

FEDERAL OPERATING PERMIT

A FEDERAL OPERATING PERMIT IS HEREBY ISSUED TO
Formosa Plastics Corporation, Texas

AUTHORIZING THE OPERATION OF
Formosa Point Comfort Plant
Polypropylene Plant
Petrochemical Manufacturing

LOCATED AT
Calhoun County, Texas
Latitude 28° 41' 20" Longitude 96° 32' 50"
Regulated Entity Number: RN100218973

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: O1956 Issuance Date: _____

For the Commission

Table of Contents

Section	Page
General Terms and Conditions	1
Special Terms and Conditions:	1
Emission Limitations and Standards, Monitoring and Testing, and Recordkeeping and Reporting.....	1
Additional Monitoring Requirements	6
New Source Review Authorization Requirements	7
Compliance Requirements.....	8
Risk Management Plan	8
Protection of Stratospheric Ozone	9
Alternative Requirements.....	9
Permit Location	9
Permit Shield (30 TAC § 122.148)	9
Attachments	10
Applicable Requirements Summary.....	11
Additional Monitoring Requirements	73
Permit Shield.....	83
New Source Review Authorization References	87
Alternative Requirement.....	92
Appendix A.....	110
Acronym List	111
Appendix B.....	112

General Terms and Conditions

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

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

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

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

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

Special Terms and Conditions:

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

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

- E. Emission units subject to 40 CFR Part 63, Subpart FFFF as identified in the attached Applicable Requirements Summary table are subject to 30 TAC Chapter 113, Subchapter C, § 113.890 which incorporates the 40 CFR Part 63 Subpart by reference.
2. The permit holder shall comply with the following sections of 30 TAC Chapter 101 (General Air Quality Rules):
- A. Title 30 TAC § 101.1 (relating to Definitions), insofar as the terms defined in this section are used to define the terms used in other applicable requirements
 - B. Title 30 TAC § 101.3 (relating to Circumvention)
 - C. Title 30 TAC § 101.8 (relating to Sampling), if such action has been requested by the TCEQ
 - D. Title 30 TAC § 101.9 (relating to Sampling Ports), if such action has been requested by the TCEQ
 - E. Title 30 TAC § 101.10 (relating to Emissions Inventory Requirements)
 - F. Title 30 TAC § 101.201 (relating to Emission Event Reporting and Recordkeeping Requirements)
 - G. Title 30 TAC § 101.211 (relating to Scheduled Maintenance, Start-up, and Shutdown Reporting and Recordkeeping Requirements)
 - H. Title 30 TAC § 101.221 (relating to Operational Requirements)
 - I. Title 30 TAC § 101.222 (relating to Demonstrations)
 - J. Title 30 TAC § 101.223 (relating to Actions to Reduce Excessive Emissions)
3. Permit holder shall comply with the following requirements of 30 TAC Chapter 111:
- A. Visible emissions from stationary vents with a flow rate of less than 100,000 actual cubic feet per minute and constructed after January 31, 1972 that are not listed in the Applicable Requirements Summary attachment for 30 TAC Chapter 111, Subchapter A, Division 1, shall not exceed 20% opacity averaged over a six-minute period. The permit holder shall comply with the following requirements for stationary vents at the site subject to this standard:
 - (i) Title 30 TAC § 111.111(a)(1)(B) (relating to Requirements for Specified Sources)
 - (ii) Title 30 TAC § 111.111(a)(1)(E)
 - (iii) Title 30 TAC § 111.111(a)(1)(F)(i), (ii), (iii), or (iv)
 - (iv) For emission units with vent emissions subject to 30 TAC § 111.111(a)(1)(B), complying with 30 TAC § 111.111(a)(1)(F)(ii), (iii), or (iv), and capable of producing visible emissions from, but not limited to, particulate matter, acid gases and NO_x, the permit holder shall also comply with the following periodic monitoring requirements for the purpose of annual compliance certification under 30 TAC § 122.146. These periodic monitoring requirements do not apply to vents that are not capable of producing visible emissions such as vents that emit only colorless VOCs; vents from non-fuming liquids; vents that provide passive

ventilation, such as plumbing vents; or vent emissions from any other source that does not obstruct the transmission of light. Vents, as specified in the “Applicable Requirements Summary” attachment, that are subject to the emission limitation of 30 TAC § 111.111(a)(1)(B) are not subject to the following periodic monitoring requirements:

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

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

- (c) Some vents may be subject to multiple visible emission or monitoring requirements. All credible data must be considered when certifying compliance with this requirement even if the observation or monitoring was performed to demonstrate compliance with a different requirement.
- B. 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.
- C. For emission units with contributions from uncombined water, the permit holder shall comply with the requirements of 30 TAC § 111.111(b).
- 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(c)(1).
- 5. 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)
6. The permit holder shall comply with the following requirements for units subject to any subpart of 40 CFR Part 61, unless otherwise stated in the applicable subpart:
- A. Title 40 CFR § 61.05 (relating to Prohibited Activities)
 - B. Title 40 CFR § 61.07 (relating to Application for Approval of Construction or Modification)
 - C. Title 40 CFR § 61.09 (relating to Notification of Start-up)
 - D. Title 40 CFR § 61.10 (relating to Source Reporting and Request Waiver)
 - E. Title 40 CFR § 61.12 (relating to Compliance with Standards and Maintenance Requirements)
 - F. Title 40 CFR § 61.13 (relating to Emissions Tests and Waiver of Emission Tests)
 - G. Title 40 CFR § 61.14 (relating to Monitoring Requirements)
 - H. Title 40 CFR § 61.15 (relating to Modification)
 - I. Title 40 CFR § 61.19 (relating to Circumvention)
7. For facilities where total annual benzene quantity from waste is greater than or equal to 10 megagrams per year and subject to emission standards in 40 CFR Part 61, Subpart FF, the permit holder shall comply with the following requirements:
- A. Title 40 CFR § 61.342(c)(1)(i) - (iii) (relating to Standards: General)
 - B. Title 40 CFR § 61.342(c)(2) (relating to Standards: General)
 - C. Title 40 CFR § 61.342(g) (relating to Standards: General)
 - D. Title 40 CFR § 61.350(a) and (b) (relating to Standards: Delay of Repair)
 - E. Title 40 CFR § 61.355(a)(1)(iii), (a)(2), (a)(6), (b), and (c)(1) - (3) (relating to Test Methods, Procedures, and Compliance Provisions)
 - F. Title 40 CFR § 61.356(a) (relating to Recordkeeping Requirements)
 - G. Title 40 CFR § 61.356(b), and (b)(1) (relating to Recordkeeping Requirements)
 - H. Title 40 CFR § 61.356(b)(5) (relating to Recordkeeping Requirements)
 - I. Title 40 CFR § 61.357(a), (d)(1), (d)(2) (d)(6) and (d)(8) (relating to Reporting Requirements)
8. The permit holder shall comply with the requirements of 30 TAC Chapter 113, Subchapter C, § 113.100 for units subject to any subpart of 40 CFR Part 63, unless otherwise stated in the applicable subpart.

9. For miscellaneous chemical process facilities subject to maintenance wastewater requirements as specified in 40 CFR § 63.2485, Table 7, the permit holder shall comply with the requirements of 40 CFR § 63.105 (relating to Maintenance Wastewater Requirements) (Title 30 TAC Chapter 113, Subchapter C, § 113.890 incorporated by reference).
10. For miscellaneous chemical process facilities with Group 2 wastewater streams subject to wastewater operations requirements in 40 CFR Part 63, Subpart FFFF, the permit holder shall comply with the requirements of 40 CFR § 63.132(a), (a)(1), (a)(1)(i), and (a)(3) as specified in § 63.2485(a) (Title 30 TAC Chapter 113, Subchapter C, § 113.890 incorporated by reference).
11. The permit holder shall comply with certified registrations submitted to the TCEQ for purposes of establishing federally enforceable emission limits. A copy of the certified registration shall be maintained with the permit. Records sufficient to demonstrate compliance with the established limits shall be maintained. The certified registration and records demonstrating compliance shall be provided, on request, to representatives of the appropriate TCEQ regional office and any local air pollution control agency having jurisdiction over the site. The permit holder shall submit updated certified registrations when changes at the site require establishment of new emission limits. If changes result in emissions that do not remain below major source thresholds, the permit holder shall submit a revision application to codify the appropriate requirements in the permit.

Additional Monitoring Requirements

12. Unless otherwise specified, the permit holder shall comply with the compliance assurance monitoring requirements as specified in the attached "CAM Summary" upon issuance of the permit. In addition, the permit holder shall comply with the following:
 - A. The permit holder shall comply with the terms and conditions contained in 30 TAC § 122.147 (General Terms and Conditions for Compliance Assurance Monitoring).
 - B. The permit holder shall report, consistent with the averaging time identified in the "CAM Summary," deviations as defined by the deviation limit in the "CAM Summary." Any monitoring data below a minimum limit or above a maximum limit, that is collected in accordance with the requirements specified in 40 CFR § 64.7(c), shall be reported as a deviation. Deviations shall be reported according to 30 TAC § 122.145 (Reporting Terms and Conditions).
 - C. The permit holder may elect to collect monitoring data on a more frequent basis and average the data, consistent with the averaging time or minimum frequency specified in the "CAM Summary," for purposes of determining whether a deviation has occurred. However, the additional data points must be collected on a regular basis. In no event shall data be collected and used in particular instances in order to avoid reporting deviations. All monitoring data shall be collected in accordance with the requirements specified in 40 CFR § 64.7(c).
 - D. The permit holder shall operate the monitoring, identified in the attached "CAM Summary," in accordance with the provisions of 40 CFR § 64.7.
 - E. The permit holder shall comply with either of the following requirements for any capture system associated with the VOC control device subject to CAM. If the results of the following inspections indicate that the capture system is not working properly, the permit holder shall promptly take necessary corrective actions:

- (i) Once a year the permit holder shall inspect the capture system in compliance of CAM for leaks in accordance with 40 CFR Part 60, Appendix A, Test Method 21. Leaks shall be indicated by an instrument reading greater than or equal to 500 ppm above background or as defined by the underlying applicable requirement; or
 - (ii) Once a month, the permit holder shall conduct a visual, audible, and/or olfactory inspection of the capture system in compliance of CAM to detect leaking components.
- F. The permit holder shall comply with the requirements of 40 CFR § 70.6(a)(3)(ii)(A) and 30 TAC § 122.144(1)(A)-(F) for documentation of all required inspections.
13. The permit holder shall comply with the periodic monitoring requirements as specified in the attached "Periodic Monitoring Summary" upon issuance of the permit. Except for, as applicable, monitoring malfunctions, associated repairs, and required quality assurance or control activities (including, as applicable, calibration checks and required zero and span adjustments), the permit holder shall conduct all monitoring in continuous operation (or shall collect data at all required intervals) at all times that the pollutant-specific emissions unit is operating. The permit holder may elect to collect monitoring data on a more frequent basis and average the data, consistent with the averaging time or minimum frequency specified in the "Periodic Monitoring Summary," for purposes of determining whether a deviation has occurred. However, the additional data points must be collected on a regular basis. In no event shall data be collected and used in particular instances to avoid reporting deviations. Deviations shall be reported according to 30 TAC § 122.145 (Reporting Terms and Conditions).

New Source Review Authorization Requirements

14. Permit holder shall comply with the requirements of New Source Review authorizations issued or claimed by the permit holder for the permitted area, including permits, permits by rule (including the terms, conditions, monitoring, recordkeeping, and reporting identified in registered PBRs and permits by rule identified in the PBR Supplemental Tables dated May 14, 2024 in the application for project 36645), standard permits, flexible permits, special permits, permits for existing facilities including Voluntary Emissions Reduction Permits and Electric Generating Facility Permits issued under 30 TAC Chapter 116, Subchapter I, or special exemptions referenced in the New Source Review Authorization References attachment. These requirements:
- A. Are incorporated by reference into this permit as applicable requirements
 - B. Shall be located with this operating permit
 - C. Are not eligible for a permit shield
15. The permit holder shall comply with the general requirements of 30 TAC Chapter 106, Subchapter A or the general requirements, if any, in effect at the time of the claim of any PBR.
16. The permit holder shall maintain records to demonstrate compliance with any emission limitation or standard that is specified in a permit by rule (PBR) or Standard Permit listed in the New Source Review Authorizations attachment. The records shall yield reliable data from the relevant time period that are representative of the emission unit's compliance with the PBR or Standard Permit. These records may include, but are not limited to, production capacity and throughput, hours of operation, safety data sheets (SDS), chemical composition of raw materials, speciation of air contaminant data, engineering calculations, maintenance records, fugitive data, performance tests, capture/control device efficiencies, direct pollutant monitoring (CEMS, COMS, or PEMS), or control device parametric monitoring. These records shall be made readily accessible and

available as required by 30 TAC § 122.144. Any monitoring or recordkeeping data indicating noncompliance with the PBR or Standard Permit shall be considered and reported as a deviation according to 30 TAC § 122.145 (Reporting Terms and Conditions).

Compliance Requirements

17. The permit holder shall certify compliance in accordance with 30 TAC § 122.146. The permit holder shall comply with 30 TAC § 122.146 using at a minimum, but not limited to, the continuous or intermittent compliance method data from monitoring, recordkeeping, reporting, or testing required by the permit and any other credible evidence or information. The certification period may not exceed 12 months and the certification must be submitted within 30 days after the end of the period being certified.
18. 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

19. 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

20. 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.

Alternative Requirements

21. The permit holder shall comply with the approved alternative means of control (AMOC); alternative monitoring, recordkeeping, or reporting requirements; or requirements determined to be equivalent to an otherwise applicable requirement contained in the Alternative Requirements attachment of this permit. Units complying with an approved alternative requirement have reference to the approval in the Applicable Requirements summary listing for the unit. The permit holder shall maintain the original documentation, from the TCEQ Executive Director, demonstrating the method or limitation utilized. Documentation shall be maintained and made available in accordance with 30 TAC § 122.144.

Permit Location

22. 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)

23. 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

Alternative Requirement

Applicable Requirements Summary

Unit Summary 12

Applicable Requirements Summary 21

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
1018	Flares	N/A	R1111-1	30 TAC Chapter 111, Visible Emissions	No changing attributes.
1018	Emission Points/Stationary Vents/Process Vents	N/A	R5121-2	30 TAC Chapter 115, Vent Gas Controls	No changing attributes.
1018	Flares	N/A	63A-1	40 CFR Part 63, Subpart A	No changing attributes.
1018	Chemical Manufacturing Process	N/A	63FFFF-1	40 CFR Part 63, Subpart FFFF	No changing attributes.
1067	Flares	N/A	R1111-1	30 TAC Chapter 111, Visible Emissions	No changing attributes.
1067	Emission Points/Stationary Vents/Process Vents	N/A	R5121-2	30 TAC Chapter 115, Vent Gas Controls	No changing attributes.
1067	Flares	N/A	63A-1	40 CFR Part 63, Subpart A	No changing attributes.
1067	Chemical Manufacturing Process	N/A	63FFFF-1	40 CFR Part 63, Subpart FFFF	No changing attributes.
1F-405	Emission Points/Stationary Vents/Process Vents	N/A	R5121-1	30 TAC Chapter 115, Vent Gas Controls	No changing attributes.
1F-405	Chemical Manufacturing Process	N/A	63FFFF-1	40 CFR Part 63, Subpart FFFF	No changing attributes.
2F-405	Emission Points/Stationary Vents/Process Vents	N/A	R5121-1	30 TAC Chapter 115, Vent Gas Controls	No changing attributes.
2F-405	Chemical Manufacturing Process	N/A	63FFFF-1	40 CFR Part 63, Subpart FFFF	No changing attributes.
3C-352A/B	Chemical Manufacturing Process	N/A	63FFFF-1	40 CFR Part 63, Subpart FFFF	No changing attributes.
3D-101	Chemical Manufacturing Process	N/A	63FFFF-1	40 CFR Part 63, Subpart FFFF	No changing attributes.

Unit Summary

Unit/Group/ Process ID No.	Unit Type	Group/Inclusive Units	SOP Index No.	Regulation	Requirement Driver
3D-102	Chemical Manufacturing Process	N/A	63FFFF-1	40 CFR Part 63, Subpart FFFF	No changing attributes.
3D-103	Chemical Manufacturing Process	N/A	63FFFF-1	40 CFR Part 63, Subpart FFFF	No changing attributes.
3D-109	Chemical Manufacturing Process	N/A	63FFFF-1	40 CFR Part 63, Subpart FFFF	No changing attributes.
B-231	Emission Points/Stationary Vents/Process Vents	N/A	R5121-1	30 TAC Chapter 115, Vent Gas Controls	No changing attributes.
B-242	Emission Points/Stationary Vents/Process Vents	N/A	R5121-1	30 TAC Chapter 115, Vent Gas Controls	No changing attributes.
B-292A	Emission Points/Stationary Vents/Process Vents	N/A	R5121-1	30 TAC Chapter 115, Vent Gas Controls	No changing attributes.
B-292B	Emission Points/Stationary Vents/Process Vents	N/A	R5121-1	30 TAC Chapter 115, Vent Gas Controls	No changing attributes.
B-406	Emission Points/Stationary Vents/Process Vents	N/A	R5121-1	30 TAC Chapter 115, Vent Gas Controls	No changing attributes.
B-620	Volatile Organic Compound Water Separators	N/A	R5131-1	30 TAC Chapter 115, Water Separation	No changing attributes.
B615	Loading/Unloading Operations	N/A	R5211-1	30 TAC Chapter 115, Loading and Unloading of VOC	No changing attributes.
B810	Loading/Unloading Operations	N/A	R5211-1	30 TAC Chapter 115, Loading and Unloading of VOC	No changing attributes.
B820	Loading/Unloading Operations	N/A	R5211-1	30 TAC Chapter 115, Loading and Unloading of VOC	No changing attributes.

Unit Summary

Unit/Group/ Process ID No.	Unit Type	Group/Inclusive Units	SOP Index No.	Regulation	Requirement Driver
C-352A/B	Chemical Manufacturing Process	N/A	63FFFF-1	40 CFR Part 63, Subpart FFFF	No changing attributes.
D-101	Chemical Manufacturing Process	N/A	63FFFF-1	40 CFR Part 63, Subpart FFFF	No changing attributes.
D-102	Chemical Manufacturing Process	N/A	63FFFF-1	40 CFR Part 63, Subpart FFFF	No changing attributes.
D-103	Chemical Manufacturing Process	N/A	63FFFF-1	40 CFR Part 63, Subpart FFFF	No changing attributes.
D-106	Chemical Manufacturing Process	N/A	63FFFF-1	40 CFR Part 63, Subpart FFFF	No changing attributes.
D-107	Volatile Organic Compound Water Separators	N/A	R5131-1	30 TAC Chapter 115, Water Separation	No changing attributes.
D-107	Chemical Manufacturing Process	N/A	63FFFF-1	40 CFR Part 63, Subpart FFFF	No changing attributes.
D-108	Volatile Organic Compound Water Separators	N/A	R5131-1	30 TAC Chapter 115, Water Separation	No changing attributes.
D-108	Chemical Manufacturing Process	N/A	63FFFF-1	40 CFR Part 63, Subpart FFFF	No changing attributes.
D-407	Emission Points/Stationary Vents/Process Vents	N/A	R5121-1	30 TAC Chapter 115, Vent Gas Controls	No changing attributes.
D-910	Chemical Manufacturing Process	N/A	63FFFF-1	40 CFR Part 63, Subpart FFFF	No changing attributes.
F-343	Emission Points/Stationary Vents/Process Vents	N/A	R5121-1	30 TAC Chapter 115, Vent Gas Controls	No changing attributes.
F-346	Emission Points/Stationary Vents/Process Vents	N/A	R5121-1	30 TAC Chapter 115, Vent Gas Controls	No changing attributes.
F-402	Emission Points/Stationary Vents/Process Vents	N/A	R5121-1	30 TAC Chapter 115, Vent Gas Controls	No changing attributes.

Unit Summary

Unit/Group/ Process ID No.	Unit Type	Group/Inclusive Units	SOP Index No.	Regulation	Requirement Driver
F-402	Chemical Manufacturing Process	N/A	63FFFF-1	40 CFR Part 63, Subpart FFFF	No changing attributes.
F-443	Emission Points/Stationsary Vents/Process Vents	N/A	R5121-1	30 TAC Chapter 115, Vent Gas Controls	No changing attributes.
F-446	Emission Points/Stationsary Vents/Process Vents	N/A	R5121-1	30 TAC Chapter 115, Vent Gas Controls	No changing attributes.
F-543	Emission Points/Stationsary Vents/Process Vents	N/A	R5121-1	30 TAC Chapter 115, Vent Gas Controls	No changing attributes.
F-546	Emission Points/Stationsary Vents/Process Vents	N/A	R5121-1	30 TAC Chapter 115, Vent Gas Controls	No changing attributes.
F-743A	Emission Points/Stationsary Vents/Process Vents	N/A	R5121-1	30 TAC Chapter 115, Vent Gas Controls	No changing attributes.
F-746	Emission Points/Stationsary Vents/Process Vents	N/A	R5121-1	30 TAC Chapter 115, Vent Gas Controls	No changing attributes.
F TPP2G111	Loading/Unloading Operations	N/A	R5211-2	30 TAC Chapter 115, Loading and Unloading of VOC	No changing attributes.
PO-CT	Emission Points/Stationsary Vents/Process Vents	N/A	R1111-2	30 TAC Chapter 111, Visible Emissions	No changing attributes.
PP1-300	Emission Points/Stationsary Vents/Process Vents	N/A	R5121-1	30 TAC Chapter 115, Vent Gas Controls	No changing attributes.
PP1-400	Emission Points/Stationsary Vents/Process Vents	N/A	R5121-1	30 TAC Chapter 115, Vent Gas Controls	No changing attributes.
PP1-500	Emission Points/Stationsary Vents/Process Vents	N/A	R5121-1	30 TAC Chapter 115, Vent Gas Controls	No changing attributes.
PP1-700	Emission Points/Stationsary Vents/Process Vents	N/A	R5121-1	30 TAC Chapter 115, Vent Gas Controls	No changing attributes.

Unit Summary

Unit/Group/ Process ID No.	Unit Type	Group/Inclusive Units	SOP Index No.	Regulation	Requirement Driver
PP1-CT	Emission Points/Stationary Vents/Process Vents	N/A	R1111-2	30 TAC Chapter 111, Visible Emissions	No changing attributes.
PP1-FUG	Fugitive Emission Units	N/A	60DDD-1	40 CFR Part 60, Subpart DDD	No changing attributes.
PP1-UNIT	Polymer Manufacturing Processes	N/A	60DDD-2	40 CFR Part 60, Subpart DDD	Uncontrolled Annual Emissions = Uncontrolled annual emissions are 1.6 Mg/yr (1.76 tpy) or greater., Weight Percent TOC = Weight percent of total organic compounds is 0.10% or greater., Control of Continuous Emissions = All continuous emissions are controlled in an existing control device (as defined in 40 CFR § 60.561).
PP1-UNIT	Polymer Manufacturing Processes	N/A	60DDD-3F	40 CFR Part 60, Subpart DDD	Uncontrolled Annual Emissions = Uncontrolled annual emissions are 1.6 Mg/yr (1.76 tpy) or greater., Weight Percent TOC = Weight percent of total organic compounds is less than 0.10%., Control of Continuous Emissions = Some of the continuous emissions are controlled in an existing control device (as defined in 40 CFR § 60.561).

Unit Summary

Unit/Group/ Process ID No.	Unit Type	Group/Inclusive Units	SOP Index No.	Regulation	Requirement Driver
PP1-UNIT	Polymer Manufacturing Processes	N/A	60DDD-3aF	40 CFR Part 60, Subpart DDD	Uncontrolled Annual Emissions = Uncontrolled annual emissions are less than 1.6 Mg/yr (1.76 tpy)., Weight Percent TOC = Weight percent of total organic compounds is less than 0.10%., Control of Continuous Emissions = Some of the continuous emissions are controlled in an existing control device (as defined in 40 CFR § 60.561).
PP1-UNIT	Polymer Manufacturing Processes	N/A	60DDD-3bF	40 CFR Part 60, Subpart DDD	Uncontrolled Annual Emissions = Uncontrolled annual emissions are less than 1.6 Mg/yr (1.76 tpy)., Weight Percent TOC = Weight percent of total organic compounds is 0.10% or greater., Control of Continuous Emissions = Some of the continuous emissions are controlled in an existing control device (as defined in 40 CFR § 60.561).
PP1-UNIT	Chemical Manufacturing Process	N/A	63FFFF-1	40 CFR Part 63, Subpart FFFF	No changing attributes.
PP2-3D407	Emission Points/Stationary Vents/Process Vents	N/A	R5121-1	30 TAC Chapter 115, Vent Gas Controls	No changing attributes.
PP2-3F402	Emission Points/Stationary Vents/Process Vents	N/A	R5121-1	30 TAC Chapter 115, Vent Gas Controls	No changing attributes.
PP2-3F402	Chemical Manufacturing Process	N/A	63FFFF-1	40 CFR Part 63, Subpart FFFF	No changing attributes.
PP2-3F405	Emission Points/Stationary Vents/Process Vents	N/A	R5121-1	30 TAC Chapter 115, Vent Gas Controls	No changing attributes.

Unit Summary

Unit/Group/ Process ID No.	Unit Type	Group/Inclusive Units	SOP Index No.	Regulation	Requirement Driver
PP2-3F405	Chemical Manufacturing Process	N/A	63FFFF-1	40 CFR Part 63, Subpart FFFF	No changing attributes.
PP2-CT	Emission Points/Stationary Vents/Process Vents	N/A	R1111-2	30 TAC Chapter 111, Visible Emissions	No changing attributes.
PP2-CT3	Emission Points/Stationary Vents/Process Vents	N/A	R1111-2	30 TAC Chapter 111, Visible Emissions	No changing attributes.
PP2-FUG	Fugitive Emission Units	N/A	60DDD-1	40 CFR Part 60, Subpart DDD	No changing attributes.
PP2-FUG	Chemical Manufacturing Process	N/A	63FFFF-1	40 CFR Part 63, Subpart FFFF	No changing attributes.
PP2-T1	Emission Points/Stationary Vents/Process Vents	N/A	R5121-1	30 TAC Chapter 115, Vent Gas Controls	No changing attributes.
PP2-T2	Emission Points/Stationary Vents/Process Vents	N/A	R5121-1	30 TAC Chapter 115, Vent Gas Controls	No changing attributes.
PP2-T3	Emission Points/Stationary Vents/Process Vents	N/A	R5121-1	30 TAC Chapter 115, Vent Gas Controls	No changing attributes.
PP2-UNIT	Polymer Manufacturing Processes	N/A	60DDD-2	40 CFR Part 60, Subpart DDD	Uncontrolled Annual Emissions = Uncontrolled annual emissions are 1.6 Mg/yr (1.76 tpy) or greater., Weight Percent TOC = Weight percent of total organic compounds is less than 0.10%., Control of Continuous Emissions = All continuous emissions are controlled in an existing control device (as defined in 40 CFR § 60.561).

