do not operate as a replacement for an existing authorized facility.
29. This permit authorizes emissions for the planned MSS activities summarized in the MSS activity Summary (Attachment C) attached to this permit. **(12/10)**

Attachment A identifies the inherently low emitting MSS activities that may be performed at the plant. Emissions from activities identified in Attachment A shall be considered to be equal to the potential to emit represented on the MAERT. The estimated emissions from the activities listed in Attachment A must be revalidated annually. This revalidation shall consist of the estimated emissions for each type of activity and the basis for that emission estimate.

Routine maintenance activities, as identified in Attachment B, may be tracked through the work orders or equivalent. Emissions from activities identified in Attachment B shall be calculated using the work orders or equivalent that month and the emissions associated with that activity identified in the permit application dated January 8, 2008.

The performance of each planned MSS activity not identified in Attachments A or B and the emissions associated with it shall be recorded and include at least the following information:

- A. the facility at which the MSS activity and emissions occurred, including the emission point number, facility identification number, if applicable, and common name of the facility;
- B. the type of planned MSS activity and the reason for the planned activity;
- C. the date and time of the MSS activity and its duration; and
- D. 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

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estimated using the methods identified in the permit application dated January 8, 2008.

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

30. Process units and facilities including VCM storage spheres, strainers, process vessels, and process lines shall be depressurized, emptied, degassed, and placed in service in accordance with the following requirements. **(12/10)**
 - A. The process equipment shall be depressurized to a control device or a controlled recovery system prior to venting to atmosphere, degassing, or draining of material. Equipment that only contains material that is liquid with a VOC True Vapor Pressure (TVP) less than 0.50 psi at the normal process temperature or 95°F may be opened to atmosphere and drained 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 TVP 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 while degassing is occurring.
 - 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 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 TVP 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

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following controlled depressurization. The venting shall be minimized to the maximum extent practicable and action 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 [PIDs] 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 No. 32. 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.

- E. Gases and vapors with VOC TVP greater than 0.50 psi may be vented directly to atmosphere if all the following criteria are met:
- (1) It is not technically practicable to depressurize or degas, as applicable, into the process.
 - (2) There is not an available connection to a plant control system.
 - (3) There is no more than 50 lb of air contaminant to be vented to atmosphere during shutdown or startup of a piece of equipment, as applicable.

All instances of venting directly to atmosphere per Special Condition 30E must be documented when occurring as part of any MSS activity.

31. Air contaminant concentration shall be measured using an instrument/detector meeting one set of requirements specified below. **(12/10)**

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- 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 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 response factor shall be recorded.
 - (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 and the greatest VOC concentration recorded. The VOC concentration shall not exceed the specified VOC concentration limit prior to uncontrolled venting.
- B. Colorimetric gas detector tubes may be used to determine air contaminant concentrations if they are used in accordance with the following requirements.
- (1) The air contaminant concentration is less than 80 percent of the range of the tube. If the maximum range of the tube is greater than the release concentration defined in sub-paragraph (3), the concentration measured 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 ppmv) * (mole fraction of the total VOC 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.

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

- C. Lower explosive limit measured with a lower explosive limit detector.
 - (1) The detector shall be calibrated monthly 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 using the same certified gas standard used for calibration. 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.
- 32. The MSS activities represented in the permit application, dated January 8, 2008, may be authorized under permit by rule only if the procedures, emission controls, monitoring and record keeping are the same as those required by this permit.
- 33. All permanent facilities must comply with all operating requirements, limits, and representations as specified in the special conditions during planned start-up and shutdown unless alternate requirements for emissions from routine emission points are identified below:
 - A. This permit authorizes emissions from EPN MSSSPHERE for the opening of six vinyl chloride storage spheres per year (on a 12-month rolling basis) for maintenance, start-up, and shutdown activities. Only one VCM storage sphere may be opened at any time.
 - B. This permit authorizes emissions from EPN MSSMISC for two PVC Plant “turnarounds” on a 12-month rolling basis.
 - C. This permit authorizes emissions for 156 PVC Dryer startups on a 12-month rolling basis. A PVC Dryer startup shall be defined as startup of the blower associated with the PVC Dryer.