Unit Summary

Unit/Group/ Process ID No.	Unit Type	Group/Inclusive Units	SOP Index No.	Regulation	Requirement Driver
PP2-UNIT	Polymer Manufacturing Processes	N/A	60DDD-3	40 CFR Part 60, Subpart DDD	Uncontrolled Annual Emissions = Uncontrolled annual emissions are 1.6 Mg/yr (1.76 tpy) or greater., Weight Percent TOC = Weight percent of total organic compounds is less than 0.10%., Control of Continuous Emissions = Some of the continuous emissions are controlled in an existing control device (as defined in 40 CFR § 60.561).
PP2-UNIT	Polymer Manufacturing Processes	N/A	60DDD-3a	40 CFR Part 60, Subpart DDD	Uncontrolled Annual Emissions = Uncontrolled annual emissions are less than 1.6 Mg/yr (1.76 tpy)., Weight Percent TOC = Weight percent of total organic compounds is 0.10% or greater., Control of Continuous Emissions = Some of the continuous emissions are controlled in an existing control device (as defined in 40 CFR § 60.561).
PP2-UNIT	Polymer Manufacturing Processes	N/A	60DDD-3b	40 CFR Part 60, Subpart DDD	Uncontrolled Annual Emissions = Uncontrolled annual emissions are less than 1.6 Mg/yr (1.76 tpy)., Weight Percent TOC = Weight percent of total organic compounds is less than 0.10%., Control of Continuous Emissions = Some of the continuous emissions are controlled in an existing control device (as defined in 40 CFR § 60.561).

Unit Summary

Unit/Group/ Process ID No.	Unit Type	Group/Inclusive Units	SOP Index No.	Regulation	Requirement Driver
PRU UNIT	Chemical Manufacturing Process	N/A	63FFF-1	40 CFR Part 63, Subpart FFFF	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)
1018	EU	R1111-1	Opacity	30 TAC Chapter 111, Visible Emissions	§ 111.111(a)(4)(A)	Visible emissions from a process gas flare shall not be permitted for more than five minutes in any two-hour period. Non-excessive upset events are subject to the provisions under §101.222(b).	§ 111.111(a)(4)(A)(i) § 111.111(a)(4)(A)(ii)	§ 111.111(a)(4)(A)(ii)	None
1018	EP	R5121-2	VOC	30 TAC Chapter 115, Vent Gas Controls	§ 115.122(c)(1) § 115.121(c)(1) § 115.122(c)(1)(B) § 60.18	For all persons in Aransas, Bexar, Calhoun, Matagorda, San Patricio, and Travis Counties, any vent gas streams affected by §115.121(c)(1) must be controlled properly using one of the control requirements specified in §115.122(c)(1)(A)-(C).	[G]§ 115.125 § 115.126(2) ** See CAM Summary	§ 115.126 § 115.126(2)	None
1018	CD	63A-1	Opacity	40 CFR Part 63, Subpart A	§ 63.11(b)(4) § 63.11(b)(1) § 63.11(b)(2) § 63.11(b)(3) § 63.11(b)(5) § 63.11(b)(6)(ii) § 63.11(b)(7)(i)	Flares shall be designed and operated with no visible emissions, except for periods of a total of 5 minutes or less during any 2 consecutive hrs. Test Method 22 in App. A of part 60 of this chapter shall be used.	§ 63.11(b)(4) § 63.11(b)(5) § 63.11(b)(7)(i)	None	None

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)
1018	EU	63FFFF-1	112(B) HAPS	40 CFR Part 63, Subpart FFFF	§ 63.2440(a) § 63.2450(a) § 63.2450(l)	This subpart applies to each miscellaneous organic chemical manufacturing affected source.	§ 63.2445(d)	§ 63.2525 § 63.2525(a) [G]§ 63.2525(b) § 63.2525(c) § 63.2525(f) § 63.2525(j)	§ 63.2435(d) § 63.2445(c) § 63.2450(g)(5) § 63.2450(m) § 63.2450(m)(1) § 63.2450(m)(2) § 63.2515(a) § 63.2515(b)(1) § 63.2515(c) § 63.2520(a) [G]§ 63.2520(b) [G]§ 63.2520(c) [G]§ 63.2520(d) § 63.2520(e) § 63.2520(e)(1) [G]§ 63.2520(e)(10) § 63.2520(e)(2) § 63.2520(e)(3) § 63.2520(e)(4) § 63.2520(e)(5) § 63.2520(e)(5)(i) [G]§ 63.2520(e)(5)(ii) [G]§ 63.2520(e)(5)(iii) § 63.2520(e)(6) § 63.2520(e)(7) § 63.2520(e)(9)
1067	CD	R1111-1	Opacity	30 TAC Chapter 111, Visible Emissions	§ 111.111(a)(4)(A)	Visible emissions from a process gas flare shall not be permitted for more than five minutes in any two-hour period. Non-excessive upset events are subject to the provisions under §101.222(b).	§ 111.111(a)(4)(A)(i) § 111.111(a)(4)(A)(ii)	§ 111.111(a)(4)(A)(ii)	None

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
1067	EP	R5121-2	VOC	30 TAC Chapter 115, Vent Gas Controls	§ 115.122(c)(1) § 115.121(c)(1) § 115.122(c)(1)(B) § 60.18	For all persons in Aransas, Bexar, Calhoun, Matagorda, San Patricio, and Travis Counties, any vent gas streams affected by §115.121(c)(1) must be controlled properly using one of the control requirements specified in §115.122(c)(1)(A)-(C).	[G]§ 115.125 § 115.126(2) ** See CAM Summary	§ 115.126 § 115.126(2)	None
1067	CD	63A-1	Opacity	40 CFR Part 63, Subpart A	§ 63.11(b)(4) § 63.11(b)(1) § 63.11(b)(2) § 63.11(b)(3) § 63.11(b)(5) § 63.11(b)(6)(ii) § 63.11(b)(7)(i)	Flares shall be designed and operated with no visible emissions, except for periods of a total of 5 minutes or less during any 2 consecutive hrs. Test Method 22 in App. A of part 60 of this chapter shall be used.	§ 63.11(b)(4) § 63.11(b)(5) § 63.11(b)(7)(i)	None	None

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)
1067	EU	63FFFF-1	112(B) HAPS	40 CFR Part 63, Subpart FFFF	§ 63.2440(a) § 63.2450(a) § 63.2450(l)	This subpart applies to each miscellaneous organic chemical manufacturing affected source.	§ 63.2445(d)	§ 63.2525 § 63.2525(a) [G]§ 63.2525(b) § 63.2525(c) § 63.2525(f) § 63.2525(j)	§ 63.2435(d) § 63.2445(c) § 63.2450(g)(5) § 63.2450(m) § 63.2450(m)(1) § 63.2450(m)(2) § 63.2515(a) § 63.2515(b)(1) § 63.2515(c) § 63.2520(a) [G]§ 63.2520(b) [G]§ 63.2520(c) [G]§ 63.2520(d) § 63.2520(e) § 63.2520(e)(1) [G]§ 63.2520(e)(10) § 63.2520(e)(2) § 63.2520(e)(3) § 63.2520(e)(4) § 63.2520(e)(5) § 63.2520(e)(5)(i) [G]§ 63.2520(e)(5)(ii) [G]§ 63.2520(e)(5)(iii) § 63.2520(e)(6) § 63.2520(e)(7) § 63.2520(e)(9)
1F-405	EP	R5121-1	VOC	30 TAC Chapter 115, Vent Gas Controls	§ 115.127(c)(1)(B) § 115.127(c)(1)	A vent gas stream having a combined weight of the VOC or classes of compounds specified in §115.121(c)(1)(B)-(C) of this title equal to or less than 100 lbs in a continuous 24-hour period is exempt from the requirements of §115.121(c)(1) of this title.	[G]§ 115.125 § 115.126(2) § 115.126(3)(B)	§ 115.126 § 115.126(2) § 115.126(3) § 115.126(3)(B)	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)
1F-405	EP	R5121-1	VOC	30 TAC Chapter 115, Vent Gas Controls	§ 115.127(c)(1)(C) § 115.127(c)(1)	A vent gas stream having a concentration of the VOC specified in § 115.121(c)(1)(B) and (C) less than 30,000 ppmv is exempt from § 115.121(c)(1).	[G]§ 115.125 § 115.126(2) § 115.126(3)(C)	§ 115.126 § 115.126(2) § 115.126(3) § 115.126(3)(C)	None
1F-405	EU	63FFFF-1	112(B) HAPS	40 CFR Part 63, Subpart FFFF	§ 63.2440(a) § 63.2450(a) § 63.2450(l)	This subpart applies to each miscellaneous organic chemical manufacturing affected source.	§ 63.2445(d)	§ 63.2525 § 63.2525(a) [G]§ 63.2525(b) § 63.2525(c) § 63.2525(f) § 63.2525(j)	§ 63.2435(d) § 63.2445(c) § 63.2450(g)(5) § 63.2450(m) § 63.2450(m)(1) § 63.2450(m)(2) § 63.2515(a) § 63.2515(b)(1) § 63.2515(c) § 63.2520(a) [G]§ 63.2520(b) [G]§ 63.2520(c) [G]§ 63.2520(d) § 63.2520(e) § 63.2520(e)(1) [G]§ 63.2520(e)(10) § 63.2520(e)(2) § 63.2520(e)(3) § 63.2520(e)(4) § 63.2520(e)(5) § 63.2520(e)(5)(i) [G]§ 63.2520(e)(5)(ii) [G]§ 63.2520(e)(5)(iii) § 63.2520(e)(6) § 63.2520(e)(7) § 63.2520(e)(9)

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
2F-405	EP	R5121-1	VOC	30 TAC Chapter 115, Vent Gas Controls	§ 115.127(c)(1)(B) § 115.127(c)(1)	A vent gas stream having a combined weight of the VOC or classes of compounds specified in §115.121(c)(1)(B)-(C) of this title equal to or less than 100 lbs in a continuous 24-hour period is exempt from the requirements of §115.121(c)(1) of this title.	[G]§ 115.125 § 115.126(2) § 115.126(3)(B)	§ 115.126 § 115.126(2) § 115.126(3) § 115.126(3)(B)	None
2F-405	EP	R5121-1	VOC	30 TAC Chapter 115, Vent Gas Controls	§ 115.127(c)(1)(C) § 115.127(c)(1)	A vent gas stream having a concentration of the VOC specified in § 115.121(c)(1)(B) and (C) less than 30,000 ppmv is exempt from § 115.121(c)(1).	[G]§ 115.125 § 115.126(2) § 115.126(3)(C)	§ 115.126 § 115.126(2) § 115.126(3) § 115.126(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)
2F-405	EU	63FFFF-1	112(B) HAPS	40 CFR Part 63, Subpart FFFF	§ 63.2440(a) § 63.2450(a) § 63.2450(l)	This subpart applies to each miscellaneous organic chemical manufacturing affected source.	§ 63.2445(d)	§ 63.2525 § 63.2525(a) [G]§ 63.2525(b) § 63.2525(c) § 63.2525(f) § 63.2525(j)	§ 63.2435(d) § 63.2445(c) § 63.2450(g)(5) § 63.2450(m) § 63.2450(m)(1) § 63.2450(m)(2) § 63.2515(a) § 63.2515(b)(1) § 63.2515(c) § 63.2520(a) [G]§ 63.2520(b) [G]§ 63.2520(c) [G]§ 63.2520(d) § 63.2520(e) § 63.2520(e)(1) [G]§ 63.2520(e)(10) § 63.2520(e)(2) § 63.2520(e)(3) § 63.2520(e)(4) § 63.2520(e)(5) § 63.2520(e)(5)(i) [G]§ 63.2520(e)(5)(ii) [G]§ 63.2520(e)(5)(iii) § 63.2520(e)(6) § 63.2520(e)(7) § 63.2520(e)(9)

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
3C-352A/B	PRO	63FFFF-1	112(B) HAPS	40 CFR Part 63, Subpart FFFF	§ 63.2440(a) § 63.2450(a) § 63.2450(l)	This subpart applies to each miscellaneous organic chemical manufacturing affected source.	§ 63.2445(d)	§ 63.2525 § 63.2525(a) [G]§ 63.2525(b) § 63.2525(c) § 63.2525(f) § 63.2525(j)	§ 63.2435(d) § 63.2445(c) § 63.2450(g)(5) § 63.2450(m) § 63.2450(m)(1) § 63.2450(m)(2) § 63.2515(a) § 63.2515(b)(1) § 63.2515(c) § 63.2520(a) [G]§ 63.2520(b) [G]§ 63.2520(c) [G]§ 63.2520(d) § 63.2520(e) § 63.2520(e)(1) [G]§ 63.2520(e)(10) § 63.2520(e)(2) § 63.2520(e)(3) § 63.2520(e)(4) § 63.2520(e)(5) § 63.2520(e)(5)(i) [G]§ 63.2520(e)(5)(ii) [G]§ 63.2520(e)(5)(iii) § 63.2520(e)(6) § 63.2520(e)(7) § 63.2520(e)(9)

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
3D-101	PRO	63FFFF-1	112(B) HAPS	40 CFR Part 63, Subpart FFFF	§ 63.2440(a) § 63.2450(a) § 63.2450(l)	This subpart applies to each miscellaneous organic chemical manufacturing affected source.	§ 63.2445(d)	§ 63.2525 § 63.2525(a) [G]§ 63.2525(b) § 63.2525(c) § 63.2525(f) § 63.2525(j)	§ 63.2435(d) § 63.2445(c) § 63.2450(g)(5) § 63.2450(m) § 63.2450(m)(1) § 63.2450(m)(2) § 63.2515(a) § 63.2515(b)(1) § 63.2515(c) § 63.2520(a) [G]§ 63.2520(b) [G]§ 63.2520(c) [G]§ 63.2520(d) § 63.2520(e) § 63.2520(e)(1) [G]§ 63.2520(e)(10) § 63.2520(e)(2) § 63.2520(e)(3) § 63.2520(e)(4) § 63.2520(e)(5) § 63.2520(e)(5)(i) [G]§ 63.2520(e)(5)(ii) [G]§ 63.2520(e)(5)(iii) § 63.2520(e)(6) § 63.2520(e)(7) § 63.2520(e)(9)

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
3D-102	PRO	63FFFF-1	112(B) HAPS	40 CFR Part 63, Subpart FFFF	§ 63.2440(a) § 63.2450(a) § 63.2450(l)	This subpart applies to each miscellaneous organic chemical manufacturing affected source.	§ 63.2445(d)	§ 63.2525 § 63.2525(a) [G]§ 63.2525(b) § 63.2525(c) § 63.2525(f) § 63.2525(j)	§ 63.2435(d) § 63.2445(c) § 63.2450(g)(5) § 63.2450(m) § 63.2450(m)(1) § 63.2450(m)(2) § 63.2515(a) § 63.2515(b)(1) § 63.2515(c) § 63.2520(a) [G]§ 63.2520(b) [G]§ 63.2520(c) [G]§ 63.2520(d) § 63.2520(e) § 63.2520(e)(1) [G]§ 63.2520(e)(10) § 63.2520(e)(2) § 63.2520(e)(3) § 63.2520(e)(4) § 63.2520(e)(5) § 63.2520(e)(5)(i) [G]§ 63.2520(e)(5)(ii) [G]§ 63.2520(e)(5)(iii) § 63.2520(e)(6) § 63.2520(e)(7) § 63.2520(e)(9)

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
3D-103	PRO	63FFFF-1	112(B) HAPS	40 CFR Part 63, Subpart FFFF	§ 63.2440(a) § 63.2450(a) § 63.2450(l)	This subpart applies to each miscellaneous organic chemical manufacturing affected source.	§ 63.2445(d)	§ 63.2525 § 63.2525(a) [G]§ 63.2525(b) § 63.2525(c) § 63.2525(f) § 63.2525(j)	§ 63.2435(d) § 63.2445(c) § 63.2450(g)(5) § 63.2450(m) § 63.2450(m)(1) § 63.2450(m)(2) § 63.2515(a) § 63.2515(b)(1) § 63.2515(c) § 63.2520(a) [G]§ 63.2520(b) [G]§ 63.2520(c) [G]§ 63.2520(d) § 63.2520(e) § 63.2520(e)(1) [G]§ 63.2520(e)(10) § 63.2520(e)(2) § 63.2520(e)(3) § 63.2520(e)(4) § 63.2520(e)(5) § 63.2520(e)(5)(i) [G]§ 63.2520(e)(5)(ii) [G]§ 63.2520(e)(5)(iii) § 63.2520(e)(6) § 63.2520(e)(7) § 63.2520(e)(9)

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
3D-109	PRO	63FFFF-1	112(B) HAPS	40 CFR Part 63, Subpart FFFF	§ 63.2440(a) § 63.2450(a) § 63.2450(l)	This subpart applies to each miscellaneous organic chemical manufacturing affected source.	§ 63.2445(d)	§ 63.2525 § 63.2525(a) [G]§ 63.2525(b) § 63.2525(c) § 63.2525(f) § 63.2525(j)	§ 63.2435(d) § 63.2445(c) § 63.2450(g)(5) § 63.2450(m) § 63.2450(m)(1) § 63.2450(m)(2) § 63.2515(a) § 63.2515(b)(1) § 63.2515(c) § 63.2520(a) [G]§ 63.2520(b) [G]§ 63.2520(c) [G]§ 63.2520(d) § 63.2520(e) § 63.2520(e)(1) [G]§ 63.2520(e)(10) § 63.2520(e)(2) § 63.2520(e)(3) § 63.2520(e)(4) § 63.2520(e)(5) § 63.2520(e)(5)(i) [G]§ 63.2520(e)(5)(ii) [G]§ 63.2520(e)(5)(iii) § 63.2520(e)(6) § 63.2520(e)(7) § 63.2520(e)(9)
B-231	EP	R5121-1	VOC	30 TAC Chapter 115, Vent Gas Controls	§ 115.127(c)(1)(C) § 115.127(c)(1)	A vent gas stream having a concentration of the VOC specified in § 115.121(c)(1)(B) and (C) less than 30,000 ppmv is exempt from § 115.121(c)(1).	[G]§ 115.125 § 115.126(2) § 115.126(3)(C)	§ 115.126 § 115.126(2) § 115.126(3) § 115.126(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)
B-231	EP	R5121-1	VOC	30 TAC Chapter 115, Vent Gas Controls	§ 115.127(c)(1)(B) § 115.127(c)(1)	A vent gas stream having a combined weight of the VOC or classes of compounds specified in §115.121(c)(1)(B)-(C) of this title equal to or less than 100 lbs in a continuous 24-hour period is exempt from the requirements of §115.121(c)(1) of this title.	[G]§ 115.125 § 115.126(2) § 115.126(3)(B)	§ 115.126 § 115.126(2) § 115.126(3) § 115.126(3)(B)	None
B-242	EP	R5121-1	VOC	30 TAC Chapter 115, Vent Gas Controls	§ 115.127(c)(1)(C) § 115.127(c)(1)	A vent gas stream having a concentration of the VOC specified in § 115.121(c)(1)(B) and (C) less than 30,000 ppmv is exempt from § 115.121(c)(1).	[G]§ 115.125 § 115.126(2) § 115.126(3)(C)	§ 115.126 § 115.126(2) § 115.126(3) § 115.126(3)(C)	None
B-242	EP	R5121-1	VOC	30 TAC Chapter 115, Vent Gas Controls	§ 115.127(c)(1)(B) § 115.127(c)(1)	A vent gas stream having a combined weight of the VOC or classes of compounds specified in §115.121(c)(1)(B)-(C) of this title equal to or less than 100 lbs in a continuous 24-hour period is exempt from the requirements of §115.121(c)(1) of this title.	[G]§ 115.125 § 115.126(2) § 115.126(3)(B)	§ 115.126 § 115.126(2) § 115.126(3) § 115.126(3)(B)	None
B-292A	EP	R5121-1	VOC	30 TAC Chapter 115, Vent Gas Controls	§ 115.127(c)(1)(B) § 115.127(c)(1)	A vent gas stream having a combined weight of the VOC or classes of compounds specified in §115.121(c)(1)(B)-(C) of this title equal to or less than 100 lbs in a continuous 24-hour period is exempt from the requirements of §115.121(c)(1) of this title.	[G]§ 115.125 § 115.126(2) § 115.126(3)(B)	§ 115.126 § 115.126(2) § 115.126(3) § 115.126(3)(B)	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)
B-292A	EP	R5121-1	VOC	30 TAC Chapter 115, Vent Gas Controls	§ 115.127(c)(1)(C) § 115.127(c)(1)	A vent gas stream having a concentration of the VOC specified in § 115.121(c)(1)(B) and (C) less than 30,000 ppmv is exempt from § 115.121(c)(1).	[G]§ 115.125 § 115.126(2) § 115.126(3)(C)	§ 115.126 § 115.126(2) § 115.126(3) § 115.126(3)(C)	None
B-292B	EP	R5121-1	VOC	30 TAC Chapter 115, Vent Gas Controls	§ 115.127(c)(1)(B) § 115.127(c)(1)	A vent gas stream having a combined weight of the VOC or classes of compounds specified in §115.121(c)(1)(B)-(C) of this title equal to or less than 100 lbs in a continuous 24-hour period is exempt from the requirements of §115.121(c)(1) of this title.	[G]§ 115.125 § 115.126(2) § 115.126(3)(B)	§ 115.126 § 115.126(2) § 115.126(3) § 115.126(3)(B)	None
B-292B	EP	R5121-1	VOC	30 TAC Chapter 115, Vent Gas Controls	§ 115.127(c)(1)(C) § 115.127(c)(1)	A vent gas stream having a concentration of the VOC specified in § 115.121(c)(1)(B) and (C) less than 30,000 ppmv is exempt from § 115.121(c)(1).	[G]§ 115.125 § 115.126(2) § 115.126(3)(C)	§ 115.126 § 115.126(2) § 115.126(3) § 115.126(3)(C)	None
B-406	EP	R5121-1	VOC	30 TAC Chapter 115, Vent Gas Controls	§ 115.127(c)(1)(C) § 115.127(c)(1)	A vent gas stream having a concentration of the VOC specified in § 115.121(c)(1)(B) and (C) less than 30,000 ppmv is exempt from § 115.121(c)(1).	[G]§ 115.125 § 115.126(2) § 115.126(3)(C)	§ 115.126 § 115.126(2) § 115.126(3) § 115.126(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)
B-406	EP	R5121-1	VOC	30 TAC Chapter 115, Vent Gas Controls	§ 115.127(c)(1)(B) § 115.127(c)(1)	A vent gas stream having a combined weight of the VOC or classes of compounds specified in §115.121(c)(1)(B)-(C) of this title equal to or less than 100 lbs in a continuous 24-hour period is exempt from the requirements of §115.121(c)(1) of this title.	[G]§ 115.125 § 115.126(2) § 115.126(3)(B)	§ 115.126 § 115.126(2) § 115.126(3) § 115.126(3)(B)	None
B-620	EU	R5131-1	VOC	30 TAC Chapter 115, Water Separation	§ 115.132(c)(3) § 115.131(c)	VOC water separator compartments must be equipped with a vapor recovery system which satisfies the provisions of §115.131(c) of this title.	** See Periodic Monitoring Summary	None	None
B615	EU	R5211-1	VOC	30 TAC Chapter 115, Loading and Unloading of VOC	§ 115.217(b)(2) § 115.212(b)(2) § 115.214(b)(1)(B) § 115.214(b)(1)(D) § 115.214(b)(1)(D)(i)	All land-based loading and unloading of VOC with a true vapor pressure less than 1.5 psia under actual storage conditions is exempt from the requirements of the division (relating to Loading and Unloading of VOCs), except as specified.	§ 115.214(b)(1)(A) § 115.214(b)(1)(A)(i) § 115.215 § 115.215(4)	§ 115.216 § 115.216(2) § 115.216(3)(B)	None
B810	EU	R5211-1	VOC	30 TAC Chapter 115, Loading and Unloading of VOC	§ 115.217(b)(2) § 115.212(b)(2) § 115.214(b)(1)(B) § 115.214(b)(1)(D) § 115.214(b)(1)(D)(i)	All land-based loading and unloading of VOC with a true vapor pressure less than 1.5 psia under actual storage conditions is exempt from the requirements of the division (relating to Loading and Unloading of VOCs), except as specified.	§ 115.214(b)(1)(A) § 115.214(b)(1)(A)(i) § 115.215 § 115.215(4)	§ 115.216 § 115.216(2) § 115.216(3)(B)	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)
B820	EU	R5211-1	VOC	30 TAC Chapter 115, Loading and Unloading of VOC	§ 115.217(b)(2) § 115.212(b)(2) § 115.214(b)(1)(B) § 115.214(b)(1)(D) § 115.214(b)(1)(D)(i)	All land-based loading and unloading of VOC with a true vapor pressure less than 1.5 psia under actual storage conditions is exempt from the requirements of the division (relating to Loading and Unloading of VOCs), except as specified.	§ 115.214(b)(1)(A) § 115.214(b)(1)(A)(i) § 115.215 § 115.215(4)	§ 115.216 § 115.216(2) § 115.216(3)(B)	None
C-352A/B	EU	63FFFF-1	112(B) HAPS	40 CFR Part 63, Subpart FFFF	§ 63.2440(a) § 63.2450(a) § 63.2450(l)	This subpart applies to each miscellaneous organic chemical manufacturing affected source.	§ 63.2445(d)	§ 63.2525 § 63.2525(a) [G]§ 63.2525(b) § 63.2525(c) § 63.2525(f) § 63.2525(j)	§ 63.2435(d) § 63.2445(c) § 63.2450(g)(5) § 63.2450(m) § 63.2450(m)(1) § 63.2450(m)(2) § 63.2515(a) § 63.2515(b)(1) § 63.2515(c) § 63.2520(a) [G]§ 63.2520(b) [G]§ 63.2520(c) [G]§ 63.2520(d) § 63.2520(e) § 63.2520(e)(1) [G]§ 63.2520(e)(10) § 63.2520(e)(2) § 63.2520(e)(3) § 63.2520(e)(4) § 63.2520(e)(5) § 63.2520(e)(5)(i) [G]§ 63.2520(e)(5)(ii) [G]§ 63.2520(e)(5)(iii) § 63.2520(e)(6) § 63.2520(e)(7) § 63.2520(e)(9)

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
D-101	EU	63FFFF-1	112(B) HAPS	40 CFR Part 63, Subpart FFFF	§ 63.2440(a) § 63.2450(a) § 63.2450(l)	This subpart applies to each miscellaneous organic chemical manufacturing affected source.	§ 63.2445(d)	§ 63.2525 § 63.2525(a) [G]§ 63.2525(b) § 63.2525(c) § 63.2525(f) § 63.2525(j)	§ 63.2435(d) § 63.2445(c) § 63.2450(g)(5) § 63.2450(m) § 63.2450(m)(1) § 63.2450(m)(2) § 63.2515(a) § 63.2515(b)(1) § 63.2515(c) § 63.2520(a) [G]§ 63.2520(b) [G]§ 63.2520(c) [G]§ 63.2520(d) § 63.2520(e) § 63.2520(e)(1) [G]§ 63.2520(e)(10) § 63.2520(e)(2) § 63.2520(e)(3) § 63.2520(e)(4) § 63.2520(e)(5) § 63.2520(e)(5)(i) [G]§ 63.2520(e)(5)(ii) [G]§ 63.2520(e)(5)(iii) § 63.2520(e)(6) § 63.2520(e)(7) § 63.2520(e)(9)

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
D-102	EU	63FFFF-1	112(B) HAPS	40 CFR Part 63, Subpart FFFF	§ 63.2440(a) § 63.2450(a) § 63.2450(l)	This subpart applies to each miscellaneous organic chemical manufacturing affected source.	§ 63.2445(d)	§ 63.2525 § 63.2525(a) [G]§ 63.2525(b) § 63.2525(c) § 63.2525(f) § 63.2525(j)	§ 63.2435(d) § 63.2445(c) § 63.2450(g)(5) § 63.2450(m) § 63.2450(m)(1) § 63.2450(m)(2) § 63.2515(a) § 63.2515(b)(1) § 63.2515(c) § 63.2520(a) [G]§ 63.2520(b) [G]§ 63.2520(c) [G]§ 63.2520(d) § 63.2520(e) § 63.2520(e)(1) [G]§ 63.2520(e)(10) § 63.2520(e)(2) § 63.2520(e)(3) § 63.2520(e)(4) § 63.2520(e)(5) § 63.2520(e)(5)(i) [G]§ 63.2520(e)(5)(ii) [G]§ 63.2520(e)(5)(iii) § 63.2520(e)(6) § 63.2520(e)(7) § 63.2520(e)(9)

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
D-103	EU	63FFFF-1	112(B) HAPS	40 CFR Part 63, Subpart FFFF	§ 63.2440(a) § 63.2450(a) § 63.2450(l)	This subpart applies to each miscellaneous organic chemical manufacturing affected source.	§ 63.2445(d)	§ 63.2525 § 63.2525(a) [G]§ 63.2525(b) § 63.2525(c) § 63.2525(f) § 63.2525(j)	§ 63.2435(d) § 63.2445(c) § 63.2450(g)(5) § 63.2450(m) § 63.2450(m)(1) § 63.2450(m)(2) § 63.2515(a) § 63.2515(b)(1) § 63.2515(c) § 63.2520(a) [G]§ 63.2520(b) [G]§ 63.2520(c) [G]§ 63.2520(d) § 63.2520(e) § 63.2520(e)(1) [G]§ 63.2520(e)(10) § 63.2520(e)(2) § 63.2520(e)(3) § 63.2520(e)(4) § 63.2520(e)(5) § 63.2520(e)(5)(i) [G]§ 63.2520(e)(5)(ii) [G]§ 63.2520(e)(5)(iii) § 63.2520(e)(6) § 63.2520(e)(7) § 63.2520(e)(9)

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
D-106	EU	63FFFF-1	112(B) HAPS	40 CFR Part 63, Subpart FFFF	§ 63.2440(a) § 63.2450(a) § 63.2450(l)	This subpart applies to each miscellaneous organic chemical manufacturing affected source.	§ 63.2445(d)	§ 63.2525 § 63.2525(a) [G]§ 63.2525(b) § 63.2525(c) § 63.2525(f) § 63.2525(j)	§ 63.2435(d) § 63.2445(c) § 63.2450(g)(5) § 63.2450(m) § 63.2450(m)(1) § 63.2450(m)(2) § 63.2515(a) § 63.2515(b)(1) § 63.2515(c) § 63.2520(a) [G]§ 63.2520(b) [G]§ 63.2520(c) [G]§ 63.2520(d) § 63.2520(e) § 63.2520(e)(1) [G]§ 63.2520(e)(10) § 63.2520(e)(2) § 63.2520(e)(3) § 63.2520(e)(4) § 63.2520(e)(5) § 63.2520(e)(5)(i) [G]§ 63.2520(e)(5)(ii) [G]§ 63.2520(e)(5)(iii) § 63.2520(e)(6) § 63.2520(e)(7) § 63.2520(e)(9)
D-107	EU	R5131-1	VOC	30 TAC Chapter 115, Water Separation	§ 115.132(c)(3) § 115.131(c)	VOC water separator compartments must be equipped with a vapor recovery system which satisfies the provisions of §115.131(c) of this title.	** See Periodic Monitoring Summary	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)
D-107	EU	63FFFF-1	112(B) HAPS	40 CFR Part 63, Subpart FFFF	§ 63.2440(a) § 63.2450(a) § 63.2450(l)	This subpart applies to each miscellaneous organic chemical manufacturing affected source.	§ 63.2445(d)	§ 63.2525 § 63.2525(a) [G]§ 63.2525(b) § 63.2525(c) § 63.2525(f) § 63.2525(j)	§ 63.2435(d) § 63.2445(c) § 63.2450(g)(5) § 63.2450(m) § 63.2450(m)(1) § 63.2450(m)(2) § 63.2515(a) § 63.2515(b)(1) § 63.2515(c) § 63.2520(a) [G]§ 63.2520(b) [G]§ 63.2520(c) [G]§ 63.2520(d) § 63.2520(e) § 63.2520(e)(1) [G]§ 63.2520(e)(10) § 63.2520(e)(2) § 63.2520(e)(3) § 63.2520(e)(4) § 63.2520(e)(5) § 63.2520(e)(5)(i) [G]§ 63.2520(e)(5)(ii) [G]§ 63.2520(e)(5)(iii) § 63.2520(e)(6) § 63.2520(e)(7) § 63.2520(e)(9)
D-108	EU	R5131-1	VOC	30 TAC Chapter 115, Water Separation	§ 115.132(c)(3) § 115.131(c)	VOC water separator compartments must be equipped with a vapor recovery system which satisfies the provisions of §115.131(c) of this title.	** See Periodic Monitoring Summary	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)
D-108	EU	63FFFF-1	112(B) HAPS	40 CFR Part 63, Subpart FFFF	§ 63.2440(a) § 63.2450(a) § 63.2450(l)	This subpart applies to each miscellaneous organic chemical manufacturing affected source.	§ 63.2445(d)	§ 63.2525 § 63.2525(a) [G]§ 63.2525(b) § 63.2525(c) § 63.2525(f) § 63.2525(j)	§ 63.2435(d) § 63.2445(c) § 63.2450(g)(5) § 63.2450(m) § 63.2450(m)(1) § 63.2450(m)(2) § 63.2515(a) § 63.2515(b)(1) § 63.2515(c) § 63.2520(a) [G]§ 63.2520(b) [G]§ 63.2520(c) [G]§ 63.2520(d) § 63.2520(e) § 63.2520(e)(1) [G]§ 63.2520(e)(10) § 63.2520(e)(2) § 63.2520(e)(3) § 63.2520(e)(4) § 63.2520(e)(5) § 63.2520(e)(5)(i) [G]§ 63.2520(e)(5)(ii) [G]§ 63.2520(e)(5)(iii) § 63.2520(e)(6) § 63.2520(e)(7) § 63.2520(e)(9)
D-407	EP	R5121-1	VOC	30 TAC Chapter 115, Vent Gas Controls	§ 115.127(c)(1)(B) § 115.127(c)(1)	A vent gas stream having a combined weight of the VOC or classes of compounds specified in §115.121(c)(1)(B)-(C) of this title equal to or less than 100 lbs in a continuous 24-hour period is exempt from the requirements of §115.121(c)(1) of this title.	[G]§ 115.125 § 115.126(2) § 115.126(3)(B)	§ 115.126 § 115.126(2) § 115.126(3) § 115.126(3)(B)	None

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
D-407	EP	R5121-1	VOC	30 TAC Chapter 115, Vent Gas Controls	§ 115.127(c)(1)(C) § 115.127(c)(1)	A vent gas stream having a concentration of the VOC specified in § 115.121(c)(1)(B) and (C) less than 30,000 ppmv is exempt from § 115.121(c)(1).	[G]§ 115.125 § 115.126(2) § 115.126(3)(C)	§ 115.126 § 115.126(2) § 115.126(3) § 115.126(3)(C)	None
D-910	EU	63FFFF-1	112(B) HAPS	40 CFR Part 63, Subpart FFFF	§ 63.2440(a) § 63.2450(a) § 63.2450(l)	This subpart applies to each miscellaneous organic chemical manufacturing affected source.	§ 63.2445(d)	§ 63.2525 § 63.2525(a) [G]§ 63.2525(b) § 63.2525(c) § 63.2525(f) § 63.2525(j)	§ 63.2435(d) § 63.2445(c) § 63.2450(g)(5) § 63.2450(m) § 63.2450(m)(1) § 63.2450(m)(2) § 63.2515(a) § 63.2515(b)(1) § 63.2515(c) § 63.2520(a) [G]§ 63.2520(b) [G]§ 63.2520(c) [G]§ 63.2520(d) § 63.2520(e) § 63.2520(e)(1) [G]§ 63.2520(e)(10) § 63.2520(e)(2) § 63.2520(e)(3) § 63.2520(e)(4) § 63.2520(e)(5) § 63.2520(e)(5)(i) [G]§ 63.2520(e)(5)(ii) [G]§ 63.2520(e)(5)(iii) § 63.2520(e)(6) § 63.2520(e)(7) § 63.2520(e)(9)

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
F-343	EP	R5121-1	VOC	30 TAC Chapter 115, Vent Gas Controls	§ 115.127(c)(1)(B) § 115.127(c)(1)	A vent gas stream having a combined weight of the VOC or classes of compounds specified in §115.121(c)(1)(B)-(C) of this title equal to or less than 100 lbs in a continuous 24-hour period is exempt from the requirements of §115.121(c)(1) of this title.	[G]§ 115.125 § 115.126(2) § 115.126(3)(B)	§ 115.126 § 115.126(2) § 115.126(3) § 115.126(3)(B)	None
F-343	EP	R5121-1	VOC	30 TAC Chapter 115, Vent Gas Controls	§ 115.127(c)(1)(C) § 115.127(c)(1)	A vent gas stream having a concentration of the VOC specified in § 115.121(c)(1)(B) and (C) less than 30,000 ppmv is exempt from § 115.121(c)(1).	[G]§ 115.125 § 115.126(2) § 115.126(3)(C)	§ 115.126 § 115.126(2) § 115.126(3) § 115.126(3)(C)	None
F-346	EP	R5121-1	VOC	30 TAC Chapter 115, Vent Gas Controls	§ 115.127(c)(1)(B) § 115.127(c)(1)	A vent gas stream having a combined weight of the VOC or classes of compounds specified in §115.121(c)(1)(B)-(C) of this title equal to or less than 100 lbs in a continuous 24-hour period is exempt from the requirements of §115.121(c)(1) of this title.	[G]§ 115.125 § 115.126(2) § 115.126(3)(B)	§ 115.126 § 115.126(2) § 115.126(3) § 115.126(3)(B)	None
F-346	EP	R5121-1	VOC	30 TAC Chapter 115, Vent Gas Controls	§ 115.127(c)(1)(C) § 115.127(c)(1)	A vent gas stream having a concentration of the VOC specified in § 115.121(c)(1)(B) and (C) less than 30,000 ppmv is exempt from § 115.121(c)(1).	[G]§ 115.125 § 115.126(2) § 115.126(3)(C)	§ 115.126 § 115.126(2) § 115.126(3) § 115.126(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)
F-402	EP	R5121-1	VOC	30 TAC Chapter 115, Vent Gas Controls	§ 115.127(c)(1)(B) § 115.127(c)(1)	A vent gas stream having a combined weight of the VOC or classes of compounds specified in §115.121(c)(1)(B)-(C) of this title equal to or less than 100 lbs in a continuous 24-hour period is exempt from the requirements of §115.121(c)(1) of this title.	[G]§ 115.125 § 115.126(2) § 115.126(3)(B)	§ 115.126 § 115.126(2) § 115.126(3) § 115.126(3)(B)	None
F-402	EP	R5121-1	VOC	30 TAC Chapter 115, Vent Gas Controls	§ 115.127(c)(1)(C) § 115.127(c)(1)	A vent gas stream having a concentration of the VOC specified in § 115.121(c)(1)(B) and (C) less than 30,000 ppmv is exempt from § 115.121(c)(1).	[G]§ 115.125 § 115.126(2) § 115.126(3)(C)	§ 115.126 § 115.126(2) § 115.126(3) § 115.126(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)
F-402	EU	63FFFF-1	112(B) HAPS	40 CFR Part 63, Subpart FFFF	§ 63.2440(a) § 63.2450(a) § 63.2450(l)	This subpart applies to each miscellaneous organic chemical manufacturing affected source.	§ 63.2445(d)	§ 63.2525 § 63.2525(a) [G]§ 63.2525(b) § 63.2525(c) § 63.2525(f) § 63.2525(j)	§ 63.2435(d) § 63.2445(c) § 63.2450(g)(5) § 63.2450(m) § 63.2450(m)(1) § 63.2450(m)(2) § 63.2515(a) § 63.2515(b)(1) § 63.2515(c) § 63.2520(a) [G]§ 63.2520(b) [G]§ 63.2520(c) [G]§ 63.2520(d) § 63.2520(e) § 63.2520(e)(1) [G]§ 63.2520(e)(10) § 63.2520(e)(2) § 63.2520(e)(3) § 63.2520(e)(4) § 63.2520(e)(5) § 63.2520(e)(5)(i) [G]§ 63.2520(e)(5)(ii) [G]§ 63.2520(e)(5)(iii) § 63.2520(e)(6) § 63.2520(e)(7) § 63.2520(e)(9)
F-443	EP	R5121-1	VOC	30 TAC Chapter 115, Vent Gas Controls	§ 115.127(c)(1)(C) § 115.127(c)(1)	A vent gas stream having a concentration of the VOC specified in § 115.121(c)(1)(B) and (C) less than 30,000 ppmv is exempt from § 115.121(c)(1).	[G]§ 115.125 § 115.126(2) § 115.126(3)(C)	§ 115.126 § 115.126(2) § 115.126(3) § 115.126(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)
F-443	EP	R5121-1	VOC	30 TAC Chapter 115, Vent Gas Controls	§ 115.127(c)(1)(B) § 115.127(c)(1)	A vent gas stream having a combined weight of the VOC or classes of compounds specified in §115.121(c)(1)(B)-(C) of this title equal to or less than 100 lbs in a continuous 24-hour period is exempt from the requirements of §115.121(c)(1) of this title.	[G]§ 115.125 § 115.126(2) § 115.126(3)(B)	§ 115.126 § 115.126(2) § 115.126(3) § 115.126(3)(B)	None
F-446	EP	R5121-1	VOC	30 TAC Chapter 115, Vent Gas Controls	§ 115.127(c)(1)(C) § 115.127(c)(1)	A vent gas stream having a concentration of the VOC specified in § 115.121(c)(1)(B) and (C) less than 30,000 ppmv is exempt from § 115.121(c)(1).	[G]§ 115.125 § 115.126(2) § 115.126(3)(C)	§ 115.126 § 115.126(2) § 115.126(3) § 115.126(3)(C)	None
F-446	EP	R5121-1	VOC	30 TAC Chapter 115, Vent Gas Controls	§ 115.127(c)(1)(B) § 115.127(c)(1)	A vent gas stream having a combined weight of the VOC or classes of compounds specified in §115.121(c)(1)(B)-(C) of this title equal to or less than 100 lbs in a continuous 24-hour period is exempt from the requirements of §115.121(c)(1) of this title.	[G]§ 115.125 § 115.126(2) § 115.126(3)(B)	§ 115.126 § 115.126(2) § 115.126(3) § 115.126(3)(B)	None
F-543	EP	R5121-1	VOC	30 TAC Chapter 115, Vent Gas Controls	§ 115.127(c)(1)(C) § 115.127(c)(1)	A vent gas stream having a concentration of the VOC specified in § 115.121(c)(1)(B) and (C) less than 30,000 ppmv is exempt from § 115.121(c)(1).	[G]§ 115.125 § 115.126(2) § 115.126(3)(C)	§ 115.126 § 115.126(2) § 115.126(3) § 115.126(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)
F-543	EP	R5121-1	VOC	30 TAC Chapter 115, Vent Gas Controls	§ 115.127(c)(1)(B) § 115.127(c)(1)	A vent gas stream having a combined weight of the VOC or classes of compounds specified in §115.121(c)(1)(B)-(C) of this title equal to or less than 100 lbs in a continuous 24-hour period is exempt from the requirements of §115.121(c)(1) of this title.	[G]§ 115.125 § 115.126(2) § 115.126(3)(B)	§ 115.126 § 115.126(2) § 115.126(3) § 115.126(3)(B)	None
F-546	EP	R5121-1	VOC	30 TAC Chapter 115, Vent Gas Controls	§ 115.127(c)(1)(B) § 115.127(c)(1)	A vent gas stream having a combined weight of the VOC or classes of compounds specified in §115.121(c)(1)(B)-(C) of this title equal to or less than 100 lbs in a continuous 24-hour period is exempt from the requirements of §115.121(c)(1) of this title.	[G]§ 115.125 § 115.126(2) § 115.126(3)(B)	§ 115.126 § 115.126(2) § 115.126(3) § 115.126(3)(B)	None
F-546	EP	R5121-1	VOC	30 TAC Chapter 115, Vent Gas Controls	§ 115.127(c)(1)(C) § 115.127(c)(1)	A vent gas stream having a concentration of the VOC specified in § 115.121(c)(1)(B) and (C) less than 30,000 ppmv is exempt from § 115.121(c)(1).	[G]§ 115.125 § 115.126(2) § 115.126(3)(C)	§ 115.126 § 115.126(2) § 115.126(3) § 115.126(3)(C)	None
F-743A	EP	R5121-1	VOC	30 TAC Chapter 115, Vent Gas Controls	§ 115.127(c)(1)(C) § 115.127(c)(1)	A vent gas stream having a concentration of the VOC specified in § 115.121(c)(1)(B) and (C) less than 30,000 ppmv is exempt from § 115.121(c)(1).	[G]§ 115.125 § 115.126(2) § 115.126(3)(C)	§ 115.126 § 115.126(2) § 115.126(3) § 115.126(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)
F-743A	EP	R5121-1	VOC	30 TAC Chapter 115, Vent Gas Controls	§ 115.127(c)(1)(B) § 115.127(c)(1)	A vent gas stream having a combined weight of the VOC or classes of compounds specified in §115.121(c)(1)(B)-(C) of this title equal to or less than 100 lbs in a continuous 24-hour period is exempt from the requirements of §115.121(c)(1) of this title.	[G]§ 115.125 § 115.126(2) § 115.126(3)(B)	§ 115.126 § 115.126(2) § 115.126(3) § 115.126(3)(B)	None
F-746	EP	R5121-1	VOC	30 TAC Chapter 115, Vent Gas Controls	§ 115.127(c)(1)(C) § 115.127(c)(1)	A vent gas stream having a concentration of the VOC specified in § 115.121(c)(1)(B) and (C) less than 30,000 ppmv is exempt from § 115.121(c)(1).	[G]§ 115.125 § 115.126(2) § 115.126(3)(C)	§ 115.126 § 115.126(2) § 115.126(3) § 115.126(3)(C)	None
F-746	EP	R5121-1	VOC	30 TAC Chapter 115, Vent Gas Controls	§ 115.127(c)(1)(B) § 115.127(c)(1)	A vent gas stream having a combined weight of the VOC or classes of compounds specified in §115.121(c)(1)(B)-(C) of this title equal to or less than 100 lbs in a continuous 24-hour period is exempt from the requirements of §115.121(c)(1) of this title.	[G]§ 115.125 § 115.126(2) § 115.126(3)(B)	§ 115.126 § 115.126(2) § 115.126(3) § 115.126(3)(B)	None
FTPP2G111	EU	R5211-2	VOC	30 TAC Chapter 115, Loading and Unloading of VOC	§ 115.217(b)(3)(A) § 115.214(b)(1)(B) § 115.214(b)(1)(D) § 115.214(b)(1)(D)(i)	Plants, excluding gasoline bulk plants, which load less than 20,000 gallons of VOC into transport vessels per day with a true vapor pressure greater than or equal to 1.5 psia is exempt from the division, except as specified.	§ 115.214(b)(1)(A) § 115.214(b)(1)(A)(i) § 115.215 § 115.215(4)	§ 115.216 § 115.216(2) § 115.216(3)(B) § 115.216(3)(D)	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)
PO-CT	EP	R1111-2	Opacity	30 TAC Chapter 111, Visible Emissions	§ 111.111(a)(1)(C) § 111.111(a)(1)(E)	Visible emissions from any stationary vent shall not exceed an opacity of 15% averaged over a six minute period for any source with a total flow rate of at least 100,000 acfm unless a CEMS is installed.	[G]§ 111.111(a)(1)(F) ** See Periodic Monitoring Summary	None	None
PP1-300	EP	R5121-1	VOC	30 TAC Chapter 115, Vent Gas Controls	§ 115.127(c)(1)(B) § 115.127(c)(1)	A vent gas stream having a combined weight of the VOC or classes of compounds specified in §115.121(c)(1)(B)-(C) of this title equal to or less than 100 lbs in a continuous 24-hour period is exempt from the requirements of §115.121(c)(1) of this title.	[G]§ 115.125 § 115.126(2) § 115.126(3)(B)	§ 115.126 § 115.126(2) § 115.126(3) § 115.126(3)(B)	None
PP1-300	EP	R5121-1	VOC	30 TAC Chapter 115, Vent Gas Controls	§ 115.127(c)(1)(C) § 115.127(c)(1)	A vent gas stream having a concentration of the VOC specified in § 115.121(c)(1)(B) and (C) less than 30,000 ppmv is exempt from § 115.121(c)(1).	[G]§ 115.125 § 115.126(2) § 115.126(3)(C)	§ 115.126 § 115.126(2) § 115.126(3) § 115.126(3)(C)	None
PP1-400	EP	R5121-1	VOC	30 TAC Chapter 115, Vent Gas Controls	§ 115.127(c)(1)(C) § 115.127(c)(1)	A vent gas stream having a concentration of the VOC specified in § 115.121(c)(1)(B) and (C) less than 30,000 ppmv is exempt from § 115.121(c)(1).	[G]§ 115.125 § 115.126(2) § 115.126(3)(C)	§ 115.126 § 115.126(2) § 115.126(3) § 115.126(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)
PP1-400	EP	R5121-1	VOC	30 TAC Chapter 115, Vent Gas Controls	§ 115.127(c)(1)(B) § 115.127(c)(1)	A vent gas stream having a combined weight of the VOC or classes of compounds specified in §115.121(c)(1)(B)-(C) of this title equal to or less than 100 lbs in a continuous 24-hour period is exempt from the requirements of §115.121(c)(1) of this title.	[G]§ 115.125 § 115.126(2) § 115.126(3)(B)	§ 115.126 § 115.126(2) § 115.126(3) § 115.126(3)(B)	None
PP1-500	EP	R5121-1	VOC	30 TAC Chapter 115, Vent Gas Controls	§ 115.127(c)(1)(B) § 115.127(c)(1)	A vent gas stream having a combined weight of the VOC or classes of compounds specified in §115.121(c)(1)(B)-(C) of this title equal to or less than 100 lbs in a continuous 24-hour period is exempt from the requirements of §115.121(c)(1) of this title.	[G]§ 115.125 § 115.126(2) § 115.126(3)(B)	§ 115.126 § 115.126(2) § 115.126(3) § 115.126(3)(B)	None
PP1-500	EP	R5121-1	VOC	30 TAC Chapter 115, Vent Gas Controls	§ 115.127(c)(1)(C) § 115.127(c)(1)	A vent gas stream having a concentration of the VOC specified in § 115.121(c)(1)(B) and (C) less than 30,000 ppmv is exempt from § 115.121(c)(1).	[G]§ 115.125 § 115.126(2) § 115.126(3)(C)	§ 115.126 § 115.126(2) § 115.126(3) § 115.126(3)(C)	None
PP1-700	EP	R5121-1	VOC	30 TAC Chapter 115, Vent Gas Controls	§ 115.127(c)(1)(C) § 115.127(c)(1)	A vent gas stream having a concentration of the VOC specified in § 115.121(c)(1)(B) and (C) less than 30,000 ppmv is exempt from § 115.121(c)(1).	[G]§ 115.125 § 115.126(2) § 115.126(3)(C)	§ 115.126 § 115.126(2) § 115.126(3) § 115.126(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)
PP1-700	EP	R5121-1	VOC	30 TAC Chapter 115, Vent Gas Controls	§ 115.127(c)(1)(B) § 115.127(c)(1)	A vent gas stream having a combined weight of the VOC or classes of compounds specified in §115.121(c)(1)(B)-(C) of this title equal to or less than 100 lbs in a continuous 24-hour period is exempt from the requirements of §115.121(c)(1) of this title.	[G]§ 115.125 § 115.126(2) § 115.126(3)(B)	§ 115.126 § 115.126(2) § 115.126(3) § 115.126(3)(B)	None
PP1-CT	EP	R1111-2	Opacity	30 TAC Chapter 111, Visible Emissions	§ 111.111(a)(1)(C) § 111.111(a)(1)(E)	Visible emissions from any stationary vent shall not exceed an opacity of 15% averaged over a six minute period for any source with a total flow rate of at least 100,000 acfm unless a CEMS is installed.	[G]§ 111.111(a)(1)(F) ** See Periodic Monitoring Summary	None	None
PP1-FUG	EU	60DDD-1	VOC/TOC	40 CFR Part 60, Subpart DDD	§ 60.562-2(a) § 60.482-1(a) § 60.482-1(b) § 60.482-1(g) § 60.482-5(a) [G]§ 60.482-5(b) § 60.482-5(c) § 60.486(k) § 60.562-2(d) § 60.562-2(e)	Comply with the requirements in as stated in §60.482-5 for sampling connection systems.	§ 60.485(a) [G]§ 60.485(b) [G]§ 60.485(d) § 60.485(f) § 60.562-2(d)	§ 60.482-1(g) [G]§ 60.486(a) § 60.486(e) § 60.486(e)(1) § 60.486(j) § 60.562-2(e)	§ 60.487(a) [G]§ 60.487(b) [G]§ 60.487(c) § 60.487(e) § 60.562-2(e) § 60.565(l)

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)
PP1-FUG	EU	60DDD-1	VOC/TOC	40 CFR Part 60, Subpart DDD	§ 60.562-2(a) § 60.482-1(a) § 60.482-1(b) § 60.482-1(g) § 60.482-6(a)(1) § 60.482-6(a)(2) § 60.482-6(b) § 60.482-6(c) § 60.482-6(d) § 60.482-6(e) § 60.486(k) § 60.562-2(d) § 60.562-2(e)	Comply with the requirements in as stated in §60.482-6 for open-ended valves and lines.	§ 60.485(a) [G]§ 60.485(b) [G]§ 60.485(d) § 60.485(f) § 60.562-2(d)	§ 60.482-1(g) [G]§ 60.486(a) § 60.486(e) § 60.486(e)(1) § 60.486(j) § 60.562-2(e)	§ 60.487(a) [G]§ 60.487(b) [G]§ 60.487(c) § 60.487(e) § 60.562-2(e) § 60.565(l)
PP1-FUG	EU	60DDD-1	VOC/TOC	40 CFR Part 60, Subpart DDD	§ 60.562-2(a) § 60.18 § 60.482-1(a) § 60.482-1(b) § 60.482-1(g) § 60.482-10(d) § 60.482-10(m) § 60.486(k) § 60.562-2(d) § 60.562-2(e)	Comply with the requirements in as stated in §60.482-10 for flares.	§ 60.482-10(e) § 60.485(a) [G]§ 60.485(b) [G]§ 60.485(c) [G]§ 60.485(d) § 60.485(f) [G]§ 60.485(g) § 60.562-2(d)	§ 60.482-1(g) [G]§ 60.486(a) [G]§ 60.486(d) § 60.486(e) § 60.486(e)(1) § 60.486(j) § 60.562-2(e)	§ 60.487(a) [G]§ 60.487(b) [G]§ 60.487(c) § 60.487(e) § 60.562-2(e) § 60.565(l)