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34. With the exception of the MAERT emission limits, these permit conditions become effective 180 days after this permit has been issued. During this period, monitoring and recordkeeping shall satisfy the requirements of Special Condition 29.A through 29.D. Emissions shall be estimated using good engineering practice and methods to provide reasonably accurate representations for emissions. The basis used for determining the quantity of air contaminants to be emitted shall be recorded. **(12/10)**

Dated: June 16, 2014

Attachment A
Permit 9347
INHERENTLY LOW EMITTING ACTIVITIES

Activity	Emissions		
Aerosol and Solvent Usage	VOC	PM	PM10
	X		

Attachment B
Permit 9347
ROUTINE MAINTENANCE ACTIVITIES

Fugitive component (valve, pipe, flange) Repair/Replacement
Strainer Cleaning
Heat Exchanger Cleaning

Attachment C
Permit 9347
MSS ACTIVITY SUMMARY

Facilities	Description	Emissions Activity	EPN
Vinyl chloride storage spheres TK4901A-F, TK2901A-D, TK3901A-B	unit purge and degas	vent to VCM recovery system	
Vinyl chloride storage spheres TK4901A-F, TK2901A-D, TK3901A-B	Open vessels	vent to atmosphere	MSSSPHERE
All Process Units	depressurize, purge/degas for PVC Plant turnarounds	vent to VCM recovery system	
All Process Units	Open process units for cleaning and repair during Plant Turnarounds	vent to atmosphere	MSSMISC
PVC Dryers	Dryer Startup	vent to control	
see Attachment A	miscellaneous low emitting activities	see Attachment A	MSSSOLV
see Attachment B	Process unit cleaning	see Attachment B	MSSMISC
see Attachment B	routine fugitive component maintenance activities	see Attachment B	MSSMISC

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

Permit Number 9347 and PSDTX285M5

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)
Plant 1				
DR401D	PVC Dryer	PM/PM ₁₀ /PM _{2.5}	1.80	
		NVOC	8.50	
		VCM	5.10	
DR401E	PVC Dryer	PM/PM ₁₀ /PM _{2.5}	1.80	
		NVOC	8.50	
		VCM	5.10	
DR401F	PVC Dryer	PM/PM ₁₀ /PM _{2.5}	1.80	
		NVOC	8.50	
		VCM	5.10	
DR401G	PVC Dryer	PM/PM ₁₀ /PM _{2.5}	1.80	
		NVOC	8.50	
		VCM	5.10	
LV-5	VCM Incinerator	CO	0.10	
		HCl	0.20	
		Cl ₂	0.02	
		NO _x	2.10	
		VCM	0.10	
		PM/PM ₁₀ /PM _{2.5}	0.20	
		SO ₂	0.01	
		VOC	0.03	
TK116	VOC Tank	VOC	0.34	
TK117	VOC Tank	VOC	0.34	
TK124	VOC Tank	VOC	1.84	
TK115	VOC Tank	VOC	0.24	
TK123	VOC Tank	VOC	0.85	
TK502A, TK502B, TK502C, TK502D, TK503A, TK503C, TK503D, TK503E, TK551A, TK551E	Plant 1 Silos	PM/PM ₁₀ /PM _{2.5}	3.58	
		VCM	2.80	