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)
PP1-FUG	EU	60DDD-1	VOC/TOC	40 CFR Part 60, Subpart DDD	§ 60.562-2(a) § 60.482-1(a) § 60.482-1(b) § 60.482-1(g) § 60.482-2(b)(1) [G]§ 60.482-2(b)(2) § 60.482-2(c)(1) [G]§ 60.482-2(c)(2) § 60.482-2(d) [G]§ 60.482-2(d)(1) § 60.482-2(d)(2) § 60.482-2(d)(3) [G]§ 60.482-2(d)(4) [G]§ 60.482-2(d)(5) [G]§ 60.482-2(d)(6) [G]§ 60.482-2(e) § 60.482-2(f) [G]§ 60.482-2(g) § 60.482-2(h) § 60.482-9(a) § 60.482-9(b) [G]§ 60.482-9(d) § 60.482-9(f) § 60.486(k) § 60.562-2(d) § 60.562-2(e)	Comply with the requirements as stated in §60.482-2 for pumps in light-liquid service.	§ 60.482-1(f)(1) § 60.482-1(f)(2) [G]§ 60.482-1(f)(3) [G]§ 60.482-2(a) [G]§ 60.482-2(b)(2) [G]§ 60.482-2(d)(4) § 60.485(a) [G]§ 60.485(b) [G]§ 60.485(c) [G]§ 60.485(d) [G]§ 60.485(e) § 60.485(f) § 60.562-2(d)	§ 60.482-1(g) [G]§ 60.486(a) [G]§ 60.486(b) [G]§ 60.486(c) § 60.486(e) § 60.486(e)(1) [G]§ 60.486(e)(2) [G]§ 60.486(e)(4) § 60.486(f) [G]§ 60.486(h) § 60.486(j) § 60.562-2(e)	§ 60.487(a) [G]§ 60.487(b) [G]§ 60.487(c) § 60.487(e) § 60.562-2(e) § 60.565(l)

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)
PP1-FUG	EU	60DDD-1	VOC/TOC	40 CFR Part 60, Subpart DDD	§ 60.562-2(a) § 60.482-1(a) § 60.482-1(b) § 60.482-1(g) § 60.482-3(a) [G]§ 60.482-3(b) § 60.482-3(c) § 60.482-3(d) § 60.482-3(e)(1) § 60.482-3(e)(2) § 60.482-3(f) § 60.482-3(g)(1) § 60.482-3(g)(2) § 60.482-3(h) [G]§ 60.482-3(i) § 60.482-3(j) § 60.482-9(a) § 60.482-9(b) § 60.486(k) § 60.562-2(d) § 60.562-2(e)	Comply with the requirements as stated in §60.482-3 for compressors.	§ 60.482-3(e)(1) § 60.485(a) [G]§ 60.485(b) [G]§ 60.485(c) [G]§ 60.485(d) § 60.485(f) § 60.562-2(d)	§ 60.482-1(g) [G]§ 60.486(a) [G]§ 60.486(b) [G]§ 60.486(c) § 60.486(e) § 60.486(e)(1) [G]§ 60.486(e)(2) [G]§ 60.486(e)(4) [G]§ 60.486(h) § 60.486(j) § 60.562-2(e)	§ 60.487(a) [G]§ 60.487(b) [G]§ 60.487(c) § 60.487(e) § 60.562-2(e) § 60.565(l)

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)
PP1-FUG	EU	60DDD-1	VOC/TOC	40 CFR Part 60, Subpart DDD	§ 60.562-2(b) § 60.482-7(d)(1) § 60.482-7(d)(2) [G]§ 60.482-7(e) § 60.482-9(a) § 60.482-9(b) [G]§ 60.482-9(c) § 60.482-9(e) § 60.482-9(f) § 60.483-1(a) § 60.483-1(b) § 60.483-1(b)(3) § 60.483-1(c) § 60.483-1(c)(1) § 60.483-1(c)(2) § 60.483-1(c)(3) § 60.483-1(d) § 60.483-2(a)(1) § 60.483-2(b)(1) § 60.483-2(b)(2) § 60.483-2(b)(3) § 60.483-2(b)(4) § 60.483-2(b)(5) [G]§ 60.485(h)	An owner or operator may elect to comply with the requirements specified in §60.483-1 and §60.483-2 for valves in gas/vapor service and light liquid service.	§ 60.482-1(f)(1) § 60.482-1(f)(2) [G]§ 60.482-1(f)(3) § 60.482-7(a)(1) [G]§ 60.482-7(a)(2) § 60.482-7(c)(1)(i) § 60.482-7(c)(1)(ii) § 60.482-7(c)(2) § 60.483-1(b)(2) § 60.483-2(b)(7) § 60.485(a) [G]§ 60.485(b) [G]§ 60.485(d) [G]§ 60.485(e) § 60.485(f)	§ 60.483-2(b)(6) [G]§ 60.486(a) [G]§ 60.486(b) [G]§ 60.486(c) [G]§ 60.486(f) [G]§ 60.486(g)	§ 60.483-1(b)(1) § 60.483-2(a)(2) § 60.487(d)
PP1-FUG	EU	60DDD-1	VOC/TOC	40 CFR Part 60, Subpart DDD	§ 60.562-2(a) § 60.482-1(a) § 60.482-1(b) § 60.482-1(g) § 60.482-4(a) § 60.482-4(b)(1) § 60.482-4(c) § 60.482-4(d)(1) § 60.482-4(d)(2) § 60.482-9(a) § 60.482-9(b) § 60.486(k) § 60.562-2(d) § 60.562-2(e)	Comply with the requirements in as stated in §60.482-4 for pressure relief devices in gas/vapor service.	§ 60.482-4(b)(2) § 60.485(a) [G]§ 60.485(b) [G]§ 60.485(c) [G]§ 60.485(d) § 60.485(f) § 60.562-2(d)	§ 60.482-1(g) [G]§ 60.486(a) § 60.486(e) § 60.486(e)(1) § 60.486(e)(3) [G]§ 60.486(e)(4) § 60.486(j) § 60.562-2(e)	§ 60.487(a) [G]§ 60.487(b) [G]§ 60.487(c) § 60.487(e) § 60.562-2(e) § 60.565(l)

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)
PP1-UNIT	EU	60DDD-2	VOC/TOC	40 CFR Part 60, Subpart DDD	§ 60.562-1(a)(2)	Each vent stream that emits intermittent emissions as defined in §60.560-1(a)(1) shall be controlled as specified; prior to control modification/reconstruction/replacement, the vent stream is exempted.	None	None	None
PP1-UNIT	PRO	60DDD-3F	VOC/TOC	40 CFR Part 60, Subpart DDD	§ 60.562-1(a)(2)	Each vent stream that emits intermittent emissions as defined in §60.560-1(a)(1) shall be controlled as specified; prior to control modification/reconstruction/replacement, the vent stream is exempted.	None	None	None
PP1-UNIT	PRO	60DDD-3F	VOC/TOC	40 CFR Part 60, Subpart DDD	§ 60.560(g)	Vent streams emitting continuous emissions with uncontrolled annual emissions of < 1.6 Mg/yr (1.76 Tons/yr) or with weight % TOC of < 0.10 % from facilities as specified, exempted from §60.562-1(a)(1).	[G]§ 60.564(d)	§ 60.565(a) § 60.565(a)(10) § 60.565(h)	§ 60.565(a) § 60.565(a)(10) § 60.565(k) § 60.565(k)(6) § 60.565(k)(7)
PP1-UNIT	PRO	60DDD-3aF	VOC/TOC	40 CFR Part 60, Subpart DDD	§ 60.560(g)	Vent streams emitting continuous emissions with uncontrolled annual emissions of < 1.6 Mg/yr (1.76 Tons/yr) or with weight % TOC of < 0.10 % from facilities as specified, exempted from §60.562-1(a)(1).	[G]§ 60.564(d)	§ 60.565(a) § 60.565(a)(10) § 60.565(h)	§ 60.565(a) § 60.565(a)(10) § 60.565(k) § 60.565(k)(6) § 60.565(k)(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)
PP1-UNIT	PRO	60DDD-3aF	VOC/TOC	40 CFR Part 60, Subpart DDD	§ 60.562-1(a)(2)	Each vent stream that emits intermittent emissions as defined in §60.560-1(a)(1) shall be controlled as specified; prior to control modification/reconstruction/replacement, the vent stream is exempted.	None	None	None
PP1-UNIT	PRO	60DDD-3bF	VOC/TOC	40 CFR Part 60, Subpart DDD	§ 60.562-1(a)(2)	Each vent stream that emits intermittent emissions as defined in §60.560-1(a)(1) shall be controlled as specified; prior to control modification/reconstruction/replacement, the vent stream is exempted.	None	None	None
PP1-UNIT	PRO	60DDD-3bF	VOC/TOC	40 CFR Part 60, Subpart DDD	§ 60.560(g)	Vent streams emitting continuous emissions with uncontrolled annual emissions of < 1.6 Mg/yr (1.76 Tons/yr) or with weight % TOC of < 0.10 % from facilities as specified, exempted from §60.562-1(a)(1).	[G]§ 60.564(d)	§ 60.565(a) § 60.565(a)(10) § 60.565(h)	§ 60.565(a) § 60.565(a)(10) § 60.565(k) § 60.565(k)(6) § 60.565(k)(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)
PP1-UNIT	EU	63FFFF-1	112(B) HAPS	40 CFR Part 63, Subpart FFFF	§ 63.2440(a) § 63.2450(a) § 63.2450(l)	This subpart applies to each miscellaneous organic chemical manufacturing affected source.	§ 63.2445(d)	§ 63.2525 § 63.2525(a) [G]§ 63.2525(b) § 63.2525(c) § 63.2525(f) § 63.2525(j)	§ 63.2435(d) § 63.2445(c) § 63.2450(g)(5) § 63.2450(m) § 63.2450(m)(1) § 63.2450(m)(2) § 63.2515(a) § 63.2515(b)(2) § 63.2515(c) § 63.2520(a) [G]§ 63.2520(b) [G]§ 63.2520(c) [G]§ 63.2520(d) § 63.2520(e) § 63.2520(e)(1) [G]§ 63.2520(e)(10) § 63.2520(e)(2) § 63.2520(e)(3) § 63.2520(e)(4) § 63.2520(e)(5) § 63.2520(e)(5)(i) [G]§ 63.2520(e)(5)(ii) [G]§ 63.2520(e)(5)(iii) § 63.2520(e)(6) § 63.2520(e)(7) § 63.2520(e)(9)
PP2-3D407	EP	R5121-1	VOC	30 TAC Chapter 115, Vent Gas Controls	§ 115.127(c)(1)(C) § 115.127(c)(1)	A vent gas stream having a concentration of the VOC specified in §115.121(c)(1)(B) and (C) of this title less than 30,000 ppmv is exempt from the requirements of §115.121(c)(1) of this title.	[G]§ 115.125 § 115.126(2) § 115.126(3)(C)	§ 115.126 § 115.126(2) § 115.126(3) § 115.126(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)
PP2-3D407	EP	R5121-1	VOC	30 TAC Chapter 115, Vent Gas Controls	§ 115.127(c)(1)(B) § 115.127(c)(1)	A vent gas stream having a combined weight of the VOC or classes of compounds specified in §115.121(c)(1)(B)-(C) of this title equal to or less than 100 lbs in a continuous 24-hour period is exempt from the requirements of §115.121(c)(1) of this title.	[G]§ 115.125 § 115.126(2) § 115.126(3)(B)	§ 115.126 § 115.126(2) § 115.126(3) § 115.126(3)(B)	None
PP2-3F402	EP	R5121-1	VOC	30 TAC Chapter 115, Vent Gas Controls	§ 115.127(c)(1)(C) § 115.127(c)(1)	A vent gas stream having a concentration of the VOC specified in §115.121(c)(1)(B) and (C) of this title less than 30,000 ppmv is exempt from the requirements of §115.121(c)(1) of this title.	[G]§ 115.125 § 115.126(2) § 115.126(3)(C)	§ 115.126 § 115.126(2) § 115.126(3) § 115.126(3)(C)	None
PP2-3F402	EP	R5121-1	VOC	30 TAC Chapter 115, Vent Gas Controls	§ 115.127(c)(1)(B) § 115.127(c)(1)	A vent gas stream having a combined weight of the VOC or classes of compounds specified in §115.121(c)(1)(B)-(C) of this title equal to or less than 100 lbs in a continuous 24-hour period is exempt from the requirements of §115.121(c)(1) of this title.	[G]§ 115.125 § 115.126(2) § 115.126(3)(B)	§ 115.126 § 115.126(2) § 115.126(3) § 115.126(3)(B)	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)
PP2-3F402	PRO	63FFFF-1	112(B) HAPS	40 CFR Part 63, Subpart FFFF	§ 63.2440(a) § 63.2450(a) § 63.2450(l)	This subpart applies to each miscellaneous organic chemical manufacturing affected source.	§ 63.2445(d)	§ 63.2525 § 63.2525(a) [G]§ 63.2525(b) § 63.2525(c) § 63.2525(f) § 63.2525(j)	§ 63.2435(d) § 63.2445(c) § 63.2450(g)(5) § 63.2450(m) § 63.2450(m)(1) § 63.2450(m)(2) § 63.2515(a) § 63.2515(b)(2) § 63.2515(c) § 63.2520(a) [G]§ 63.2520(b) [G]§ 63.2520(c) [G]§ 63.2520(d) § 63.2520(e) § 63.2520(e)(1) [G]§ 63.2520(e)(10) § 63.2520(e)(2) § 63.2520(e)(3) § 63.2520(e)(4) § 63.2520(e)(5) § 63.2520(e)(5)(i) [G]§ 63.2520(e)(5)(ii) [G]§ 63.2520(e)(5)(iii) § 63.2520(e)(6) § 63.2520(e)(7) § 63.2520(e)(9)
PP2-3F405	EP	R5121-1	VOC	30 TAC Chapter 115, Vent Gas Controls	§ 115.127(c)(1)(C) § 115.127(c)(1)	A vent gas stream having a concentration of the VOC specified in §115.121(c)(1)(B) and (C) of this title less than 30,000 ppmv is exempt from the requirements of §115.121(c)(1) of this title.	[G]§ 115.125 § 115.126(2) § 115.126(3)(C)	§ 115.126 § 115.126(2) § 115.126(3) § 115.126(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)
PP2-3F405	EP	R5121-1	VOC	30 TAC Chapter 115, Vent Gas Controls	§ 115.127(c)(1)(B) § 115.127(c)(1)	A vent gas stream having a combined weight of the VOC or classes of compounds specified in §115.121(c)(1)(B)-(C) of this title equal to or less than 100 lbs in a continuous 24-hour period is exempt from the requirements of §115.121(c)(1) of this title.	[G]§ 115.125 § 115.126(2) § 115.126(3)(B)	§ 115.126 § 115.126(2) § 115.126(3) § 115.126(3)(B)	None
PP2-3F405	PRO	63FFFF-1	112(B) HAPS	40 CFR Part 63, Subpart FFFF	§ 63.2440(a) § 63.2450(a) § 63.2450(l)	This subpart applies to each miscellaneous organic chemical manufacturing affected source.	§ 63.2445(d)	§ 63.2525 § 63.2525(a) [G]§ 63.2525(b) § 63.2525(c) § 63.2525(f) § 63.2525(j)	§ 63.2435(d) § 63.2445(c) § 63.2450(g)(5) § 63.2450(m) § 63.2450(m)(1) § 63.2450(m)(2) § 63.2515(a) § 63.2515(b)(2) § 63.2515(c) § 63.2520(a) [G]§ 63.2520(b) [G]§ 63.2520(c) [G]§ 63.2520(d) § 63.2520(e) § 63.2520(e)(1) [G]§ 63.2520(e)(10) § 63.2520(e)(2) § 63.2520(e)(3) § 63.2520(e)(4) § 63.2520(e)(5) § 63.2520(e)(5)(i) [G]§ 63.2520(e)(5)(ii) [G]§ 63.2520(e)(5)(iii) § 63.2520(e)(6) § 63.2520(e)(7) § 63.2520(e)(9)

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
PP2-CT	EP	R1111-2	Opacity	30 TAC Chapter 111, Visible Emissions	§ 111.111(a)(1)(C) § 111.111(a)(1)(E)	Visible emissions from any stationary vent shall not exceed an opacity of 15% averaged over a six minute period for any source with a total flow rate of at least 100,000 acfm unless a CEMS is installed.	[G]§ 111.111(a)(1)(F) ** See Periodic Monitoring Summary	None	None
PP2-CT3	EP	R1111-2	Opacity	30 TAC Chapter 111, Visible Emissions	§ 111.111(a)(1)(C) § 111.111(a)(1)(E)	Visible emissions from any stationary vent shall not exceed an opacity of 15% averaged over a six minute period for any source with a total flow rate of at least 100,000 acfm unless a CEMS is installed.	[G]§ 111.111(a)(1)(F) ** See Periodic Monitoring Summary	None	None
PP2-FUG	EU	60DDD-1	VOC/TOC	40 CFR Part 60, Subpart DDD	§ 60.562-2(a) § 60.482-1(a) § 60.482-1(b) § 60.482-1(g) § 60.482-6(a)(1) § 60.482-6(a)(2) § 60.482-6(b) § 60.482-6(c) § 60.482-6(d) § 60.482-6(e) § 60.486(k) § 60.562-2(d) § 60.562-2(e)	Comply with the requirements in as stated in §60.482-6 for open-ended valves and lines.	§ 60.485(a) [G]§ 60.485(b) [G]§ 60.485(d) § 60.485(f) § 60.562-2(d)	§ 60.482-1(g) [G]§ 60.486(a) § 60.486(e) § 60.486(e)(1) § 60.486(j) § 60.562-2(e)	§ 60.487(a) [G]§ 60.487(b) [G]§ 60.487(c) § 60.487(e) § 60.562-2(e) § 60.565(l)

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)
PP2-FUG	EU	60DDD-1	VOC/TOC	40 CFR Part 60, Subpart DDD	§ 60.562-2(b) § 60.482-7(d)(1) § 60.482-7(d)(2) [G]§ 60.482-7(e) § 60.482-9(a) § 60.482-9(b) [G]§ 60.482-9(c) § 60.482-9(e) § 60.482-9(f) § 60.483-1(a) § 60.483-1(b) § 60.483-1(b)(3) § 60.483-1(c) § 60.483-1(c)(1) § 60.483-1(c)(2) § 60.483-1(c)(3) § 60.483-1(d) § 60.483-2(a)(1) § 60.483-2(b)(1) § 60.483-2(b)(2) § 60.483-2(b)(3) § 60.483-2(b)(4) § 60.483-2(b)(5) [G]§ 60.485(h)	An owner or operator may elect to comply with the requirements specified in §60.483-1 and §60.483-2 for valves in gas/vapor service and light liquid service.	§ 60.482-1(f)(1) § 60.482-1(f)(2) [G]§ 60.482-1(f)(3) § 60.482-7(a)(1) [G]§ 60.482-7(a)(2) § 60.482-7(c)(1)(i) § 60.482-7(c)(1)(ii) § 60.482-7(c)(2) § 60.483-1(b)(2) § 60.483-2(b)(7) § 60.485(a) [G]§ 60.485(b) [G]§ 60.485(d) [G]§ 60.485(e) § 60.485(f)	§ 60.483-2(b)(6) [G]§ 60.486(a) [G]§ 60.486(b) [G]§ 60.486(c) [G]§ 60.486(f) [G]§ 60.486(g)	§ 60.483-1(b)(1) § 60.483-2(a)(2) § 60.487(d)

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
PP2-FUG	EU	60DDD-1	VOC/TOC	40 CFR Part 60, Subpart DDD	§ 60.562-2(a) § 60.482-1(a) § 60.482-1(b) § 60.482-1(g) § 60.482-3(a) [G]§ 60.482-3(b) § 60.482-3(c) § 60.482-3(d) § 60.482-3(e)(1) § 60.482-3(e)(2) § 60.482-3(f) § 60.482-3(g)(1) § 60.482-3(g)(2) § 60.482-3(h) [G]§ 60.482-3(i) § 60.482-3(j) § 60.482-9(a) § 60.482-9(b) § 60.486(k) § 60.562-2(d) § 60.562-2(e)	Comply with the requirements as stated in §60.482-3 for compressors.	§ 60.482-3(e)(1) § 60.485(a) [G]§ 60.485(b) [G]§ 60.485(c) [G]§ 60.485(d) § 60.485(f) § 60.562-2(d)	§ 60.482-1(g) [G]§ 60.486(a) [G]§ 60.486(b) [G]§ 60.486(c) § 60.486(e) § 60.486(e)(1) [G]§ 60.486(e)(2) [G]§ 60.486(e)(4) [G]§ 60.486(h) § 60.486(j) § 60.562-2(e)	§ 60.487(a) [G]§ 60.487(b) [G]§ 60.487(c) § 60.487(e) § 60.562-2(e) § 60.565(l)

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)
PP2-FUG	EU	60DDD-1	VOC/TOC	40 CFR Part 60, Subpart DDD	§ 60.562-2(a) § 60.482-1(a) § 60.482-1(b) § 60.482-1(g) § 60.482-2(b)(1) [G]§ 60.482-2(b)(2) § 60.482-2(c)(1) [G]§ 60.482-2(c)(2) § 60.482-2(d) [G]§ 60.482-2(d)(1) § 60.482-2(d)(2) § 60.482-2(d)(3) [G]§ 60.482-2(d)(4) [G]§ 60.482-2(d)(5) [G]§ 60.482-2(d)(6) [G]§ 60.482-2(e) § 60.482-2(f) [G]§ 60.482-2(g) § 60.482-2(h) § 60.482-9(a) § 60.482-9(b) [G]§ 60.482-9(d) § 60.482-9(f) § 60.486(k) § 60.562-2(d) § 60.562-2(e)	Comply with the requirements as stated in §60.482-2 for pumps in light-liquid service.	§ 60.482-1(f)(1) § 60.482-1(f)(2) [G]§ 60.482-1(f)(3) [G]§ 60.482-2(a) [G]§ 60.482-2(b)(2) [G]§ 60.482-2(d)(4) § 60.485(a) [G]§ 60.485(b) [G]§ 60.485(c) [G]§ 60.485(d) [G]§ 60.485(e) § 60.485(f) § 60.562-2(d)	§ 60.482-1(g) [G]§ 60.486(a) [G]§ 60.486(b) [G]§ 60.486(c) § 60.486(e) § 60.486(e)(1) [G]§ 60.486(e)(2) [G]§ 60.486(e)(4) § 60.486(f) [G]§ 60.486(h) § 60.486(j) § 60.562-2(e)	§ 60.487(a) [G]§ 60.487(b) [G]§ 60.487(c) § 60.487(e) § 60.562-2(e) § 60.565(l)

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)
PP2-FUG	EU	60DDD-1	VOC/TOC	40 CFR Part 60, Subpart DDD	§ 60.562-2(a) § 60.482-1(a) § 60.482-1(b) § 60.482-1(g) § 60.482-4(a) § 60.482-4(b)(1) § 60.482-4(c) § 60.482-4(d)(1) § 60.482-4(d)(2) § 60.482-9(a) § 60.482-9(b) § 60.486(k) § 60.562-2(d) § 60.562-2(e)	Comply with the requirements in as stated in §60.482-4 for pressure relief devices in gas/vapor service.	§ 60.482-4(b)(2) § 60.485(a) [G]§ 60.485(b) [G]§ 60.485(c) [G]§ 60.485(d) § 60.485(f) § 60.562-2(d)	§ 60.482-1(g) [G]§ 60.486(a) § 60.486(e) § 60.486(e)(1) § 60.486(e)(3) [G]§ 60.486(e)(4) § 60.486(j) § 60.562-2(e)	§ 60.487(a) [G]§ 60.487(b) [G]§ 60.487(c) § 60.487(e) § 60.562-2(e) § 60.565(l)
PP2-FUG	EU	60DDD-1	VOC/TOC	40 CFR Part 60, Subpart DDD	§ 60.562-2(a) § 60.18 § 60.482-1(a) § 60.482-1(b) § 60.482-1(g) § 60.482-10(d) § 60.482-10(m) § 60.486(k) § 60.562-2(d) § 60.562-2(e)	Comply with the requirements in as stated in §60.482-10 for flares.	§ 60.482-10(e) § 60.485(a) [G]§ 60.485(b) [G]§ 60.485(c) [G]§ 60.485(d) § 60.485(f) [G]§ 60.485(g) § 60.562-2(d)	§ 60.482-1(g) [G]§ 60.486(a) [G]§ 60.486(d) § 60.486(e) § 60.486(e)(1) § 60.486(j) § 60.562-2(e)	§ 60.487(a) [G]§ 60.487(b) [G]§ 60.487(c) § 60.487(e) § 60.562-2(e) § 60.565(l)
PP2-FUG	EU	60DDD-1	VOC/TOC	40 CFR Part 60, Subpart DDD	§ 60.562-2(a) § 60.482-1(a) § 60.482-1(b) § 60.482-1(g) § 60.482-5(a) [G]§ 60.482-5(b) § 60.482-5(c) § 60.486(k) § 60.562-2(d) § 60.562-2(e)	Comply with the requirements in as stated in §60.482-5 for sampling connection systems.	§ 60.485(a) [G]§ 60.485(b) [G]§ 60.485(d) § 60.485(f) § 60.562-2(d)	§ 60.482-1(g) [G]§ 60.486(a) § 60.486(e) § 60.486(e)(1) § 60.486(j) § 60.562-2(e)	§ 60.487(a) [G]§ 60.487(b) [G]§ 60.487(c) § 60.487(e) § 60.562-2(e) § 60.565(l)

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)
PP2-FUG	EU	63FFFF-1	112(B) HAPS	40 CFR Part 63, Subpart FFFF	§ 63.2440(a) § 63.2450(a) § 63.2450(l)	This subpart applies to each miscellaneous organic chemical manufacturing affected source.	§ 63.2445(d)	§ 63.2525 § 63.2525(a) [G]§ 63.2525(b) § 63.2525(c) § 63.2525(f) § 63.2525(j)	§ 63.2435(d) § 63.2445(c) § 63.2450(g)(5) § 63.2450(m) § 63.2450(m)(1) § 63.2450(m)(2) § 63.2515(a) § 63.2515(b)(1) § 63.2515(c) § 63.2520(a) [G]§ 63.2520(b) [G]§ 63.2520(c) [G]§ 63.2520(d) § 63.2520(e) § 63.2520(e)(1) [G]§ 63.2520(e)(10) § 63.2520(e)(2) § 63.2520(e)(3) § 63.2520(e)(4) § 63.2520(e)(5) § 63.2520(e)(5)(i) [G]§ 63.2520(e)(5)(ii) [G]§ 63.2520(e)(5)(iii) § 63.2520(e)(6) § 63.2520(e)(7) § 63.2520(e)(9)
PP2-T1	EP	R5121-1	VOC	30 TAC Chapter 115, Vent Gas Controls	§ 115.127(c)(1)(B) § 115.127(c)(1)	A vent gas stream having a combined weight of the VOC or classes of compounds specified in §115.121(c)(1)(B)-(C) of this title equal to or less than 100 lbs in a continuous 24-hour period is exempt from the requirements of §115.121(c)(1) of this title.	[G]§ 115.125 § 115.126(2) § 115.126(3)(B)	§ 115.126 § 115.126(2) § 115.126(3) § 115.126(3)(B)	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)
PP2-T1	EP	R5121-1	VOC	30 TAC Chapter 115, Vent Gas Controls	§ 115.127(c)(1)(C) § 115.127(c)(1)	A vent gas stream having a concentration of the VOC specified in § 115.121(c)(1)(B) and (C) less than 30,000 ppmv is exempt from § 115.121(c)(1).	[G]§ 115.125 § 115.126(2) § 115.126(3)(C)	§ 115.126 § 115.126(2) § 115.126(3) § 115.126(3)(C)	None
PP2-T2	EP	R5121-1	VOC	30 TAC Chapter 115, Vent Gas Controls	§ 115.127(c)(1)(C) § 115.127(c)(1)	A vent gas stream having a concentration of the VOC specified in § 115.121(c)(1)(B) and (C) less than 30,000 ppmv is exempt from § 115.121(c)(1).	[G]§ 115.125 § 115.126(2) § 115.126(3)(C)	§ 115.126 § 115.126(2) § 115.126(3) § 115.126(3)(C)	None
PP2-T2	EP	R5121-1	VOC	30 TAC Chapter 115, Vent Gas Controls	§ 115.127(c)(1)(B) § 115.127(c)(1)	A vent gas stream having a combined weight of the VOC or classes of compounds specified in §115.121(c)(1)(B)-(C) of this title equal to or less than 100 lbs in a continuous 24-hour period is exempt from the requirements of §115.121(c)(1) of this title.	[G]§ 115.125 § 115.126(2) § 115.126(3)(B)	§ 115.126 § 115.126(2) § 115.126(3) § 115.126(3)(B)	None
PP2-T3	EP	R5121-1	VOC	30 TAC Chapter 115, Vent Gas Controls	§ 115.127(c)(1)(C) § 115.127(c)(1)	A vent gas stream having a concentration of the VOC specified in §115.121(c)(1)(B) and (C) of this title less than 30,000 ppmv is exempt from the requirements of §115.121(c)(1) of this title.	[G]§ 115.125 § 115.126(2) § 115.126(3)(C)	§ 115.126 § 115.126(2) § 115.126(3) § 115.126(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)
PP2-T3	EP	R5121-1	VOC	30 TAC Chapter 115, Vent Gas Controls	§ 115.127(c)(1)(B) § 115.127(c)(1)	A vent gas stream having a combined weight of the VOC or classes of compounds specified in §115.121(c)(1)(B)-(C) of this title equal to or less than 100 lbs in a continuous 24-hour period is exempt from the requirements of §115.121(c)(1) of this title.	[G]§ 115.125 § 115.126(2) § 115.126(3)(B)	§ 115.126 § 115.126(2) § 115.126(3) § 115.126(3)(B)	None
PP2-UNIT	PRO	60DDD-2	VOC/TOC	40 CFR Part 60, Subpart DDD	§ 60.560(g)	Vent streams emitting continuous emissions with uncontrolled annual emissions of < 1.6 Mg/yr (1.76 Tons/yr) or with weight % TOC of < 0.10 % from facilities as specified, exempted from §60.562-1(a)(1).	[G]§ 60.564(d)	§ 60.565(a) § 60.565(a)(10) § 60.565(h)	§ 60.565(a) § 60.565(a)(10) § 60.565(k) § 60.565(k)(6) § 60.565(k)(7)
PP2-UNIT	PRO	60DDD-2	VOC/TOC	40 CFR Part 60, Subpart DDD	§ 60.562-1(a)(2)	Each vent stream that emits intermittent emissions as defined in §60.560-1(a)(1) shall be controlled as specified; prior to control modification/reconstruction/r eplacement, the vent stream is exempted.	None	None	None
PP2-UNIT	PRO	60DDD-3	VOC/TOC	40 CFR Part 60, Subpart DDD	§ 60.560(g)	Vent streams emitting continuous emissions with uncontrolled annual emissions of < 1.6 Mg/yr (1.76 Tons/yr) or with weight % TOC of < 0.10 % from facilities as specified, exempted from §60.562-1(a)(1).	[G]§ 60.564(d)	§ 60.565(a) § 60.565(a)(10) § 60.565(h)	§ 60.565(a) § 60.565(a)(10) § 60.565(k) § 60.565(k)(6) § 60.565(k)(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)
PP2-UNIT	PRO	60DDD-3	VOC/TOC	40 CFR Part 60, Subpart DDD	§ 60.562-1(a)(2)	Each vent stream that emits intermittent emissions as defined in §60.560-1(a)(1) shall be controlled as specified; prior to control modification/reconstruction/replacement, the vent stream is exempted.	None	None	None
PP2-UNIT	PRO	60DDD-3a	VOC/TOC	40 CFR Part 60, Subpart DDD	§ 60.562-1(a)(2)	Each vent stream that emits intermittent emissions as defined in §60.560-1(a)(1) shall be controlled as specified; prior to control modification/reconstruction/replacement, the vent stream is exempted.	None	None	None
PP2-UNIT	PRO	60DDD-3a	VOC/TOC	40 CFR Part 60, Subpart DDD	§ 60.560(g)	Vent streams emitting continuous emissions with uncontrolled annual emissions of < 1.6 Mg/yr (1.76 Tons/yr) or with weight % TOC of < 0.10 % from facilities as specified, exempted from §60.562-1(a)(1).	[G]§ 60.564(d)	§ 60.565(a) § 60.565(a)(10) § 60.565(h)	§ 60.565(a) § 60.565(a)(10) § 60.565(k) § 60.565(k)(6) § 60.565(k)(7)
PP2-UNIT	PRO	60DDD-3b	VOC/TOC	40 CFR Part 60, Subpart DDD	§ 60.560(g)	Vent streams emitting continuous emissions with uncontrolled annual emissions of < 1.6 Mg/yr (1.76 Tons/yr) or with weight % TOC of < 0.10 % from facilities as specified, exempted from §60.562-1(a)(1).	[G]§ 60.564(d)	§ 60.565(a) § 60.565(a)(10) § 60.565(h)	§ 60.565(a) § 60.565(a)(10) § 60.565(k) § 60.565(k)(6) § 60.565(k)(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)
PP2-UNIT	PRO	60DDD-3b	VOC/TOC	40 CFR Part 60, Subpart DDD	§ 60.562-1(a)(2)	Each vent stream that emits intermittent emissions as defined in §60.560-1(a)(1) shall be controlled as specified; prior to control modification/reconstruction/ replacement, the vent stream is exempted.	None	None	None
PRU UNIT	EU	63FFFF-1	112(B) HAPS	40 CFR Part 63, Subpart FFFF	§ 63.2440(a) § 63.2450(a) § 63.2450(l)	This subpart applies to each miscellaneous organic chemical manufacturing affected source.	§ 63.2445(d)	§ 63.2525 § 63.2525(a) [G]§ 63.2525(b) § 63.2525(c) § 63.2525(f) § 63.2525(j)	§ 63.2435(d) § 63.2445(c) § 63.2450(g)(5) § 63.2450(m) § 63.2450(m)(1) § 63.2450(m)(2) § 63.2515(a) § 63.2515(b)(1) § 63.2515(c) § 63.2520(a) [G]§ 63.2520(b) [G]§ 63.2520(c) [G]§ 63.2520(d) § 63.2520(e) § 63.2520(e)(1) [G]§ 63.2520(e)(10) § 63.2520(e)(2) § 63.2520(e)(3) § 63.2520(e)(4) § 63.2520(e)(5) § 63.2520(e)(5)(i) [G]§ 63.2520(e)(5)(ii) [G]§ 63.2520(e)(5)(iii) § 63.2520(e)(6) § 63.2520(e)(7) § 63.2520(e)(9)

Additional Monitoring Requirements

Compliance Assurance Monitoring Summary 74

Periodic Monitoring Summary 76

CAM Summary

Unit/Group/Process Information	
ID No.: 1018	
Control Device ID No.: 1018	Control Device Type: Flare
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 115, Vent Gas Controls	SOP Index No.: R5121-2
Pollutant: VOC	Main Standard: § 115.122(c)(1)
Monitoring Information	
Indicator: Pilot Flame	
Minimum Frequency: Continuous	
Averaging Period: N/A	
Deviation Limit: No pilot flame	
<p>CAM Text: Monitor the presence of a flare pilot flame using a thermocouple or other equivalent device to detect the presence of a flame or using an alarm that uses a thermocouple or other equivalent device to detect the absence of a flame. Maintain records of alarm events and duration of alarm events. Each monitoring device shall be accurate to within manufacturer's recommendations. Each monitoring device shall be calibrated at a frequency in accordance with the manufacturer's specifications or other written procedures that provide an adequate assurance that the device is calibrated accurately.</p> <p>Note: This CAM summary applies to the process vents at Polypropylene Plant routing to Flare 1018 (EPN 1018) and not the flare itself. Since Flare 1018 is located at the Olefins Plant at Formosa Plastics, the monitoring requirements in this CAM summary are listed in this permit as a reference only. Actual monitoring of the pilot flame will be conducted in the Olefins Plant.</p>	

CAM Summary

Unit/Group/Process Information	
ID No.: 1067	
Control Device ID No.: 1067	Control Device Type: Flare
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 115, Vent Gas Controls	SOP Index No.: R5121-2
Pollutant: VOC	Main Standard: § 115.122(c)(1)
Monitoring Information	
Indicator: Pilot Flame	
Minimum Frequency: Continuous	
Averaging Period: N/A	
Deviation Limit: No pilot flame	
<p>CAM Text: Monitor the presence of a flare pilot flame using a thermocouple or other equivalent device to detect the presence of a flame or using an alarm that uses a thermocouple or other equivalent device to detect the absence of a flame. Maintain records of alarm events and duration of alarm events. Each monitoring device shall be accurate to within manufacturer's recommendations. Each monitoring device shall be calibrated at a frequency in accordance with the manufacturer's specifications or other written procedures that provide an adequate assurance that the device is calibrated accurately.</p> <p>This CAM summary applies to the process vents at Polypropylene Plant routing to Flare 1018 (EPN 1018) and not the flare itself. Since Flare 1018 is located at the Olefins Plant at Formosa Plastics, the monitoring requirements in this CAM summary are listed in this permit as a reference only. Actual monitoring of the pilot flame will be conducted in the Olefins Plant.</p>	

Periodic Monitoring Summary

Unit/Group/Process Information	
ID No.: B-620	
Control Device ID No.: N/A	Control Device Type: N/A
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 115, Water Separation	SOP Index No.: R5131-1
Pollutant: VOC	Main Standard: § 115.132(c)(3)
Monitoring Information	
Indicator: VOC Concentration	
Minimum Frequency: Quarterly	
Averaging Period: N/A	
Deviation Limit: For a potential leak interface, the maximum deviation limit shall be 500 ppmv. For a seal around a shaft that passes through a cover opening, the maximum deviation limit shall be 10000 ppmv.	
<p>Periodic Monitoring Text: Measure and record the VOC concentration using a portable analyzer to monitor VOC concentration around the immediate area of the compartment in accordance with 40 CFR Part 60, Appendix A, Method 21. Each potential leak interface (i.e., a location where organic vapor leakage could occur) on the cover and associated closure devices shall be checked. Potential leak interfaces that are associated with covers and closure devices include, but are not limited to: the interface of the cover and its foundation mounting; the periphery of any opening on the cover and its associated closure device; and the sealing seat interface on a spring-loaded pressure relief valve. The owner or operator may choose to adjust the detection instrument readings for the background organic concentration level.</p> <p>The monitoring instrumentation shall be maintained and operated in accordance with manufacturer's specifications or other written procedures.</p> <p>Any monitoring data greater than the maximum VOC limit indicated in the Deviation Limit above shall be considered and reported as a deviation as required by § 122.145(2).</p>	

Periodic Monitoring Summary

Unit/Group/Process Information	
ID No.: D-107	
Control Device ID No.: N/A	Control Device Type: N/A
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 115, Water Separation	SOP Index No.: R5131-1
Pollutant: VOC	Main Standard: § 115.132(c)(3)
Monitoring Information	
Indicator: VOC Concentration	
Minimum Frequency: Quarterly	
Averaging Period: N/A	
Deviation Limit: For a potential leak interface, the maximum deviation limit shall be 500 ppmv. For a seal around a shaft that passes through a cover opening, the maximum deviation limit shall be 10000 ppmv.	
<p>Periodic Monitoring Text: Measure and record the VOC concentration using a portable analyzer to monitor VOC concentration around the immediate area of the compartment in accordance with 40 CFR Part 60, Appendix A, Method 21. Each potential leak interface (i.e., a location where organic vapor leakage could occur) on the cover and associated closure devices shall be checked. Potential leak interfaces that are associated with covers and closure devices include, but are not limited to: the interface of the cover and its foundation mounting; the periphery of any opening on the cover and its associated closure device; and the sealing seat interface on a spring-loaded pressure relief valve. The owner or operator may choose to adjust the detection instrument readings for the background organic concentration level.</p> <p>The monitoring instrumentation shall be maintained and operated in accordance with manufacturer's specifications or other written procedures.</p> <p>Any monitoring data greater than the maximum VOC limit indicated in the Deviation Limit above shall be considered and reported as a deviation as required by § 122.145(2).</p>	

Periodic Monitoring Summary

Unit/Group/Process Information	
ID No.: D-108	
Control Device ID No.: N/A	Control Device Type: N/A
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 115, Water Separation	SOP Index No.: R5131-1
Pollutant: VOC	Main Standard: § 115.132(c)(3)
Monitoring Information	
Indicator: VOC Concentration	
Minimum Frequency: Quarterly	
Averaging Period: N/A	
Deviation Limit: For a potential leak interface, the maximum deviation limit shall be 500 ppmv. For a seal around a shaft that passes through a cover opening, the maximum deviation limit shall be 10000 ppmv.	
<p>Periodic Monitoring Text: Measure and record the VOC concentration using a portable analyzer to monitor VOC concentration around the immediate area of the compartment in accordance with 40 CFR Part 60, Appendix A, Method 21. Each potential leak interface (i.e., a location where organic vapor leakage could occur) on the cover and associated closure devices shall be checked. Potential leak interfaces that are associated with covers and closure devices include, but are not limited to: the interface of the cover and its foundation mounting; the periphery of any opening on the cover and its associated closure device; and the sealing seat interface on a spring-loaded pressure relief valve. The owner or operator may choose to adjust the detection instrument readings for the background organic concentration level.</p> <p>The monitoring instrumentation shall be maintained and operated in accordance with manufacturer's specifications or other written procedures.</p> <p>Any monitoring data greater than the maximum VOC limit indicated in the Deviation Limit above shall be considered and reported as a deviation as required by § 122.145(2).</p>	

Periodic Monitoring Summary

Unit/Group/Process Information	
ID No.: PO-CT	
Control Device ID No.: N/A	Control Device Type: N/A
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 111, Visible Emissions	SOP Index No.: R1111-2
Pollutant: Opacity	Main Standard: § 111.111(a)(1)(C)
Monitoring Information	
Indicator: Visible Emissions	
Minimum Frequency: Once per year	
Averaging Period: N/A	
Deviation Limit: Opacity shall not exceed 15% averaged over a six-minute period for any source having a total flow rate greater than or equal to 100,000 acfm.	
<p>Periodic Monitoring Text: Visible emissions observations shall be made and recorded. Note that to properly determine the presence of visible emissions, all sources must be in clear view of the observer. The observer shall be at least 15 feet, but not more than 0.25 miles, away from the emission source during the observation. The observer shall select a position where the sun is not directly in the observer's eyes. If the observations cannot be conducted due to weather conditions, the date, time, and specific weather conditions shall be recorded. When condensed water vapor is present within the plume, as it emerges from the emissions outlet, observations must be made beyond the point in the plume at which condensed water vapor is no longer visible. When water vapor within the plume condenses and becomes visible at a distance from the emissions outlet, the observation shall be evaluated at the outlet prior to condensation of water vapor.</p> <p>If visible emissions are observed, the permit holder shall report a deviation. As an alternative, the permit holder may determine the opacity consistent with Test Method 9, as soon as practicable, but no later than 24 hours after observing visible emissions. If the result of the Test Method 9 is opacity above the corresponding opacity limit, the permit holder shall report a deviation.</p>	

Periodic Monitoring Summary

Unit/Group/Process Information	
ID No.: PP1-CT	
Control Device ID No.: N/A	Control Device Type: N/A
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 111, Visible Emissions	SOP Index No.: R1111-2
Pollutant: Opacity	Main Standard: § 111.111(a)(1)(C)
Monitoring Information	
Indicator: Visible Emissions	
Minimum Frequency: Once per year	
Averaging Period: N/A	
Deviation Limit: Opacity shall not exceed 15% averaged over a six-minute period for any source having a total flow rate greater than or equal to 100,000 acfm.	
<p>Periodic Monitoring Text: Visible emissions observations shall be made and recorded. Note that to properly determine the presence of visible emissions, all sources must be in clear view of the observer. The observer shall be at least 15 feet, but not more than 0.25 miles, away from the emission source during the observation. The observer shall select a position where the sun is not directly in the observer's eyes. If the observations cannot be conducted due to weather conditions, the date, time, and specific weather conditions shall be recorded. When condensed water vapor is present within the plume, as it emerges from the emissions outlet, observations must be made beyond the point in the plume at which condensed water vapor is no longer visible. When water vapor within the plume condenses and becomes visible at a distance from the emissions outlet, the observation shall be evaluated at the outlet prior to condensation of water vapor.</p> <p>If visible emissions are observed, the permit holder shall report a deviation. As an alternative, the permit holder may determine the opacity consistent with Test Method 9, as soon as practicable, but no later than 24 hours after observing visible emissions. If the result of the Test Method 9 is opacity above the corresponding opacity limit, the permit holder shall report a deviation.</p>	

Periodic Monitoring Summary

Unit/Group/Process Information	
ID No.: PP2-CT	
Control Device ID No.: N/A	Control Device Type: N/A
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 111, Visible Emissions	SOP Index No.: R1111-2
Pollutant: Opacity	Main Standard: § 111.111(a)(1)(C)
Monitoring Information	
Indicator: Visible Emissions	
Minimum Frequency: Once per year	
Averaging Period: N/A	
Deviation Limit: Opacity shall not exceed 15% averaged over a six-minute period for any source having a total flow rate greater than or equal to 100,000 acfm.	
<p>Periodic Monitoring Text: Visible emissions observations shall be made and recorded. Note that to properly determine the presence of visible emissions, all sources must be in clear view of the observer. The observer shall be at least 15 feet, but not more than 0.25 miles, away from the emission source during the observation. The observer shall select a position where the sun is not directly in the observer's eyes. If the observations cannot be conducted due to weather conditions, the date, time, and specific weather conditions shall be recorded. When condensed water vapor is present within the plume, as it emerges from the emissions outlet, observations must be made beyond the point in the plume at which condensed water vapor is no longer visible. When water vapor within the plume condenses and becomes visible at a distance from the emissions outlet, the observation shall be evaluated at the outlet prior to condensation of water vapor.</p> <p>If visible emissions are observed, the permit holder shall report a deviation. As an alternative, the permit holder may determine the opacity consistent with Test Method 9, as soon as practicable, but no later than 24 hours after observing visible emissions. If the result of the Test Method 9 is opacity above the corresponding opacity limit, the permit holder shall report a deviation.</p>	

Periodic Monitoring Summary

Unit/Group/Process Information	
ID No.: PP2-CT3	
Control Device ID No.: N/A	Control Device Type: N/A
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 111, Visible Emissions	SOP Index No.: R1111-2
Pollutant: Opacity	Main Standard: § 111.111(a)(1)(C)
Monitoring Information	
Indicator: Visible Emissions	
Minimum Frequency: Once per year	
Averaging Period: N/A	
Deviation Limit: Opacity shall not exceed 15% averaged over a six-minute period for any source having a total flow rate greater than or equal to 100,000 acfm.	
<p>Periodic Monitoring Text: Visible emissions observations shall be made and recorded. Note that to properly determine the presence of visible emissions, all sources must be in clear view of the observer. The observer shall be at least 15 feet, but not more than 0.25 miles, away from the emission source during the observation. The observer shall select a position where the sun is not directly in the observer's eyes. If the observations cannot be conducted due to weather conditions, the date, time, and specific weather conditions shall be recorded. When condensed water vapor is present within the plume, as it emerges from the emissions outlet, observations must be made beyond the point in the plume at which condensed water vapor is no longer visible. When water vapor within the plume condenses and becomes visible at a distance from the emissions outlet, the observation shall be evaluated at the outlet prior to condensation of water vapor.</p> <p>If visible emissions are observed, the permit holder shall report a deviation. As an alternative, the permit holder may determine the opacity consistent with Test Method 9, as soon as practicable, but no later than 24 hours after observing visible emissions. If the result of the Test Method 9 is opacity above the corresponding opacity limit, the permit holder shall report a deviation.</p>	

Permit Shield

Permit Shield 84

Permit Shield

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

Unit / Group / Process ID No.	Group / Inclusive Units	Regulation	Basis of Determination
3D-101	N/A	30 TAC Chapter 115, Storage of VOCs	Tank capacity is less than 1,000 gallons.
3D-101	N/A	40 CFR Part 60, Subpart Kb	Tank capacity is less than 19,800 gallons.
3D-102	N/A	30 TAC Chapter 115, Storage of VOCs	Tank capacity is less than 1,000 gallons.
3D-102	N/A	40 CFR Part 60, Subpart Kb	Tank capacity is less than 19,800 gallons
3D-103	N/A	30 TAC Chapter 115, Storage of VOCs	Tank capacity is less than 1,000 gallons.
3D-103	N/A	40 CFR Part 60, Subpart Kb	Tank capacity is less than 19,800 gallons.
3D-109	N/A	30 TAC Chapter 115, Storage of VOCs	Tank capacity is less than 1,000 gallons.
3D-109	N/A	40 CFR Part 60, Subpart Kb	Tank capacity is less than 19,800 gallons.
3D-109	N/A	40 CFR Part 63, Subpart VV	The separator is not subject to another subpart within 40 CFR 60, 61, or 63 that references this subpart for control of air emissions.
B-620	N/A	40 CFR Part 63, Subpart VV	The separator is not subject to another subpart within 40 CFR 60, 61, or 63 that references this subpart for control of air emissions.
D-101	N/A	30 TAC Chapter 115, Storage of VOCs	Tank capacity is less than 1,000 gallons.
D-101	N/A	40 CFR Part 60, Subpart Kb	Tank capacity is less than 19,800 gallons.
D-102	N/A	30 TAC Chapter 115, Storage of VOCs	Tank capacity is less than 1,000 gallons.
D-102	N/A	40 CFR Part 60, Subpart Kb	Tank capacity is less than 19,800 gallons
D-103	N/A	30 TAC Chapter 115, Storage of VOCs	Tank capacity is less than 1,000 gallons.
D-103	N/A	40 CFR Part 60, Subpart Kb	Tank capacity is less than 19,800 gallons.
D-106	N/A	30 TAC Chapter 115, Storage of VOCs	Tank capacity is less than 1,000 gallons.
D-106	N/A	40 CFR Part 60, Subpart Kb	Tank capacity is less than 19,800 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 ID No.	Group / Inclusive Units	Regulation	Basis of Determination
D-107	N/A	40 CFR Part 63, Subpart VV	The separator is not subject to another subpart within 40 CFR 60, 61, or 63 that references this subpart for control of air emissions.
D-108	N/A	40 CFR Part 63, Subpart VV	The separator is not subject to another subpart within 40 CFR 60, 61, or 63 that references this subpart for control of air emissions.
D-910	N/A	40 CFR Part 60, Subpart Kb	Tank capacity is less than 19,800 gallons.
PO-CT	N/A	40 CFR Part 63, Subpart Q	The cooling tower has not operated with chromium-based water treatment chemicals on or after Sept. 8, 1994.
PP1-CT	N/A	40 CFR Part 63, Subpart Q	The cooling tower has not operated with chromium-based water treatment chemicals on or after Sept. 8, 1994.
PP1-FUG	N/A	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	The site is not located in one of the applicable areas.
PP1-FUG	N/A	40 CFR Part 61, Subpart F	This site does not produce ethylene dichloride, vinyl chloride, or one or more polymers containing any fraction of polymerized vinyl chloride.
PP1-FUG	N/A	40 CFR Part 61, Subpart J	This site does not contain any sources in benzene service.
PP1-FUG	N/A	40 CFR Part 61, Subpart V	No sources are operated in VHAP services.
PP1-FUG	N/A	40 CFR Part 63, Subpart H	This site is not a chemical manufacturing process unit that manufactures as a primary product one or more of the chemicals listed in 40 CFR 63, Subpart F.

Permit Shield

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

Unit / Group / Process ID No.	Group / Inclusive Units	Regulation	Basis of Determination
PP1-FUG	N/A	40 CFR Part 63, Subpart I	This site does not produce any of the applicable chemicals listed in 63.190.
PP2-CT	N/A	40 CFR Part 63, Subpart Q	The cooling tower has not operated with chromium-based water treatment chemicals on or after Sept. 8, 1994
PP2-CT3	N/A	40 CFR Part 63, Subpart Q	The cooling tower has not operated with chromium based water treatment chemicals on or after Sept. 8, 1994.
PP2-FUG	N/A	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	The site is not located in one of the areas.
PP2-FUG	N/A	40 CFR Part 61, Subpart F	The site does not produce ethylene dichloride, vinyl chloride, or one or more polymers containing any fraction of polymerized vinyl chloride.
PP2-FUG	N/A	40 CFR Part 61, Subpart J	The site does not contain any source in benzene service.
PP2-FUG	N/A	40 CFR Part 61, Subpart V	No sources are operated in VHAP service.
PP2-FUG	N/A	40 CFR Part 63, Subpart H	The site is not a chemical manufacturing process unit that manufactures as a primary product one or more of the chemicals listed in 40 CFR 63 Subpart F.
PP2-FUG	N/A	40 CFR Part 63, Subpart I	The site does not produce any of the applicable chemicals listed in 63.190.