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates	
			lbs/hour	TPY (4)
TK503B	PVC Loading Silo	PM/PM ₁₀ /PM _{2.5}	0.35	
		VCM	0.30	
TK510	PVC Storage Silo	PM/PM ₁₀ /PM _{2.5}	0.18	
		VCM	0.01	
TK561A	PVC Storage Silo	PM/PM ₁₀ /PM _{2.5}	0.19	
		VCM	0.60	
TK561B	PVC Storage Silo	PM/PM ₁₀ /PM _{2.5}	0.19	
		VCM	0.60	
TK561C	PVC Storage Silo	PM/PM ₁₀ /PM _{2.5}	0.25	
		VCM	0.60	
UN752A	Boiler	CO	13.14	
		NO _x	4.38	
		PM/PM ₁₀ /PM _{2.5}	0.61	
		SO ₂	1.04	
		VOC	0.39	
UN752B	Boiler	CO	13.14	
		NO _x	4.38	
		PM/PM ₁₀ /PM _{2.5}	0.61	
		SO ₂	1.04	
		VOC	0.39	
UN752D	Boiler	CO	1.08	
		NO _x	0.90	
		PM/PM ₁₀ /PM _{2.5}	0.50	
		SO ₂	0.85	
		VOC	0.32	
FUG200	200 Area Fugitives (5)	PM/PM ₁₀ /PM _{2.5}	0.01	
		VCM	0.58	
		NVOC	0.25	
FUG300	300 Area Fugitives (5)	VCM	0.64	
PL1WWSTRIP	Wastewater Stripper	VCM	0.14	
PL1BIO	Biological Treatment	VCM	0.15	

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates	
			lbs/hour	TPY (4)
Plant 2				
DR-2401A	PVC Dryer	PM/PM ₁₀ /PM _{2.5}	1.76	
		NVOC	8.50	
		VCM	6.80	
DR-2401B	PVC Dryer	PM/PM ₁₀ /PM _{2.5}	1.76	
		NVOC	8.50	
		VCM	6.80	
DR-2401C	PVC Dryer	PM/PM ₁₀ /PM _{2.5}	1.80	
		NVOC	10.00	
		VCM	8.00	
TK551B, TK551C, TK551D, TK553A, TK553B, TK2503A, TK2503B, TK2503C TK2503D, TK2503E, TK2503F, TK2503G, TK2503H, TK2503I	Plant 2 Silos	PM/PM ₁₀ /PM _{2.5}	2.95	
		VCM	2.10	
TK2901A	VCM Storage Sphere	VCM	0.10	
TK2901B	VCM Storage Sphere	VCM	0.10	
TK2901C	VCM Storage Sphere	VCM	0.10	
TK2901D	VCM Storage Sphere	VCM	0.10	
UNLDGA	VCM Unloading	VCM	0.02	
UNLDGB	VCM Unloading	VCM	0.02	
UNLDGC	VCM Unloading	VCM	0.02	
UNLDGD	VCM Unloading	VCM	0.02	
UNLDGE	VCM Unloading	VCM	0.02	
UNLDGF	VCM Unloading	VCM	0.02	
UNLDGG	VCM Unloading	VCM	0.02	
UNLDGH	VCM Unloading	VCM	0.02	
UNLDGJ	VCM Unloading	VCM	0.02	
UNLDGK	VCM Unloading	VCM	0.02	
UNLDGL	VCM Unloading	VCM	0.02	
UNLDGM	VCM Unloading	VCM	0.02	
UNLDGJFUG	VCM Unloading (5)	VCM	0.17	
UNLDGKFUG	VCM Unloading (5)	VCM	0.17	
UNLDGLFUG	VCM Unloading (5)	VCM	0.17	