New Source Review Authorization References

New Source Review Authorization References 88

New Source Review Authorization References by Emission Unit 89

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.: PSDTX1237	Issuance Date: 04/01/2021
PSD Permit No.: PSDTX1240	Issuance Date: 09/23/2019
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.: 19200	Issuance Date: 04/01/2021
Authorization No.: 91780	Issuance Date: 09/23/2019
Permits By Rule (30 TAC Chapter 106) for the Application Area	
Number: 106.261	Version No./Date: 11/01/2003
Number: 106.262	Version No./Date: 11/01/2003
Number: 106.393	Version No./Date: 09/04/2000
Number: 106.395	Version No./Date: 09/04/2000
Number: 106.472	Version No./Date: 09/04/2000
Number: 106.473	Version No./Date: 09/04/2000
Number: 106.511	Version No./Date: 09/04/2000

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**
1018	Olefins 1 Elevated Flare	19200, 91780, PSDTX1237, PSDTX1240
1067	Olefins 2 Elevated Flare	19200, 91780, PSDTX1237, PSDTX1240
1F-405	Vent Bag Filter Train No. 1	91780, PSDTX1240
2F-405	Vent Bag Filter Train No. 2	91780, PSDTX1240
3C-352A/B	Drying Column	91780, PSDTX1240
3D-101	Catalyst Unloading Drum	91780, PSDTX1240
3D-102	Catalyst Feed Drum	91780, PSDTX1240
3D-103	Catalyst Feed Drum	91780, PSDTX1240
3D-109	Catalyst Drum	91780, PSDTX1240
B-231	Co-Catalyst Area Dip Pot	19200, PSDTX1237
B-242	Co-Catalyst Area Dip Pot	19200, PSDTX1237
B-292A	Peroxide Dip Pot	19200, PSDTX1237
B-292B	Peroxide Dip Pot	19200, PSDTX1237
B-406	Catalyst Slurry Prep System Dip Pot	19200, PSDTX1237
B-620	Bottom Phase Separator	19200, PSDTX1237
B615	IPA Unloading	19200, PSDTX1237, 106.473/09/04/2000
B810	Heptane Unloading	19200, PSDTX1237
B820	IPA/Heptane Unloading	19200, PSDTX1237
C-352A/B	Drying Column	19200, PSDTX1237
D-101	Catalyst Unloading Drum	19200, PSDTX1237
D-102	Catalyst Feed Drum	19200, PSDTX1237

New Source Review Authorization References by Emissions Unit

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

Unit/Group/Process ID No.	Emission Unit Name/Description	New Source Review Authorization**
D-103	Catalyst Feed Drum	19200, PSDTX1237
D-106	Hexane Hold Drum	19200, PSDTX1237
D-107	Neutralization Drum	19200, PSDTX1237
D-108	Settle Drum	19200, PSDTX1237
D-407	Peroxide Drum	91780, PSDTX1240
D-910	Hexane Storage Tank	19200, PSDTX1237
F-343	Powder Vent Gas Filter	19200, PSDTX1237
F-346	Additive Feed Conveying Gas Filter	19200, PSDTX1237
F-402	Masterbatch Vent Bag Filter	91780, PSDTX1240
F-443	Powder Vent Gas Filter	19200, PSDTX1237
F-446	Additive Feed Conveying Gas Filter	19200, PSDTX1237
F-543	Powder Vent Gas Filter	19200, PSDTX1237
F-546	Additive Feed Conveying Gas Filter	19200, PSDTX1237
F-743A	Powder Vent Bag Filter	19200, PSDTX1237
F-746	Additive Feed Conveying Gas Filter	19200, PSDTX1237
FTPP2G111	Hexane Cutter Stock Loading	91780, PSDTX1240
PO-CT	Cooling Tower	19200, PSDTX1237
PP1-300	Downstream Pellet Handling Train No.1	19200, PSDTX1237
PP1-400	Downstream Pellet Handling Train No.2	19200, PSDTX1237
PP1-500	Downstream Pellet Handling Train No.3	19200, PSDTX1237
PP1-700	Downstream Pellet Handling Train No.4	19200, PSDTX1237, 106.472/09/04/2000

New Source Review Authorization References by Emissions Unit

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

Unit/Group/Process ID No.	Emission Unit Name/Description	New Source Review Authorization**
PP1-CT	Cooling Tower	19200, PSDTX1237, 106.261/11/01/2003 [173222], 106.262/11/01/2003 [173222]
PP1-FUG	Fugitives, PP-1 Unit	19200, PSDTX1237
PP1-UNIT	Polypropylene 1 Unit	19200, PSDTX1237
PP2-3D407	Peroxide Dip Pot	91780, PSDTX1240
PP2-3F402	Masterbatch Vent Bag Filter	91780, PSDTX1240
PP2-3F405	Vent Bag Filter	91780, PSDTX1240
PP2-CT	Cooling Tower	91780, PSDTX1240, 106.262/11/01/2003 [173194]
PP2-CT3	PP2 Train 3 Cooling Tower	91780, PSDTX1240
PP2-FUG	Fugitives, PP-2 Unit	91780, PSDTX1240, 106.261/11/01/2003 [155332]
PP2-T1	Downstream Pellet Handling Train No.1	91780, PSDTX1240
PP2-T2	Downstream Pellet Handling Train No.2	91780, PSDTX1240
PP2-T3	Train 3 - Downstream Pellet Handling	91780, PSDTX1240
PP2-UNIT	Polypropylene 2 Unit	91780, PSDTX1240
PRU UNIT	Propylene Recovery Unit	19200, PSDTX1237

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

Alternative Requirement

Alternative Requirement..... 93

Bryan W. Shaw, Ph.D., P.E., *Chairman*
Toby Baker, *Commissioner*
Jon Niermann, *Commissioner*
Richard A. Hyde, P.E., *Executive Director*



TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

December 14, 2016

MR RICK CRABTREE
ASSISTANT GENERAL MANAGER
FORMOSA PLASTICS CORPORATION TEXAS
PO BOX 700
POINT COMFORT TX 77978-0700

Re: Alternative Method of Compliance (AMOC) No. 66
Alternative Monitoring For Cooling Towers
Formosa Point Comfort Plant
Regulated Entity Number: RN100218973
Customer Reference Number: CN600130017
Associated Permit Numbers: 7699, 19166, 19167, 19168, 19198, 19199, 19200,
19201, 20203, 40157, 76044, 76305, 91780, 107518, 107520, 127838, 128752,
HAP10, PSDTX1053, PSDTX1058, PSDTX1222, PSDTX1224, PSDTX1226,
PSDTX1232, PSDTX1234, PSDTX1237, PSDTX1238, PSDTX1240, PSDTX1383,
PSDTX1384, PSDTX226M7, PSDTX760M9, O1484, O1951, O1953, O1954, O1956,
O1957, O1958, O3409, and O3421

Dear Mr. Crabtree:

This correspondence is in response to Formosa Plastics Corporation, Texas's (Formosa's) request for Alternative Monitoring for all cooling towers (CT) at the Formosa Point Comfort Plant. The AMOC is used to comply with requirements for sampling and analysis of VOCs in cooling tower feed water and makeup water.

We understand that Formosa is requesting clarification and confirmation of the alternative VOC sampling procedure for all authorized CT at the site installed on similar product processes (see Attachment 1). This alternative method was previously approved for Formosa on December 2, 1992, January 11, 1996, and August 1997.

The alternative VOC sampling (referenced in historical correspondence as FPC TX VOC IN WATER AND WASTEWATER) is equivalent to Test Method 8020A. The method is detailed in Attachment 2 and should provide representative concentrations of non-methane hydrocarbons to comply with the above-referenced permits. This alternative method does not apply to any requirements that may in 40 Code of Federal Regulations Part 60, New Source Performance Standards (NSPS), 40 Code of Federal Regulations Part 61, National Emission Standards for Hazardous Air Pollutants (NESHAP), or 40 Code of Federal Regulations Part 63, Maximum Achievable Control Technology (MACT) Standards for Hazardous Air Pollutants.

P.O. Box 13087 · Austin, Texas 78711-3087 · 512-239-1000 · tceq.texas.gov

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December 14, 2016
Page 2
Mr. Rick Crabtree

Re: AMOC #66

The Texas Commission on Environmental Quality (TCEQ) Executive Director has made a final decision to approve your AMOC request. You are reminded that approval of any AMOC shall not abrogate the Executive Director or Administrator's authority under the Act or in any way prohibit later canceling the AMOC.

This AMOC approval may supersede certain requirements or representations in Permit Nos. 7699, 19166, 19167, 19168, 19198, 19199, 19200, 19201, 20203, 40157, 76044, 76305, 91780, 107518, 107520, 127838, 128752, HAP10, PSDTX1053, PSDTX1058, PSDTX1222, PSDTX1224, PSDTX1226, PSDTX1232, PSDTX1234, PSDTX1237, PSDTX1238, PSDTX1240, PSDTX1383, PSDTX1384, PSDTX226M7, and PSDTX760M9. To ensure effective and consistent enforceability, we request that Formosa incorporate this AMOC into the permit(s) through submittal of alteration(s) no later than 90 days after this approval, if not already included.

This approval may also change applicable requirements for the site, which are identified in the site operating permits (SOP) O1484, O1951, O1953, O1954, O1956, O1957, O1958, O3409, and O3421. The TCEQ recommends the submittal of a SOP administrative revision if any changes are necessary. Changes meeting the criteria for an administrative revision can be operated before issuance of the revision if a complete application is submitted to the TCEQ and this information is maintained with the SOP records at the site.

If you need further information or have any questions, please contact Ms. Anne Inman, P.E. at (512) 239-1276 or write to the Texas Commission on Environmental Quality, Office of Air, Air Permits Division, MC-163, P.O. Box 13087, Austin, Texas 78711-3087.

This action is taken under authority delegated by the Executive Director of the TCEQ.

Sincerely,



Michael Wilson, P.E., Director
Air Permits Division
Office of Air
Texas Commission on Environmental Quality

cc: Air Permits Section Chief, New Source Review Section (6PD-R), U.S. Environmental Protection Agency, Region 6, Dallas

Project Number: 255806

December 14, 2016
Page 3
Mr. Rick Crabtree

Re: AMOC #66

bcc: Air Section Manager, Region 14 - Corpus Christi
Rebecca Partee, Manager, Chemical Section, Air Permits Division, OA: MC-163

December 14, 2016
Page 4
Mr. Rick Crabtree

Re: AMOC #66

December 14, 2016
Page 5
Mr. Rick Crabtree

Re: AMOC #66

Attachment 1 - Summary of Cooling Towers and Authorizations				
Permit Nos.	Type of Process	Plant	EPNs	Previous Approval
19166, HAP10, PSDTX760M9, O1951	Inorganic	Utilities Plant	Not identified on MAERT	12/2/1992
19167, O1953	Inorganic	Caustic Chlorine Plant	Not identified on MAERT (shares with EDC-CT)	1/11/1996
76044, PSDTX1053, O3421	Inorganic	Pet Coke / Coal Fired Generation	CT-1 through CT-12	N/A
19168, PSDTX1226, O1958	Organic Olefins	Olefins I Olefins II GHU PPU FRACII	1010 1064 8801U FRACII-CT	N/A
107518, PSDTX1383 SOP PENDING	Organic Olefins	Olefins III PDH	OL3-CTWR PDH-CWTR	N/A
19201, PSDTX1232 O1957	Organic Polyolefins	HDPE I	PO-CT	1/11/1996
40157, PSDTX1222 O1957	Organic Polyolefins	HDPE II	PP2-CT	N/A
20203, PSDTX1224 O1957	Organic Polyolefins	LLDPE	LL-CT	12/2/1992
107520, PSDTX1384 SOP PENDING	Organic Polyolefins	LDPE	LD-CT	N/A
19200, PSDTX1237, O1956	Organic Polyolefins	Polypropylene I Plant (PP I)	PO-CT PP1-CT	1/11/1996
91780, PSDTX1240 O1956	Organic Polyolefins	PP II	PP20CT	N/A
127838 SOP PENDING	Organic Polyolefins	HDPE 3	PE3-12	N/A
19199, PSDTX1238 O1953	Organic Other	Ethylene Dichloride (EDC)	2C-C1 2C-C2 EDC-CT	
7699, PSDTX226M7 O1954	Organic Other	EDC Cracking, VCM, PVC	999 VW-C02 VW-C11	12/2/1992
19198, PSDTX1234 O1484	Organic Other	Ethylene Glycol (EG)	EG-CT	8/1997
128752 SOP PENDING	Organic Other	EG 2	EG2-CT	N/A
76305, PSDTX1058 O3409	Organic Other	Specialty PVC	CT-01	N/A

December 14, 2016
Page 6
Mr. Rick Crabtree

Re: AMOC #66

Mr. Wilson
June 11, 2015

Attachment 2

VOC in Water and Wastewater by TACB-VOC Method Procedure

Re: AMOC #66

LABORATORY STANDARD OPERATING PROCEDURES
VOC IN WATER AND WASTEWATER BY TACB-VOC METHOD

1.0 PURPOSE *

Revision Number 5

In an effort to maintain Quality, Efficiency, Safety, and Environmental Responsibility, this procedure has been developed for L.S. & Q.A. Department Operation.

2.0 SCOPE *

This method is for the analysis of water and wastewater samples containing volatile organic compounds (VOC) and non-methane hydrocarbons (NMHC). It is intended for analyzing treated and untreated water and wastewater streams permitted in PPC expansion complex. This method can be used to quantify volatile organic compounds that have boiling points less than 200°C and are insoluble or slightly soluble in water.

*— pushy all CT
to take account
how to take
(distilling
specimen)*

3.0 ORGANIZATIONS AFFECTED

This procedure affects operation within the L.S. & Q.A. Department and any other department that may request this analysis.

4.0 RESPONSIBILITIES

Personnel	Responsibility
Management/Supervision	Responsible for development and implementation of the procedure, training material, and training of subordinates
QA/QC	Responsible for auditing the performance of the procedure.
Lab Technician	Responsible for knowing and performing analysis per procedure.

5.0 DEFINITIONS

VOC Volatile Organic Compounds (VOC) are organic compounds that have boiling points approximately less than 200°C.

6.0 KEY POINTS

Not applicable.

THIS DOCUMENT UNCONTROLLED WHEN PRINTED

Re: AMOC #66

LABORATORY STANDARD OPERATING PROCEDURES
VOC IN WATER AND WASTEWATER BY TACB-VOC METHOD

	Revision Number
7.0 POLICIES *	
This procedure has been developed to insure adherence to <u>FPC Quality, Environmental, Health and Safety Policies, FPC Corporate Total Quality Management Policies, L.S. & Q.A. Department Quality Management Plan and L.S. & Q.A. Department Quality Assurance Project Plan.</u>	
8.0 GUIDELINES	
<i>Summary</i>	GC FID Volatile organic compounds (VOC) are extracted from sample by purge and trap techniques. Stripped sample components are swept to the gas chromatograph inlet where the individual components are detected using a flame ionization detector. The resulting peaks are summed and quantitated against external calibration curve constructed using benzene as a standard. ?
<i>Interferences</i>	Major contaminate peaks are volatile materials in the laboratory and impurities in the inert purging or carrier gas. A trip blank prepared from organic-free reagent water and carried through the sampling and handling protocol can serve as a check for any possible contamination of sample.
<i>Safety Considerations</i>	The use of proper gloves, safety glasses, and FRC should be exercised when using reagents. Exercise caution when working with glassware. Wipe any spills, clean area immediately and dispose of properly. Avoid skin or eye contact, inhalation or ingestion. Do not operate instrument without all protective equipment in place.
<i>Sample Collection and Storage</i>	- Water sample are collected in 40mL vial with a Teflon-lined septum and an open top screw cap. Two vials per sampling event must be collected at a minimum per sample point. The containers must be filled in such manner that no air bubbles pass through the sample as the container is being filled. Should bubbling occur, the sample must be poured out and the vial refilled. Seal the vial so that no air bubbles are entrapped in it. - Due to differing solubility and diffusion properties of gases in liquid matrices at different temperatures, it is possible for the sample to generate some headspace during storage. This headspace will appear in the form of micro-bubbles, and should not invalidate a sample for volatile analysis. - The presence of a macro-bubble, generally indicates either improper sampling technique or a source of gas evolution within the sample. Studies conducted by the USEPA (HMSL-CI, unpublished data) indicate that "pea-sized" bubbles (i.e. diameter < 1/4 in.) did not adversely affect volatiles data. These bubbles were generally encountered in wastewater samples, which are more susceptible to variations in gas solubility than are groundwater samples.

Re: AMOC #66

LABORATORY STANDARD OPERATING PROCEDURES
VOC IN WATER AND WASTEWATER BY TACB-VOC METHOD

Revision Number 5

7.0 POLICIES *

This procedure has been developed to insure adherence to FPC Quality, Environmental, Health and Safety Policies, FPC Corporate Total Quality Management Policies, L.S. & Q.A. Department Quality Management Plan and L.S. & Q.A. Department Quality Assurance Project Plan.

8.0 GUIDELINES

Summary

Volatile organic compounds (VOC) are extracted from sample by purge and trap techniques. Stripped sample components are swept to the gas chromatograph inlet where the individual components are detected using a flame ionization detector. The resultant peaks are summed and quantitated against external calibration curve constructed using benzene as a standard.

Interferences

Major contaminate peaks are volatile materials in the laboratory and impurities in the inert purging or carrier gas. A trip blank prepared from organic-free reagent water and carried through the sampling and handling protocol can serve as a check for any possible contamination of sample.

Safety Considerations

The use of proper gloves, safety glasses, and PRC should be exercised when using reagents. Exercise caution when working with glassware. Wipe any spills, clean area immediately and dispose of properly. Avoid skin or eye contact, inhalation or ingestion. Do not operate instrument without all protective equipment in place.

Sample Collection and Storage

- Water sample are collected in 40mL vial with a Teflon-lined septum and an open top screw cap. Two vials per sampling event must be collected at a minimum per sample point. The containers must be filled in such manner that no air bubbles pass through the sample as the container is being filled. Should bubbling occur, the sample must be poured out and the vial refilled. Seal the vial so that no air bubbles are entrapped in it.
- Due to differing solubility and diffusion properties of gases in liquid matrices at different temperatures, it is possible for the sample to generate some headspace during storage. This headspace will appear in the form of micro-bubbles, and should not invalidate a sample for volatile analysis.
- The presence of a macro-bubble, generally indicates either improper sampling technique or a source of gas evolution within the sample. Studies conducted by the USEPA (RMSL-CI, unpublished data) indicate that "pea-sized" bubbles (i.e. diameter < 1/4 in.) did not adversely affect volatiles data. These bubbles were generally encountered in wastewater samples, which are more susceptible to variations in gas solubility than are groundwater samples.

Re: AMOC #66

LABORATORY STANDARD OPERATING PROCEDURES
VOC IN WATER AND WASTEWATER BY TACB-VOC METHOD

Revision Number 5

QC Requirements

QC	DESCRIPTION	FREQUENCY	CRITERIA	CORRECTIVE ACTION
MB	Method blank; Organic-free reagent water	1/10 sample	< 20 ppb Which is the amount of the lowest std.	Investigate system contamination; correct the problem and reanalyze the samples.
ICV	Initial Calibration verification. Benzene: 100 ppb.	1/10 sample	20% deviation from actual value. (80 ppb-120 ppb)	Check instrument malfunction. Correct the instrument problem and reanalyze. Perform initial calibration after the third failure.

Calculations

Deviation(%)

$$D = \frac{|X - T|}{T} \times 100$$

Where, D = percent deviation
 X = the observed value for the measurement
 T = "actual" value for the measurement

Precision and Accuracy

None

Reporting

1. Analytical reporting limit is 20 ppb (ug/L).
2. All verified results must be entered in LIMS and/or the appropriate non-routine log sheet upon completion.
3. For the purpose of reporting to applicable agencies, preliminary results from LIMS may be used to prevent greater than 48hr delay in reporting time.

Department: L.S. & Q.A.

Effective Date: May 25, 2015

Document Code: FITC4505

File Name: FITC4505_rev5.docx

Re: AMOC #66

LABORATORY STANDARD OPERATING PROCEDURES
VOC IN WATER AND WASTEWATER BY TACB-VOC METHOD

Revision Number 5

9.0 PROCEDURES*

9.1 Standard Preparation

9.1.2 Calibration Standards

Fill 40 mL VOA vials with reagent water, taking care not to trap any air in the vial. Add the Calibration Standard (AS-E0004) to the vial using a clean microsyringe basing on following list to prepare the calibration standards:

	Stock solution
Blank	0.0 uL
20 ppb	0.8 uL
50 ppb	2.0 uL
100 ppb	4.0 uL
250 ppb	10.0 uL
500 ppb	20.0 uL
1000 ppb	40.0 uL

9.1.3 Initial Calibration Verification Standard: Upon opening the certified benzene standard (e.g. M502-01-10X), transfer to a 1 mL reaction vial and cap with a syringe valve. This standard may be good up to 6 months, but should be replaced if ICV fails. Fill a 40 mL VOA vial with Reagent water, taking care not to trap any air in the vial. Add 2.0 uL to the vial using a clean microsyringe for a 100 ppb std.

9.1.4 All standard preparation activities must be logged in the standards logbook.

9.2 Instrument Setup

9.2.1 GC/FID is configured as follows:

Inlet
Mode: split Gas Helium
Heater: 250 °C
Pressure: 6.9 psid
Total Flow: 102 mL/min
Split ratio: 9:1
Split Flow: 90 mL/min

Column
Mode: Const Pressure
Pressure: 6.9 psid
Flow: 10.0 mL/min
Average Velocity: 66 cm/sec.

Department: L.S. & Q.A.

Effective Date: May 28, 2015

Document Code: FITC4505

File Name: FITC4505_rev5.docx

Re: AMOC #66

LABORATORY STANDARD OPERATING PROCEDURES
VOC IN WATER AND WASTEWATER BY TACB-VOC METHOD

Revision Number 5

Oven:
Setpoint: 50 °C
Oven Maximum: 300 °C
Equilibration: 0.5 min

Oven Ramp	°C/min	Next °C	Hold min	Run time
Initial		50	2.00	2.00
Ramp 1	20.00	250	9.00	16.00
Post Run		50	0	16.00

Detector:
Heater: 280 °C
H2 flow: 40.0 mL/min
Air Flow: 450 mL/min
Makeup Flow (He): 25.0 mL/min
Flame: On

9.2.2 Purge-and-Trap (OI 4560):

Purge flow: 35 mL/min
Purge: 1 min at 25 °C
Desorb: 2 min at 180 °C
Bake: 10 min at 185 °C
Transfer line: 100 °C
Valve: 100 °C
Sample size: 5 mL
Drypurge: 1 min

9.3 Re- Calibration

- 9.3.1 Recalibration is recommended once a year or when new ICV fails 20% recovery. Prior to re-calibration, GC and samplers must be baked out. Raise the GC oven temp to 250°C and bake for at least 30 min. It is also necessary to cycle the purge-and-trap through one bake cycle to ensure that there are no contaminants present in the trap. After 30 min lower GC temp to 50°C.
- 9.3.2 Prepare the calibration standards as outlined in 9.1.2 just prior to analysis. Load the standard vials in the correct slots of the autosampler and prepare following re-calibration sequence in the **Method and Run control window** of the Chemstation Software. Start the sequence by following steps from 9.4.4 to 9.4.9.

Re: AMOC #66

LABORATORY STANDARD OPERATING PROCEDURES
 VOC IN WATER AND WASTEWATER BY TACB-VOC METHOD

Revision Number

Re-calibration sequence:

Line	Vial	Sample Name	Method Name	Inj/Vial	Sample Type	Cal Level	Update RF	Update RT
1	1	MB (Blank)	TACB-VOC	1	Sample			
2	1	20 ppb	TACB-VOC	1	Calibration	1	Replace	No Update
3	1	50 ppb	TACB-VOC	1	Calibration	2	Replace	No Update
4	1	100 ppb	TACB-VOC	1	Calibration	3	Replace	Replace
5	1	250 ppb	TACB-VOC	1	Calibration	4	Replace	No Update
6	1	500 ppb	TACB-VOC	1	Calibration	5	Replace	No Update
6	1	1000 ppb	TACB-VOC	1	Calibration	6	Replace	No Update

- 9.3.3 In the data analysis window of the Chemstation Software, load the chromatogram for the blank (reagent water). Check to see that there are no contamination peaks. For some low level analysis, a small peak will show at the beginning of the run. This is due to a pressure change on column when the sampler injects. If a calibration exists, the run should read less than two times the lower analytical limit for the analysis.
- 9.3.4 Open the calibration file and check to see that there are only two significant peaks. The first peak will be the solvent or methanol peak. The peaks should be sharp with minimum tailing. If there are more than two peaks, the calibration stock or reagent water is contaminated. Correct this condition and begin the calibration again.
- 9.3.5 Once the calibration files are integrated, the results must be assembled in a linear calibration curve. Display the calibration curve and check that the fit is at least $R^2 > 0.990$. Calculate a new area reject from the Calibration curve plot: $AREA = \text{number value} \times \text{amount} + 0^2$ (the number value is the slope of the calibration curve. The amount is 20). Enter this new area into the integration events table in the value line for area reject.
- 9.3.6 Calibrations should be set to calculate uncalibrated peaks using compound benzene. The parameters should sum all the individual peak areas of chromatogram.
- 9.4 *Sample Analysis*
- 9.4.1 *Composite sample:* A volumetric composite is performed by combining the chilled (4°C) samples collected during a weeklong sampling event in a chilled jar that is surrounded by ice. This must be performed quickly to prevent loss of volatile component. The sample is mixed and transferred to 40mL VOA.

Department: L.S. & Q.A.

Effective Date: May 25, 2015

Document Code: FTTC4505

File Name: FTTC4505_rev3.docx

Re: AMOC #66

LABORATORY STANDARD OPERATING PROCEDURES
VOC IN WATER AND WASTEWATER BY TACB-VOC METHOD

Revision Number 5

Note: The volumetric composite may not reflect the true emissions over a week long period due to fluctuations in flow rate of the stream to be tested.

- 9.4.2 For grab samples, directly use the vial that the sample was received in.
- 9.4.3 Load the samples in the autosampler racks noting their positions.
- 9.4.4 Bring up the window P & T 6890C (online): Method & Run control by Click Start / Program/HP Chemstation /instrument online if it is not opened on the computer monitor.
- 9.4.5 Click Sequence/Load Sequence to load an existing sequence.
- 9.4.6 Click Sequence/Sequence Parameter to change the Subdirectory to today's date.
- 9.4.7 Click Sequence/Sequence Table to edit the sequence at the data station.
 Enter the sample information in a sequence file located in the data station. Be sure that the vial positions correspond with vial locations and the correct method is chosen for the analysis

Following sequence table is an example:

Line	Vial	Sample Name	Method Name	Inj/Vial	Sample Type
1	1	MB(Blank)	TACB-VOC	1	Sample
2	1	ICV	TACB-VOC	1	Sample
3	1	OL1 CWR 2/5	TACB-VOC	1	Sample
4	1	OL1 CWR 2/5	TACB-VOC	1	Sample
5	1	OL2 CWR 2/08	TACB-VOC	1	Sample
6	1	OL2 CWR 2/08	TACB-VOC	1	Sample
7	1	GHU CWR 2/5	TACB-VOC	1	Sample
8	1	GHU CWR 2/5	TACB-VOC	1	Sample
9	1	T971 2/1-2/7	TACB-VOC	1	Sample
10	1	3T971 2/1-2/7	TACB-VOC	1	Sample
11	1	CWTP 2/1-2/7	TACB-VOC	1	Sample
12	1	LLDPE CWR 2/5	TACB-VOC	1	Sample
13	1	MB	TACB-VOC	1	Sample
14	1	ICV	TACB-VOC	1	Sample
15	1	Sample A	TACB-VOC	1	Sample
16	1	Sample B	TACB-VOC	1	Sample

Note: Method blank and calibration verification need be run every 10 samples.

- 9.4.8 Press Run Sequence button. Now system is ready and waiting for Purge-and-trap device to start.
- 9.4.9 Purge-and-trap device preparation:
 - (1) Push SPL Button on the front panel, the window will show: L551 start: end;
 - (2) Set the start and end positions that need match with actual sample position and run sequence, use Arrow ON button and OFF button to switch between start and end, then use keypad to key in position number.

Re: AMOC #66

LABORATORY STANDARD OPERATING PROCEDURES

Page 9 of 14

VOC IN WATER AND WASTEWATER BY TACB-VOC METHOD

(3) Press Enter key, then press Clear button, then press Start button to run the sequence. Revision Number

9.4.10 Once data have been generated, check that the chromatograms have been integrated correctly. Samples that are 10 % out of the analytical range for the determination must be diluted and re-analyzed using the appropriate methodology (See table 1).

10.0 TRAINING REQUIREMENTS *

Personnel who perform this analysis will be required to complete the following training requirements:

Period	Requirement
Initial	SOP Training, Test, and Job Qualification
Annual Refresher and Procedure Revision	SOP Training and Test
Audit Finding	SOP Training, Test, and Job Qualification

11.0 FLOWCHART

Not applicable

12.0 REFERENCES

1. "Guidelines for preparation of Policies, Guidelines, and Procedures," FPC TQM Manual.
2. Test Method for Evaluating Solid Waste (SW-846), "Determinative Chromatographic Separations," Revision 3, March 2003, Method 8000C.
3. Test Method for Evaluating Solid Waste (SW-846), "Purge and Trap for Aqueous Samples," Revision 3, May 2003, Method 8030C.
4. Test Method for Evaluating Solid Waste (SW-846), "Organic Analytes," Revision 4, February 2003, Chapter 1006, Sec. 4.1, (for sample storage)

13.0 RECORD RETENTION PERIOD

Records produced using this procedure will be retained for a period of not less than 5 years.

14.0 ATTACHMENTS

Table 1
Figure 1: Chromatogram of Calibration Standard and sample run
Attachment 1: TNRC Approval Letter

Developed by: L.S. & Q.A.

Effective Date: May 25, 2015

Document Code: FTTC4505

File Name: FTTC4505_rev5.docx

Re: AMOC #66

LABORATORY STANDARD OPERATING PROCEDURES
VOC IN WATER AND WASTEWATER BY TACB-VOC METHOD

Revision Number 5

TABLE 1. Examples of sample dilution

Add the required amount of high concentration sample to a 50 mL volumetric flask, and then bring level to exact 50 mL with organic-free reagent water.

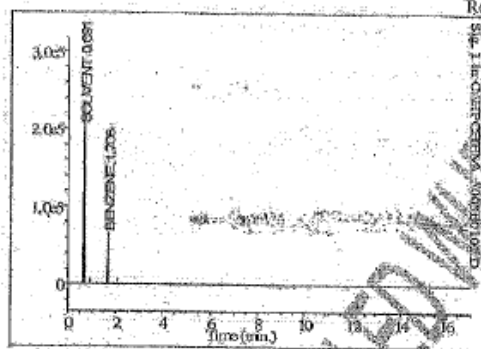
Dilution factor	High concentration sample	Total volume
30000	1.67 μ L	50 mL
20000	2.5 μ L	50 mL
10000	5 μ L	50 mL
5000	10 μ L	50 mL
4000	12.5 μ L	50 mL
3000	16.7 μ L	50 mL
2000	25 μ L	50 mL
1000	50 μ L	50 mL
500	100 μ L	50 mL
400	125 μ L	50 mL
300	167 μ L	50 mL
200	250 μ L	50 mL
100	500 μ L	50 mL
80	558 μ L	50 mL
80	625 μ L	50 mL
70	714 μ L	50 mL
60	833 μ L	50 mL
50	1 mL	50 mL
40	1.25 mL	50 mL
30	1.67 mL	50 mL
20	2.5 mL	50 mL
10	5 mL	50 mL
5	10 mL	50 mL
2	25 mL	50 mL

Figure 1: Sample Chromatogram
Calibration Standard Run

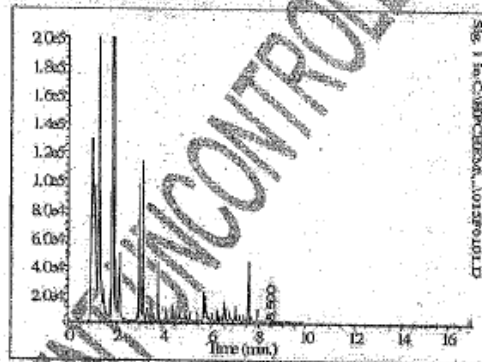
December 14, 2016
Page 17
Mr. Rick Crabtree

Re: AMOC #66

LABORATORY STANDARD OPERATING PROCEDURES
VOC IN WATER AND WASTEWATER BY TACB-VOC METHOD



Sample Run



Attachment 1: TNRCC Approval Letter

The next page is a copy of the approval letter from the TNRCC.

Appendix A

Acronym List 111

Acronym List

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

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

Appendix B

Major NSR Summary Table 113

Major NSR Summary Table

Permit Numbers: 19200 and PSDTX1237					Issuance Date: April 1, 2021		
Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates		Monitoring and Testing Requirements	Recordkeeping Requirements	Reporting Requirements
			lb/hr	TPY (4)	Special Condition/Application Information	Special Condition/Application Information	Special Condition/Application Information
1018/1067	Olefins I and II Flares (6)	CO	15.40	42.79	3, 6, 10, 11, 15, 16, 17, 18, 22, 23	3, 5, 6, 10, 11, 14, 17, 18, 22, 23	3, 10, 17
		NO _x	3.02	8.40			
		SO ₂	0.01	0.06			
		VOC	12.47	18.48			
B-242	Co-Catalyst Area Dip Pot	VOC	0.03	0.01	3	3	3
B-292A	Peroxide Dip Pot	VOC	0.05	0.01	3	3	3
B-292B	Peroxide Dip Pot	VOC	0.05	0.01	3	3	3
B-360	Pellet Buffer Vessel	PM	0.01	0.06	4	4	4
		PM ₁₀	0.01	0.01			
		PM _{2.5}	0.01	0.01			
B-406	Catalyst Slurry Prep System Dip Pot	VOC	0.05	0.01	3	3	3
B-460	Pellet Buffer Vessel	PM	0.01	0.06	4	4	4
		PM ₁₀	0.01	0.01			
		PM _{2.5}	0.01	0.01			

Major NSR Summary Table

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Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates		Monitoring and Testing Requirements	Recordkeeping Requirements	Reporting Requirements
			lb/hr	TPY (4)	Special Condition/Application Information	Special Condition/Application Information	Special Condition/Application Information
B-560	Pellet Buffer Vessel	PM	0.01	0.06	4	4	4
		PM ₁₀	0.01	0.01			
		PM _{2.5}	0.01	0.01			
B-760	Pellet Buffer Vessel	PM	0.01	0.06	4	4	4
		PM ₁₀	0.01	0.01			
		PM _{2.5}	0.01	0.01			
F-343	Powder Vent Gas Filter	VOC	0.01	0.01	4	4	4
		PM	0.04	0.06			
		PM ₁₀	0.01	0.01			
		PM _{2.5}	0.01	0.01			
F-346	Additive Feed Conveying Gas Filter	VOC	0.01	0.01	4	4	4
		PM	0.02	0.01			
		PM ₁₀	0.01	0.01			
		PM _{2.5}	0.01	0.01			
F-367	Pellet Water Pre-	PM	0.03	0.14	4	4	4

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			lb/hr	TPY (4)	Special Condition/Application Information	Special Condition/Application Information	Special Condition/Application Information
	separator Sieve	PM ₁₀	0.01	0.03			
		PM _{2.5}	0.01	0.02			
F-368	Classifier	PM	0.03	0.14	4	4	4
		PM ₁₀	0.01	0.03			
		PM _{2.5}	0.01	0.02			
F-387A	Silos Cyclone Separator, Train No. 1	PM	0.40	1.06	4	4	4
		PM ₁₀	0.08	0.21			
		PM _{2.5}	0.07	0.19			
F-443	Powder Vent Gas Filter	VOC	0.01	0.01	4	4	4
		PM	0.04	0.06			
		PM ₁₀	0.01	0.01			
		PM _{2.5}	0.01	0.01			
F-446	Additive Feed Conveying Gas Filter	VOC	0.01	0.01	4	4	4
		PM	0.02	0.01			
		PM ₁₀	0.01	0.01			

Major NSR Summary Table

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Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates		Monitoring and Testing Requirements	Recordkeeping Requirements	Reporting Requirements
			lb/hr	TPY (4)	Special Condition/Application Information	Special Condition/Application Information	Special Condition/Application Information
		PM _{2.5}	0.01	0.01			
F-467	Pellet Water Pre-separator Sieve	PM	0.03	0.14	4	4	4
		PM ₁₀	0.01	0.03			
		PM _{2.5}	0.01	0.02			
F-468	Classifier	PM	0.03	0.14	4	4	4
		PM ₁₀	0.01	0.03			
		PM _{2.5}	0.01	0.02			
F-487A	Silos Cyclone Separator, Train No. 2	PM	0.40	1.06	4	4	4
		PM ₁₀	0.08	0.21			
		PM _{2.5}	0.07	0.19			
F-541	500 Line-Off Spec Silo Bag Filter	PM	0.20	0.86	4	4	4
		PM ₁₀	0.04	0.17			
		PM _{2.5}	0.04	0.16			
F-543	Powder Vent Gas Filter	VOC	0.01	0.01	4	4	4
		PM	0.04	0.06			

Major NSR Summary Table

Permit Numbers: 19200 and PSDTX1237					Issuance Date: April 1, 2021		
Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates		Monitoring and Testing Requirements	Recordkeeping Requirements	Reporting Requirements
			lb/hr	TPY (4)	Special Condition/Application Information	Special Condition/Application Information	Special Condition/Application Information
		PM ₁₀	0.01	0.01			
		PM _{2.5}	0.01	0.01			
F-546	Additive Feed Conveying Gas Filter	VOC	0.01	0.01	4	4	4
		PM	0.02	0.01			
		PM ₁₀	0.01	0.01			
		PM _{2.5}	0.01	0.01			
F-567	Pellet Water Pre-separator Sieve	PM	0.03	0.14	4	4	4
		PM ₁₀	0.01	0.03			
		PM _{2.5}	0.01	0.02			
F-568	Classifier	PM	0.03	0.14	4	4	4
		PM ₁₀	0.01	0.03			
		PM _{2.5}	0.01	0.02			
F-575	300/400 Line - Off Spec Silo Bag Filter	PM	0.59	2.29	4	4	4
		PM ₁₀	0.12	0.46			
		PM _{2.5}	0.11	0.41			

Major NSR Summary Table

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Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates		Monitoring and Testing Requirements	Recordkeeping Requirements	Reporting Requirements
			lb/hr	TPY (4)	Special Condition/Application Information	Special Condition/Application Information	Special Condition/Application Information
F-587A	Silos Cyclone Separator, Train No. 3	PM	0.40	1.06	4	4	4
		PM ₁₀	0.08	0.21			
		PM _{2.5}	0.07	0.19			
F-705	Auto Packer Cyclone	PM	0.14	0.59	4	4	4
		PM ₁₀	0.03	0.12			
		PM _{2.5}	0.02	0.11			
F-706A	Truck Silo Cyclone	PM	0.14	0.59	4	4	4
		PM ₁₀	0.03	0.12			
		PM _{2.5}	0.02	0.11			
F-706B	Auto Packer Cyclone	PM	0.16	0.69	4	4	4
		PM ₁₀	0.03	0.14			
		PM _{2.5}	0.03	0.12			
F-711A	Hopper Silo Cyclone, Train No. 1	PM	0.14	0.59	4	4	4
		PM ₁₀	0.03	0.12			
		PM _{2.5}	0.02	0.11			

Major NSR Summary Table

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Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates		Monitoring and Testing Requirements	Recordkeeping Requirements	Reporting Requirements
			lb/hr	TPY (4)	Special Condition/Application Information	Special Condition/Application Information	Special Condition/Application Information
F-711B	PP1 Railcar Vacuum Cleaning System	PM	0.14	0.59	4	4	4
		PM ₁₀	0.03	0.12			
		PM _{2.5}	0.02	0.11			
F-711G	Streamer Remover Bag Filter, Train No. 4	PM	0.40	1.59	4	4	4
		PM ₁₀	0.08	0.32			
		PM _{2.5}	0.07	0.29			
F-741	700 Line Off Spec Silo Bag Filter	PM	0.12	0.48	4	4	4
		PM ₁₀	0.02	0.10			
		PM _{2.5}	0.02	0.09			
F-743	Additive Vent Gas Filter	VOC	0.01	0.01	4	4	4
		PM	0.01	0.01			
		PM ₁₀	0.01	0.01			
		PM _{2.5}	0.01	0.01			
F-743A	Powder Vent Bag Filter	VOC	0.01	0.01	4	4	4
		PM	0.01	0.01			

Major NSR Summary Table

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Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates		Monitoring and Testing Requirements	Recordkeeping Requirements	Reporting Requirements
			lb/hr	TPY (4)	Special Condition/Application Information	Special Condition/Application Information	Special Condition/Application Information
		PM ₁₀	0.01	0.01			
		PM _{2.5}	0.01	0.01			
F-746	Additive Feed Conveying Gas Filter	VOC	0.01	0.01	4	4	4
		PM	0.02	0.01			
		PM ₁₀	0.01	0.01			
		PM _{2.5}	0.01	0.01			
F-747 A	Bag Dumping Unit	PM	0.02	0.01	4	4	4
		PM ₁₀	0.01	0.01			
		PM _{2.5}	0.01	0.01			
F-747 B	Bag Dumping Unit	PM	0.02	0.01	4	4	4
		PM ₁₀	0.01	0.01			
		PM _{2.5}	0.01	0.01			
F-747 C	Bag Dumping Unit	PM	0.02	0.01	4	4	4
		PM ₁₀	0.01	0.01			
		PM _{2.5}	0.01	0.01			

Major NSR Summary Table

Permit Numbers: 19200 and PSDTX1237					Issuance Date: April 1, 2021		
Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates		Monitoring and Testing Requirements	Recordkeeping Requirements	Reporting Requirements
			lb/hr	TPY (4)	Special Condition/Application Information	Special Condition/Application Information	Special Condition/Application Information
F-767	Pellet Water Pre-separator Sieve	PM	0.03	0.14	4	4	4
		PM ₁₀	0.01	0.03			
		PM _{2.5}	0.01	0.02			
F-768	Classifier	PM	0.03	0.14	4	4	4
		PM ₁₀	0.01	0.03			
		PM _{2.5}	0.01	0.02			
F-781A	Product Silo Cyclone Train No. 1	PM	0.38	1.64	4	4	4
		PM ₁₀	0.08	0.33			
		PM _{2.5}	0.07	0.30			
F-781B	Product Silo Cyclone Train No. 2	PM	0.38	1.64	4	4	4
		PM ₁₀	0.08	0.33			
		PM _{2.5}	0.07	0.30			
F-781C	Product Silo Cyclone Train No. 3	PM	0.38	1.64	4	4	4
		PM ₁₀	0.08	0.33			
		PM _{2.5}	0.07	0.30			

Major NSR Summary Table

Permit Numbers: 19200 and PSDTX1237					Issuance Date: April 1, 2021		
Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates		Monitoring and Testing Requirements	Recordkeeping Requirements	Reporting Requirements
			lb/hr	TPY (4)	Special Condition/Application Information	Special Condition/Application Information	Special Condition/Application Information
F-787	Silo Air Filters Train No. 4	PM	0.48	1.87	4	4	4
		PM ₁₀	0.10	0.37			
		PM _{2.5}	0.09	0.34			
F-787A	Silos Cyclone Separator, Train No. 4	PM	0.40	1.06	4	4	4
		PM ₁₀	0.08	0.21			
		PM _{2.5}	0.07	0.19			
F-875	B Train Loading Station Cyclone Separator	PM	0.30	0.61	4	4	4
		PM ₁₀	0.06	0.12			
		PM _{2.5}	0.05	0.11			
F-902	Filter Receiver	PM	0.03	0.07	4	4	4
		PM ₁₀	0.01	0.01			
		PM _{2.5}	0.01	0.01			
F-975	C Train Loading Station Cyclone Separator	PM	0.30	0.61	4	4	4
		PM ₁₀	0.06	0.12			
		PM _{2.5}	0.05	0.11			

Major NSR Summary Table

Permit Numbers: 19200 and PSDTX1237					Issuance Date: April 1, 2021		
Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates		Monitoring and Testing Requirements	Recordkeeping Requirements	Reporting Requirements
			lb/hr	TPY (4)	Special Condition/Application Information	Special Condition/Application Information	Special Condition/Application Information
F-981	Product Silo Air Cyclone Train No. 4	PM	1.01	3.98	4	4	4
		PM ₁₀	0.20	0.80			
		PM _{2.5}	0.18	0.72			
PO-CT	Cooling Tower	VOC	1.32	5.79	12	12	12
		PM	0.86	2.40			
		PM ₁₀	0.20	0.87			
		PM _{2.5}	0.01	0.01			
		Chlorine compounds	0.01	0.01			
PP1-300	Downstream Pellet Handling PP-1, Train No. 1 (7)	VOC	3.30	3.64	3, 13	3, 7, 9, 13	3
PP1-400	Downstream Pellet Handling PP-1, Train No. 2 (8)	VOC	3.46	3.77	3, 13	3, 7, 9, 13	3
PP1-500	Downstream Pellet Handling PP-1, Train No. 3 (9)	VOC	2.87	3.79	3, 13	3, 7, 9, 13	3

Major NSR Summary Table

Permit Numbers: 19200 and PSDTX1237					Issuance Date: April 1, 2021		
Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates		Monitoring and Testing Requirements	Recordkeeping Requirements	Reporting Requirements
			lb/hr	TPY (4)	Special Condition/Application Information	Special Condition/Application Information	Special Condition/Application Information
PP1-700	Downstream Pellet Handling PP-1, Train No. 4 (10)	VOC	1.27	3.55	3, 13	3, 7, 9, 13	3
PP1-CT	Cooling Tower	VOC	0.44	1.93	12	12	12
		PM	0.29	0.80			
		PM ₁₀	0.07	0.29			
		PM _{2.5}	0.01	0.01			
		Chlorine compounds	0.01	0.01			
PP1-FUG	Fugitives PP-1 Unit (5)	VOC	13.19	57.76	3, 10, 11	3, 10, 11	3, 10
		PM	0.05	0.27			
		PM ₁₀	0.05	0.27			
		PM _{2.5}	0.05	0.27			
		Cl ₂	0.01	0.02			
T-367	Dryer Train No. 1	PM	0.33	1.21	4	4	4
		PM ₁₀	0.07	0.24			

Major NSR Summary Table

Permit Numbers: 19200 and PSDTX1237					Issuance Date: April 1, 2021		
Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates		Monitoring and Testing Requirements	Recordkeeping Requirements	Reporting Requirements
			lb/hr	TPY (4)	Special Condition/Application Information	Special Condition/Application Information	Special Condition/Application Information
		PM _{2.5}	0.06	0.22			
T-467	Dryer Train No. 2	PM	0.45	1.89	4	4	4
		PM ₁₀	0.09	0.38			
		PM _{2.5}	0.08	0.34			
T-567	Dryer Train No. 3	PM	0.33	1.21	4	4	4
		PM ₁₀	0.07	0.24			
		PM _{2.5}	0.06	0.22			
T-767	Dryer Train No. 4	PM	0.41	1.76	4	4	4
		PM ₁₀	0.08	0.35			
		PM _{2.5}	0.07	0.32			
Planned Maintenance, Startup and Shutdown (MSS)							
PP1-MAINT	MSS to Atmosphere	VOC	102.27	1.81	14, 15, 16, 17, 18, 22, 23	14,15,16,17,18,22,23	
		PM	3.19	0.42			
		PM ₁₀	3.19	0.42			
		PM _{2.5}	3.19	0.42			

Major NSR Summary Table

Permit Numbers: 19200 and PSDTX1237					Issuance Date: April 1, 2021		
Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates		Monitoring and Testing Requirements	Recordkeeping Requirements	Reporting Requirements
			lb/hr	TPY (4)	Special Condition/Application Information	Special Condition/Application Information	Special Condition/Application Information
1018/1067/PP1-TEMP (11)	Olefins I and II Flares MSS	CO	513.54	26.27	17, 19, 22, 23	17, 19, 22, 23	
		NO _x	71.24	3.55			
		VOC	949.97	39.05			

- (1) Emission point identification - either specific equipment designation or emission point number from plot plan.
- (2) Specific point source name. For fugitive sources, use area name or fugitive source name.
- (3) VOC - volatile organic compounds as defined in Title 30 Texas Administrative Code § 101.1
 NO_x - total oxides of nitrogen
 SO₂ - sulfur dioxide
 PM - total particulate matter, suspended in the atmosphere, including PM₁₀ and PM_{2.5}, as represented
 PM₁₀ - total particulate matter equal to or less than 10 microns in diameter, including PM_{2.5}, as represented
 PM_{2.5} - particulate matter equal to or less than 2.5 microns in diameter
 CO - carbon monoxide
 Cl₂ - chlorine
 Chlorine compounds - hypochlorous acid and hydrogen chloride
- (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) PP1 vents shall all be routed to one flare or the other.
- (7) Total VOC emissions from the following emissions points: B-360, F-367, F-368, F-387A, F-575, F-705, F-706A, F-706B, F-781A, F-711A, F-711G, F-711B, F 975, and T-367.
- (8) Total VOC emissions from the following emissions points: B-460, F-467, F-468, F-487A, F-575, F-705, F-706A, F-706B, F-711A, F-711B, F-711G, F-781B, F 975, and T-467.
- (9) Total VOC emissions from the following emissions points: B-560, F-541, F-567, F-568, F-587A, F-705, F-706A, F-706B, F-711A, F-711B, F-711G, F-781C, F-975, and T-567.
- (10) Total VOC emissions from the following emissions points: B-760, F-705, F-706A, F-706B, F-711A, F-711B, F-711G, F-741, F-767, F-768, F-787, F-787A, F-975, F-981, and T-767.
- (11) The Olefins I and II Flares MSS emissions include emissions from the Olefins I Flare (EPN 1018) Olefins II Flare (EPN 1067) and portable flare (EPN PP1-TEMP).

Major NSR Summary Table

Permit Number 91780 and PSDTX1240					Issuance Date: September 23, 2019		
Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates		Monitoring and Testing Requirements	Recordkeeping Requirements	Reporting Requirements
			lb/hr	TPY (4)	Special Condition/Application Information	Special Condition/Application Information	Special Condition/Application Information
1018/1067	Olefins I and II Flares Elevated Flares (6)	NO _x	2.81	6.11	4, 5, 8, 9, 21, 24, 25, 29, 30, 33, 37, 50, 55, 59	8, 9, 10, 21, 22, 23, 24, 25, 29, 30, 37, 38, 50, 51, 52, 53, 55, 56, 59	4, 5, 21, 30, 33, 50
		CO	14.37	31.27			
		VOC	15.16	10.83			
		SO ₂	0.02	0.05			
1018/1067 / PP2-TEMP	Olefins I and II Flares – MSS Contribution	NO _x	140.22	2.47	22, 23, 24, 26, 29, 30	22, 23, 24, 26, 29, 30	
		CO	899.55	15.80			
		VOC	718.09	22.06			
1018/1067	Olefins I and II Flares Elevated Flares Product Transition	NO _x	13.16	0.75	4, 5, 8, 9, 21, 30, 33, 37, 50, 55	4, 5, 8, 9, 10, 21, 30, 33, 37, 38, 50, 55	4, 5, 21, 30, 33, 50
		CO	81.58	4.64			
		VOC	116.28	6.58			
PP2-FUG	Fugitives, PP-2 Unit (5)	VOC	8.01	35.09	4, 5, 14, 15, 33, 44	4, 5, 14, 15, 33, 44	4, 5, 14, 33
		Cl ₂	0.01	0.05			
Train No. 1 and Train No. 2							
D-407	Peroxide Drum	VOC	0.01	0.01	5	5	
F-400	Vacuum Cleaner Bag	PM	0.03	0.11	6	6	

Major NSR Summary Table

Permit Number 91780 and PSDTX1240					Issuance Date: September 23, 2019		
Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates		Monitoring and Testing Requirements	Recordkeeping Requirements	Reporting Requirements
			lb/hr	TPY (4)	Special Condition/Application Information	Special Condition/Application Information	Special Condition/Application Information
	Filter	PM ₁₀	0.03	0.11			
		PM _{2.5}	0.03	0.11			
F-402	Masterbatch Vent Bag Filter	PM	0.02	0.09	6	6	
		PM ₁₀	0.02	0.09			
		PM _{2.5}	0.02	0.09			
		VOC	0.02	0.06			
F-403	Off Pellet Bag Filter	PM	0.49	1.95	6	6	
		PM ₁₀	0.49	1.95			
		PM _{2.5}	0.49	1.95			
F-987	Railcar Vacuum Cleaning System	PM	0.02	0.08	6	6	
		PM ₁₀	0.02	0.08			
		PM _{2.5}	0.02	0.08			
PP2-CT	Cooling Tower	VOC	1.32	5.77	5, 16, 17	5, 16, 17	5, 16
		PM	1.09	4.79			
		PM ₁₀	0.40	1.74			

Major NSR Summary Table

Permit Number 91780 and PSDTX1240					Issuance Date: September 23, 2019		
Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates		Monitoring and Testing Requirements	Recordkeeping Requirements	Reporting Requirements
			lb/hr	TPY (4)	Special Condition/Application Information	Special Condition/Application Information	Special Condition/Application Information
		PM _{2.5}	0.01	0.01			
		Chlorine Compounds	<0.01	<0.01			
PP2-T1	Downstream Pellet Handling PP-2, Train No. 1 (7)	VOC	6.37	5.60	5, 13, 20	5, 11, 13, 20	5
PP2-T2	Downstream Pellet Handling PP-2, Train No. 2 (8)	VOC	6.37	5.60	5, 13, 20	5, 11, 13, 20	5
1F-404	Additive Hopper Vent Bag Filters	PM	0.02	0.02	6	6	6
		PM ₁₀	0.02	0.02			
		PM _{2.5}	0.02	0.02			
1F-405	Vent Bag Filter, Train No. 1	PM	0.12	0.48	6	6	
		PM ₁₀	0.12	0.48			
		PM _{2.5}	0.12	0.48			
		VOC	0.74	3.23			
1F-406B	Vent Hopper Sock, Train No. 1	PM	0.01	0.04	6	6	
		PM ₁₀	0.01	0.04			