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates	
			lbs/hour	TPY (4)
UNLDGMFUG	VCM Unloading (5)	VCM	0.17	
UN2701A	Boiler	PM/PM ₁₀ /PM _{2.5}	0.63	
		VOC	0.41	
		NO _x	4.56	
		SO ₂	1.09	
		CO	8.36	
UN2701B	Boiler	PM/PM ₁₀ /PM _{2.5}	0.63	
		VOC	0.41	
		NO _x	4.56	
		SO ₂	1.09	
		CO	8.36	
UN2701C	Boiler	PM/PM ₁₀ /PM _{2.5}	0.63	
		VOC	0.41	
		NO _x	4.56	
		SO ₂	1.09	
		CO	8.36	
UN2703A	VCM Incinerator	PM/PM ₁₀ /PM _{2.5}	0.20	
		NO _x	2.10	
		SO ₂	0.01	
		CO	0.16	
		VCM	0.60	
		HCl	0.20	
		Cl ₂	0.02	
		VOC	0.03	
UN2703B	VCM Incinerator	PM/PM ₁₀ /PM _{2.5}	0.20	
		NO _x	2.10	
		SO ₂	0.01	
		CO	0.16	
		VCM	0.60	
		HCl	0.20	
		Cl ₂	0.02	
		VOC	0.03	
FUG2200	200 Area Fugitives (5)	PM/PM ₁₀ /PM _{2.5}	0.01	

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates	
			lbs/hour	TPY (4)
		VCM	0.69	
		NVVOG	0.16	
FUG2300	300 Area Fugitives (5)	VCM	1.26	
		NVVOG	0.01	
PL2WWSTRIP	Wastewater Stripper	VCM	0.14	
PLBIO	Biological Treatment	VCM	0.15	
TK2115A	VOC Storage Tank	VOC	0.01	
TK2115B	VOC Storage Tank	VOC	0.01	
TK2131	VOC Storage Tank	VOC	7.86	
TK2132	VOC Storage Tank	VOC	1.79	
TK2133	VOC Storage Tank	VOC	17.50	
Plant 3				
DR3401A	PVC Dryer	NVVOG	11.50	
		PM/PM ₁₀ /PM _{2.5}	2.05	
		VCM	6.90	
DR3401B	PVC Dryer	NVVOG	11.50	
		PM/PM ₁₀ /PM _{2.5}	2.05	
		VCM	6.90	
DR3401C	PVC Dryer	NVVOG	13.13	
		PM/PM ₁₀ /PM _{2.5}	2.40	
		VCM	7.88	
TK3503A, TK3503B, TK3503C, TK3503D, TK3503E, TK3503F, TK3503G, TK3503H, TK3503I	Plant 3 Silos	PM/PM ₁₀ /PM _{2.5}	1.44	
		VCM	0.90	
TK3901A	VCM Storage Sphere (5)	VCM	0.10	
TK3901B	VCM Storage Sphere (5)	VCM	0.10	
UN3701A	Boiler	CO	1.31	
		NO _x	1.10	
		PM/PM ₁₀ /PM _{2.5}	0.63	
		SO ₂	1.04	
		VOC	0.39	
UN3701B	Boiler	CO	1.10	
		NO _x	4.63	

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates	
			lbs/hour	TPY (4)
		PM/PM ₁₀ /PM _{2.5}	0.63	
		SO ₂	1.04	
		VOC	0.39	
UN3701C	Boiler	CO	1.10	
		NO _x	4.63	
		PM/PM ₁₀ /PM _{2.5}	0.63	
		SO ₂	1.04	
		VOC	0.39	
UN3703A	Incinerator	Cl ₂	0.02	
		CO	0.41	
		HCl	0.05	
		NO _x	1.03	
		VCM	0.06	
		SO ₂	0.01	
		PM/PM ₁₀ /PM _{2.5}	0.20	
		VOC	0.03	
UN3703B	Incinerator	Cl ₂	0.02	
		CO	0.41	
		HCl	0.05	
		NO _x	1.03	
		VCM	0.06	
		SO ₂	0.01	
		PM/PM ₁₀ /PM _{2.5}	0.20	
		VOC	0.03	
TK3132	VOC Storage Tank	VOC	2.68	
TK3133	VOC Storage Tank	VOC	16.00	
TK3134	VOC Storage Tank	VOC	0.98	
TK3510	PVC Storage Silo	PM/PM ₁₀ /PM _{2.5}	0.18	
		VCM	0.01	
FUG3200	Fugitive (5)	NVOC	0.18	
		PM/PM ₁₀ /PM _{2.5}	0.01	
		VCM	0.54	
FUG3300	Fugitive (5)	VCM	0.65	

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates	
			lbs/hour	TPY (4)
PL3WWSTRIP	Wastewater	VCM	0.14	
PL3BIO	Lagoon	VCM	0.10	
Small Organic Liquid Storage Vessels				
TK107	Tank TK107	VOC	0.20	
TK108	Tank TK108	VOC	0.20	
TK109	Tank TK109	VOC	0.44	
TK110	Tank TK110	VOC	0.05	
TK111	Tank TK111	VOC	0.05	
TK120	Tank TK120	VOC	0.27	
TK121	Tank TK121	VOC	0.62	
TK353	Tank TK353	VOC	0.13	
TK2119	Tank TK2119	VOC	0.66	
TK2120	Tank TK2120	VOC	0.66	
TK2121	Tank TK2121	VOC	0.26	
TK2122	Tank TK2122	VOC	0.26	
TK2125	Tank TK2125	VOC	0.46	
TK2126	Tank TK2126	VOC	0.46	
TK2130	Tank TK2130	VOC	0.02	
TK3115	Tank TK3115	VOC	0.24	
TK3116	Tank TK3116	VOC	0.01	
TK3117	Tank TK3117	VOC	0.09	
TK3118	Tank TK3118	VOC	0.01	
TK3119	Tank TK3119	VOC	0.64	
TK3120	Tank TK3120	VOC	0.64	
TK3121	Tank TK3121	VOC	0.57	
TK3122	Tank TK3122	VOC	0.57	
TK3124	Tank TK3124	VOC	0.72	
TK3125	Tank TK3125	VOC	0.72	
Emission Caps				
Total Site Emissions (all EPNs) for routine operations		CO		257.8
		Cl ₂		0.6
		HCl		2.2

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates	
			lbs/hour	TPY (4)
		NO _x		151.6
		SO ₂		40.9
		PM ₁₀ /PM _{2.5}		22.6
		PM		140.6
		VCM		65.1
		VOC		151.0
Sitewide Reactors, Refer to Footnote (6) for EPNs		VCM	7.99	
Maintenance, Start-Up, and Shutdown Emissions				
MSSSPHERE	VCM Storage Sphere MSS includes TK2901 A-D, TK3901 A-B and TK4901 A-F	VCM	21.81	0.26
MSSSOLV	Solvent Usage	VOC	1.32	1.37
MSSMISC	Turnarounds, Process Vessels, Fugitive component repair	VCM	12.40	0.22

- (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)
 - PM - total particulate matter, suspended in the atmosphere
 - PM₁₀ - particulate matter equal to or less than 10 microns in diameter
 - PM_{2.5} - particulate matter equal to or less than 2.5 microns in diameter
 - NVOC - non-vinyl chloride volatile organic compounds
 - VCM - vinyl chloride monomer
 - VOC - volatile organic compounds as defined in Title 30 Texas Administrative Code § 101.1
 - CO - carbon monoxide
 - NO_x - total oxides of nitrogen
 - SO₂ - sulfur dioxide
 - HCl - hydrogen chloride
 - Cl₂ - chlorine
- (4) Compliance with annual emission limits (tons per year) is based on a 12 month rolling period.
- (5) Emission rate is an estimate and is enforceable through compliance with the applicable special condition(s) and permit application representations.
- (6) The following EPNs are included: PL251A, PL251B, PL251C, PL251D, PL251E, PL251F, PL2251A, PL2251B, PL2251C, PL2251D, PL2251E, PL2251F, PL3251A, PL3251B, PL3251C, PL3251D, PL3251E, and PL3251F.

Date: August 22, 2013