Major NSR Summary Table

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Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates		Monitoring and Testing Requirements	Recordkeeping Requirements	Reporting Requirements
			lb/hr	TPY (4)	Special Condition/Application Information	Special Condition/Application Information	Special Condition/Application Information
		PM _{2.5}	0.01	0.04			
1F-501	Blending Silos Bag Filter, Train No. 1	PM	0.49	1.95	6	6	
		PM ₁₀	0.49	1.95			
		PM _{2.5}	0.49	1.95			
1F-982	Elutriator Bag Filter, Train No. 1	PM	0.98	3.89	6	6	
		PM ₁₀	0.98	3.89			
		PM _{2.5}	0.98	3.89			
1F-985	Railcar Bag Filter Train No. 1	PM	0.49	1.95	6	6	
		PM ₁₀	0.49	1.95			
		PM _{2.5}	0.49	1.95			
1S-404	Dryer Train No. 1	PM	0.51	1.99	6	6	
		PM ₁₀	0.51	1.99			
		PM _{2.5}	0.51	1.99			
1S-405	Classifier	PM	0.04	0.18	6	6	
		PM ₁₀	0.04	0.18			

Major NSR Summary Table

Permit Number 91780 and PSDTX1240					Issuance Date: September 23, 2019		
Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates		Monitoring and Testing Requirements	Recordkeeping Requirements	Reporting Requirements
			lb/hr	TPY (4)	Special Condition/Application Information	Special Condition/Application Information	Special Condition/Application Information
		PM _{2.5}	0.04	0.18			
2F-405	Vent Bag Filter, Train No. 2	PM	0.12	0.48	6	6	
		PM ₁₀	0.12	0.48			
		PM _{2.5}	0.12	0.48			
		VOC	0.74	3.23			
2F-406B	Vent Hopper Sock	PM	0.01	0.04	6	6	
		PM ₁₀	0.01	0.04			
		PM _{2.5}	0.01	0.04			
2F-501	Blending Silos Bag Filter, Train No. 2	PM	0.49	1.95	6	6	
		PM ₁₀	0.49	1.95			
		PM _{2.5}	0.49	1.95			
2F-982	Elutriator Bag Filter, Train No. 2	PM	0.98	3.89	6	6	
		PM ₁₀	0.98	3.89			
		PM _{2.5}	0.98	3.89			

Major NSR Summary Table

Permit Number 91780 and PSDTX1240					Issuance Date: September 23, 2019		
Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates		Monitoring and Testing Requirements	Recordkeeping Requirements	Reporting Requirements
			lb/hr	TPY (4)	Special Condition/Application Information	Special Condition/Application Information	Special Condition/Application Information
2F-985	Railcar Bag Filter Train No. 2	PM	0.49	1.95	6	6	
		PM ₁₀	0.49	1.95			
		PM _{2.5}	0.49	1.95			
2S-404	Dryer Train No. 2	PM	0.51	1.99	6	6	
		PM ₁₀	0.51	1.99			
		PM _{2.5}	0.51	1.99			
2S-405	Classifier	PM	0.04	0.18	6	6	
		PM ₁₀	0.04	0.18			
		PM _{2.5}	0.04	0.18			
Train No. 3							
PP2-3F405	Vent Bag Filter	PM	0.16	0.63	33, 35, 48	33, 35, 48	33, 48
		PM ₁₀	0.03	0.13			
		PM _{2.5}	0.01	0.05			
		VOC	0.61	2.43			

Major NSR Summary Table

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Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates		Monitoring and Testing Requirements	Recordkeeping Requirements	Reporting Requirements
			lb/hr	TPY (4)	Special Condition/Application Information	Special Condition/Application Information	Special Condition/Application Information
PP2-3F406B	Vent Hopper Sock	PM	0.01	0.04	35, 48	35, 48	48
		PM ₁₀	<0.01	<0.01			
		PM _{2.5}	<0.01	<0.01			
PP2-3F982	Elutriator Bag Filter	PM	1.30	5.16	35, 48	35, 48	48
		PM ₁₀	0.26	1.03			
		PM _{2.5}	0.10	0.41			
PP2-3F985	Railcar Bag Filter	PM	0.71	2.83	35, 48	35, 48	48
		PM ₁₀	0.14	0.57			
		PM _{2.5}	0.06	0.23			
PP2-3F987	Railcar Vacuum	PM	0.02	0.08	35, 48	35, 48	48
		PM ₁₀	<0.01	0.02			
		PM _{2.5}	<0.01	0.01			
PP2-3S404	Dryer Train No. 3	PM	0.67	2.64	35	35	
		PM ₁₀	0.13	0.53			

Major NSR Summary Table

Permit Number 91780 and PSDTX1240					Issuance Date: September 23, 2019		
Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates		Monitoring and Testing Requirements	Recordkeeping Requirements	Reporting Requirements
			lb/hr	TPY (4)	Special Condition/Application Information	Special Condition/Application Information	Special Condition/Application Information
		PM _{2.5}	0.05	0.21			
PP2-3S405	Classifier	PM	0.01	0.05	35	35	
		PM ₁₀	<0.01	0.01			
		PM _{2.5}	<0.01	<0.01			
PP2-3F501	Silo Bag Filter	PM	0.70	2.78	35, 48	35, 48	48
		PM ₁₀	0.14	0.56			
		PM _{2.5}	0.06	0.22			
PP2-3F400	Vacuum Cleaner Bag Filter	PM	0.03	0.11	35, 48	35, 48	48
		PM ₁₀	0.01	0.02			
		PM _{2.5}	<0.01	0.01			
PP2-3F402	Masterbatch Vent Bag Filter	PM	0.02	0.09	33, 35, 48	33, 35, 48	33, 48
		PM ₁₀	<0.01	0.02			
		PM _{2.5}	<0.01	0.01			
		VOC	0.02	0.08			
PP2-3F403	Off Pellet Vent Bag Filter	PM	0.49	1.94	35, 48	35, 48	48

Major NSR Summary Table

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Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates		Monitoring and Testing Requirements	Recordkeeping Requirements	Reporting Requirements
			lb/hr	TPY (4)	Special Condition/Application Information	Special Condition/Application Information	Special Condition/Application Information
		PM ₁₀	0.10	0.39			
		PM _{2.5}	0.04	0.15			
PP2-CT3	PP2 Train 3 Cooling Tower	Chlorine Compounds	<0.01	<0.01	34, 45, 46	34, 45, 46	34
		PM	1.25	5.46			
		PM ₁₀	0.45	1.98			
		PM _{2.5}	< 0.01	0.01			
		VOC	1.50	6.58			
PP2-T3	Train 3 - Downstream Pellet Handling (9)	VOC	8.75	6.90	33, 34, 49	33, 34, 41, 49	33, 34
PP2-3D407	Peroxide Dip Pot	VOC	<0.01	<0.01	33, 34, 42, 54	33, 34, 42, 54	33, 34
Maintenance, Startup, and Shutdown (MSS) – Train Nos. 1, 2, and 3							
PP2-MAINT	MSS to Atmosphere	VOC	202.88	3.61	24, 25, 29, 52, 53, 55, 59	22, 23, 24, 25, 29, 51, 52, 53, 55, 56, 59	
		PM	3.94	0.24			
		PM ₁₀	3.94	0.24			

Major NSR Summary Table

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Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates		Monitoring and Testing Requirements	Recordkeeping Requirements	Reporting Requirements
			lb/hr	TPY (4)	Special Condition/Application Information	Special Condition/Application Information	Special Condition/Application Information
		PM _{2.5}	3.94	0.24			

- (1) Emission point identification - either specific equipment designation or emission point number from plot plan.
- (2) Specific point source name. For fugitive sources, use area name or fugitive source name.
- (3) VOC
 - NO_x - total oxides of nitrogen
 - SO₂ - sulfur dioxide
 - PM - total particulate matter, suspended in the atmosphere, including PM₁₀ and PM_{2.5}, as represented
 - PM₁₀ - total particulate matter equal to or less than 10 microns in diameter, including PM_{2.5}, as represented
 - PM_{2.5} - particulate matter equal to or less than 2.5 microns in diameter
 - CO - carbon monoxide
 - 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) PP II vents shall be rerouted to one flare or the other.
- (7) Total VOC emissions from the following emission points: F-403, 1F-406B, 1F-501, 1F-982, 1F-985, 1S-404 and 1S-405.
- (8) Total VOC emissions from the following emission points: F-403, 2F-406B, 2F-501, 2F-982, 2F-985, 2S-404 and 2S-405.
- (9) Total VOC emissions from the following emission points: PP2-3F403, PP2-3F501, PP2-3S405, PP2-3F985, PP2 3F982, PP2-3F406B, and PP2-3S404



Texas Commission on Environmental Quality Air Quality Permit

A Permit Is Hereby Issued To
Formosa Plastics Corporation, Texas
Authorizing the Construction and Operation of
Formosa Point Comfort Plant
Located at Point Comfort, Calhoun County, Texas
Latitude 28° 41' 20" Longitude -96° 32' 50"

Permit: 19200 and PSDTX1237

Amendment Date: April 1, 2021

Expiration Date: June 17, 2030



For the Commission

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

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

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

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

Common Acronyms in Air Permits

°C = Temperature in degrees Celsius
°F = Temperature in degrees Fahrenheit
°K = Temperature in degrees Kelvin
µg = microgram
µg/m³ = microgram per cubic meter
acfm = actual cubic feet per minute
AMOC = alternate means of control
AOS = alternative operating scenario
AP-42 = Air Pollutant Emission Factors, 5th edition
APD = Air Permits Division
API = American Petroleum Institute
APWL = air pollutant watch list
BPA = Beaumont/ Port Arthur
BACT = best available control technology
BAE = baseline actual emissions
bbl = barrel
bbl/day = barrel per day
bhp = brake horsepower
BMP = best management practices
Btu = British thermal unit
Btu/scf = British thermal unit per standard cubic foot or feet
CAA = Clean Air Act
CAM = compliance-assurance monitoring
CEMS = continuous emissions monitoring systems
cfm = cubic feet (per) minute
CFR = Code of Federal Regulations
CN = customer ID number
CNG = compressed natural gas
CO = carbon monoxide
COMS = continuous opacity monitoring system
CPMS = continuous parametric monitoring system
DFW = Dallas/ Fort Worth (Metroplex)
DE = destruction efficiency
DRE = destruction and removal efficiency
dscf = dry standard cubic foot or feet
dscfm = dry standard cubic foot or feet per minute
ED = (TCEQ) Executive Director
EF = emissions factor
EFR = external floating roof tank
EGU = electric generating unit
EI = Emissions Inventory
ELP = El Paso
EPA = (United States) Environmental Protection Agency
EPN = emission point number
ESL = effects screening level
ESP = electrostatic precipitator
FCAA = Federal Clean Air Act
FCCU = fluid catalytic cracking unit
FID = flame ionization detector
FIN = facility identification number
ft = foot or feet
ft/sec = foot or feet per second
g = gram
gal/wk = gallon per week
gal/yr = gallon per year
GLC = ground level concentration
GLC_{max} = maximum (predicted) ground-level concentration
gpm = gallon per minute
gr/1000scf = grain per 1000 standard cubic feet
gr/dscf = grain per dry standard cubic feet
H₂CO = formaldehyde
H₂S = hydrogen sulfide
H₂SO₄ = sulfuric acid
HAP = hazardous air pollutant as listed in § 112(b) of the Federal Clean Air Act or Title 40 Code of Federal Regulations Part 63, Subpart C
HC = hydrocarbons
HCl = hydrochloric acid, hydrogen chloride
Hg = mercury
HGB = Houston/Galveston/Brazoria
hp = horsepower
hr = hour
IFR = internal floating roof tank
in H₂O = inches of water
in Hg = inches of mercury
IR = infrared
ISC3 = Industrial Source Complex, a dispersion model
ISCST3 = Industrial Source Complex Short-Term, a dispersion model
K = Kelvin; extension of the degree Celsius scaled-down to absolute zero
LACT = lease automatic custody transfer
LAER = lowest achievable emission rate
lb = pound
hp = horsepower
hr = hour
lb/day = pound per day
lb/hr = pound per hour
lb/MMBtu = pound per million British thermal units
LDAR = Leak Detection and Repair (Requirements)
LNG = liquefied natural gas
LPG = liquefied petroleum gas
LT/D = long ton per day
m = meter
m³ = cubic meter
m/sec = meters per second
MACT = maximum achievable control technology
MAERT = Maximum Allowable Emission Rate Table
MERA = Modeling and Effects Review Applicability
mg = milligram
mg/g = milligram per gram
mL = milliliter
MMBtu = million British thermal units
MMBtu/hr = million British thermal units per hour
MSDS = material safety data sheet
MSS = maintenance, startup, and shutdown
MW = megawatt
NAAQS = National Ambient Air Quality Standards
NESHAP = National Emission Standards for Hazardous Air Pollutants
NGL = natural gas liquids
NNSR = nonattainment new source review
NO_x = total oxides of nitrogen

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

Special Conditions

Permit Numbers 19200 and PSDTX1237

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.
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 those listed below:

Relief Valves Y3220, Y3221, Y3222, Y3223, Y4220, Y4221, Y4222, Y4223, Y5220, Y5221, Y5222, Y7220, Y7221, and Y7222. **(5/10)**

Federal Applicability

3. These facilities shall comply with all applicable requirements of the U.S. Environmental Protection Agency (EPA) regulations on: **(6/20)**
 - A. Standards of Performance for New Stationary Sources promulgated in Title 40 Code of Federal Regulations Part 60 (40 CFR Part 60):
 - (1) Subpart A, General Provisions.
 - (2) Subpart VV, Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry for which Construction, Reconstruction, or Modification Commenced After January 5, 1981, and on or Before November 7, 2006.
 - (3) Subpart DDD, Standards of Performance for Volatile Organic Compound (VOC) Emissions from the Polymer Manufacturing Industry.
 - B. National Emission Standards for Hazardous Air Pollutants for Source Categories in 40 CFR Part 63:
 - (1) Subpart A, General Provisions.
 - (2) Subpart FFFF, National Emission Standards for Hazardous Air Pollutants: Miscellaneous Organic Chemical Manufacturing.

Emission Standards and Operational Specifications

4. The facilities covered by this permit shall not operate unless all associated air pollution abatement equipment is maintained in good working order and operating during normal facility operations. The following steps shall be performed, at a minimum, to ensure the proper operation of the baghouses, fabric filters, and cyclones:
 - A. Particulate matter outlet grain loading shall not exceed 0.01 grain per dscf of air from any vent. There shall be no visible emissions exceeding 30 seconds in any six-minute period as determined using U.S. EPA Test Method 22. All particulate matter vents authorized in the

permit shall be inspected for visible emissions in accordance with Method 22 quarterly.
(6/20)

- B. The vents covered by this permit shall not operate unless control devices and associated equipment are maintained in good working order and operating. All vents will be inspected for visible emissions once per day. Records shall be maintained of all inspections and maintenance performed. **(6/20)**
- C. When there are visible emissions from a baghouse, fabric filter, or cyclone, the operation associated with the event shall be shut down as soon as practicable and the entire baghouse, fabric filter system or cyclone shall be tested/inspected, and the failed or damaged parts shall be repaired or replaced.
- D. Baghouse and fabric filter pressure drops shall be recorded continuously during operation of the facility. All pressure drop records shall be dated for each day the facility is operated, and these records shall be maintained on-site for a rolling 60-month period and made available for inspection by the Executive Director of the TCEQ or a designated representative upon request.

Each 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 5% of the minimum pressure drop necessary to ensure compliance with outlet grain loading of the minimum waste flow or in accordance with the manufacturer's specifications. **(6/20)**

Quality assured (or valid) data must be generated during periods that flow is occurring 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 time (in hours) that each bag filter or cyclone separator operated over the previous rolling 12-month period. The measurements missed shall be estimated using engineering judgment and the methods used recorded. **(6/20)**

- E. A spare parts inventory with an adequate number of replacement bags for each baghouse and an adequate number of replacement filters for each fabric filter shall be maintained on site at all times. All baghouses, fabric filters, and cyclones shall undergo a preventative maintenance inspection on an annual basis.
- F. The following requirements apply to capture systems for the baghouses, fabric filters, and cyclones authorized in this permit at least annually: **(6/20)**
 - (1) Inspect any fan and verify proper operation and inspect the capture system to verify there are no cracks, holes, tears, and other defects; or
 - (2) Verify there are no fugitive emissions escaping from the capture system by performing a visible emissions observation for a period of at least six minutes in accordance with 40 CFR Part 60, Appendix A, Test Method 22.
- G. The TCEQ Regional Director shall be notified as soon as possible of any baghouse, fabric filter, or cyclone system malfunction that results in visible emissions or necessitates repair.

Flares (EPNs 1018 and 1067)

5. Each flare shall operate with no less than 98 percent efficiency in the removal of organic compounds with over three carbons and 99 percent efficiency for the compounds with three or less carbons. **(6/20)**
6. Flares (EPNs 1018 and 1067) shall be designed and operated in accordance with the following requirements: **(11/12)**
 - A. The flare systems shall be designed such that the combined assist natural gas and waste gas stream to each flare meets the 40 CFR § 60.18 specifications of minimum heating value and maximum tip velocity under normal and maintenance flow conditions.

The heating value and velocity requirements shall be satisfied during operations authorized by this permit. Flare testing shall be performed per 40 CFR § 60.18(f) if requested by the appropriate Texas Commission on Environmental Quality (TCEQ) Regional Office to demonstrate compliance with these requirements.
 - B. The flares shall be operated with a flame present at all times and/or have a constant pilot flame. The pilot flame shall be continuously monitored by a thermocouple or an infrared monitor. The time, date, and duration of any loss of pilot flame shall be recorded. Each monitoring device shall be accurate to, and shall be calibrated at a frequency in accordance with, the manufacturer's specifications. **(8/18)**
 - C. The flares shall be operated with no visible emissions except periods not to exceed a total of five minutes during any two consecutive hours. This shall be ensured by the use of steam assist.
 - D. The permit holder shall install a continuous flow monitor and calorimeter that provide a record of the vent stream flow and Btu content to the flare. The flow monitor sensor and calorimeter sample points shall be installed in the vent stream as near as possible to the flare inlet such that the total vent stream to the flare is measured and analyzed. Readings shall be taken at least once every 15 minutes and the average hourly values of the flow and composition (or Btu content) shall be recorded each hour. **(6/20)**

The monitor shall be calibrated or have a calibration check performed on an annual basis to meet the following accuracy specifications: the flow monitor shall be $\pm 5.0\%$, temperature monitor shall be $\pm 2.0\%$ at absolute temperature, and pressure monitor shall be ± 5.0 mm Hg.

The calorimeter shall be calibrated, installed, operated, and maintained, in accordance with manufacturer recommendations, to continuously measure and record the net heating value of the gas sent to the flare, in British thermal units/standard cubic foot of the gas.

The monitors and calorimeter shall operate as required by this section at least 95% of the time when the flare is operational, averaged over a rolling 12-month period. Flared gas net heating value and actual exit velocity determined in accordance with 40 CFR §60.18(f)(3) and 60.18(f)(4) shall be recorded at least once every hour. **(6/20)**
7. Total volatile organic compounds (VOC) emitted to the atmosphere between the extruder and the point of final product loading from all four trains or production lines shall not exceed 80 pounds of VOC per million (MM) pounds of polypropylene (PP). **(04/21)**
8. Heptane or mineral oil shall be used as the solvent carrier in the Polypropylene I Unit process. **(5/10)**

9. PPI total annual production of product is limited to 700,800 tons of polypropylene per 12 consecutive months. Records of production totals shall be maintained on a rolling 12-month basis and be made available to TCEQ personnel upon request. **(04/21)**

Fugitive Emissions Monitoring

10. Piping, Valves, Connectors, Pumps, Agitators, and Compressors – 28VHP **(11/12)**

The following requirements apply to piping, valves, connectors, pumps, agitators, and compressors containing or in contact with fluids that could reasonably be expected to contain greater than or equal to 10 weight percent volatile organic compounds (VOC) at any time. **(6/20)**

- A. The requirements of paragraphs F and G shall not apply (1) where the VOC has an aggregate partial pressure or vapor pressure of less than 0.044 pounds per square inch, absolute (psia) at 68°F or (2) operating pressure is at least 5 kilopascals (0.725 psi) below ambient pressure. Equipment excluded from this condition shall be identified in a list or by one of the methods described below to be made readily available upon request.

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

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

be inspected by visual, audible, and/or olfactory means at least weekly by operating personnel walk-through.

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

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

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

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

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

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

- G. Except as may be provided for in the special conditions of this permit, all pump, compressor, and agitator seals shall be monitored with an approved gas analyzer at least quarterly or be equipped with a shaft sealing system that prevents or detects emissions of VOC from the seal. Seal systems designed and operated to prevent emissions or seals equipped with automatic seal failure detection and alarm system need not be monitored. These seal systems may include (but are not limited to) dual pump seals with barrier fluid at higher

pressure than process pressure, seals degassing to vent control systems kept in good working order, or seals equipped with an automatic seal failure detection and alarm system. Submerged pumps or sealless pumps (including, but not limited to, diaphragm, canned, or magnetic-driven pumps) may be used to satisfy the requirements of this condition and need not be monitored.

- H. Damaged or leaking valves or connectors found to be emitting VOC in excess of 500 parts per million by volume (ppmv) or found by visual inspection to be leaking (e.g., dripping process fluids) shall be tagged and replaced or repaired. Damaged or leaking pump, compressor, and agitator seals found to be emitting VOC in excess of 2,000 ppmv or found by visual inspection to be leaking (e.g., dripping process fluids) shall be tagged and replaced or repaired. A first attempt to repair the leak must be made within 5 days and a record of the attempt shall be maintained.
- I. A leaking component shall be repaired as soon as practicable, but no later than 15 days after the leak is found. If the repair of a component would require a unit shutdown that would create more emissions than the repair would eliminate, the repair may be delayed until the next scheduled shutdown. All leaking components which cannot be repaired until a scheduled shutdown shall be identified for such repair by tagging within 15 days of the detection of the leak. A listing of all components that qualify for delay of repair shall be maintained on a delay of repair list. The cumulative daily emissions from all components on the delay of repair list shall be estimated by multiplying by 24 the mass emission rate for each component calculated in accordance with the instructions in 30 TAC 115.782 (c)(1)(B)(i)(II). The calculations of the cumulative daily emissions from all components on the delay of repair list shall be updated within ten days of when the latest leaking component is added to the delay of repair list. When the cumulative daily emission rate of all components on the delay of repair list times the number of days until the next scheduled unit shutdown is equal to or exceeds the total emissions from a unit shut down as calculated in accordance with 30 TAC 115.782 (c)(1)(B)(i)(I) or 500 pounds, whichever is greater, the TCEQ Regional Manager and any local programs shall be notified and the TCEQ Executive Director may require early unit shut down or other appropriate action based on the number and severity of tagged leaks awaiting shutdown. This notification shall be made within 15 days of making this determination. **(6/20)**
- J. Records of repairs shall include date of repairs, repair results, justification for delay of repairs, and corrective actions taken for all components. Records of instrument monitoring shall indicate dates and times, test methods, and instrument readings. The instrument monitoring record shall include the time that monitoring took place for no less than 95% of the instrument readings recorded. Records of physical inspections shall be noted in the operator's log or equivalent.
- K. Alternative monitoring frequency schedules of 30 TAC 115.352 - 115.359 or National Emission Standards for Organic Hazardous Air Pollutants, 40 CFR Part 63, Subpart H, may be used in lieu of Items F and G of this condition.
- L. Compliance with the requirements of this condition does not assure compliance with requirements of 30 TAC Chapter 115, an applicable New Source Performance Standard (NSPS), or an applicable National Emission Standard for Hazardous Air Pollutants (NESHAPS) and does not constitute approval of alternative standards for these regulations.
- M. With respect to Special Condition 10, new and reworked is meant to apply to major changes in piping. It is not intended to apply to minor activities including but not limited to: installation/replacement of small number of valves and flanges; minor repairs; gasket replacement; repair/replacement of small sections of piping, etc. Also, "process pipelines"

does not apply to underground process sewer lines, cooling tower water, fire water, etc. Additionally, the requirement for new and reworked buried connectors to be welded will not apply if compliance would require a process unit shutdown or would create a safety issue including, but not limited to, close proximity of other process pipelines and equipment or unsafe access to the piping.

11. Additional Fugitive Emissions Monitoring Requirements:

- A. In lieu of the 2000 ppmv VOC limit in Paragraph H of Special Condition 10, damaged or leaking pump, compressor, and agitator seals found to be emitting VOC in excess of 500 ppmv or found by visual inspection to be leaking (e.g., dripping process fluids) shall be tagged and replaced or repaired. A first attempt to repair the leak must be made within 5 days. Records of the first attempt to repair shall be maintained. **(11/12)**
- B. Connectors Inspected Annually – 28CNTA **(6/20)**

In addition to the weekly physical inspection required by Item E of Special Condition No. 10, all connectors in gas/vapor and light liquid service shall be monitored annually with an approved gas analyzer in accordance with Items F thru J of Special Condition No. 10. Alternative monitoring frequency schedules (“skip options”) of Title 40 Code of Federal Regulations Part 63, Subpart H, National Emission Standards for Organic Hazardous Air Pollutants for Equipment Leaks, may be used in lieu of the monitoring frequency required by this permit condition. Compliance with this condition does not assure compliance with requirements of applicable state or federal regulation and does not constitute approval of alternative standards for these regulations.

- C. Piping, Valves, Pumps, and Compressors in contact with Chlorine (Cl₂) – 28AVO **(6/20)**

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

- (1) Audio, olfactory, and visual checks for leaks within the operating area shall be made once per shift.
- (2) Immediately, but no later than one hour upon detection of a leak, plant personnel shall take at least one of the following actions:
 - (a) Isolate the leak.
 - (b) Commence repair or replacement of the leaking component.
 - (c) Use a leak collection/containment system to prevent the leak until repair or replacement can be made if immediate repair is not possible.
- (3) Date and time of each inspection shall be noted in the operator's log or equivalent. Records shall be maintained at the plant site of all repairs and replacements made due to leaks. These records shall be made available to representatives of the Texas Commission on Environmental Quality (TCEQ) upon request.

Cooling Towers (EPNs PO-CT and PP1-CT)

12. The cooling towers (EPNs PO-CT and PP1-CT) shall be operated and monitored in accordance with the following: **(6/20)**

- A. The cooling tower water shall be monitored monthly for VOC leakage from heat exchangers in accordance with the requirements of the TCEQ Sampling Procedures Manual, Appendix P (dated January 2003 or a later edition) or another air stripping method approved by the TCEQ Executive Director. The results of the monitoring, cooling water flow rate and maintenance activities on the cooling water system shall be recorded. The monitoring results and cooling water hourly mass flow rate shall be used to determine cooling tower hourly VOC emissions. The rolling 12-month cooling water emission rate shall be recorded on a monthly basis and be determined by summing the VOC emissions between VOC monitoring periods over the rolling 12-month period. The emissions between VOC monitoring periods shall be obtained by multiplying the total cooling water mass flow between cooling water monitoring periods by the higher of the two VOC monitored results.
- B. Cooling tower water VOC concentrations above 0.05 ppmw potentially indicate faulty equipment. Equipment shall be maintained so as to minimize VOC emissions into the cooling water. Faulty equipment shall be repaired at the earliest opportunity but no later than the next scheduled shutdown of the process unit in which the leak occurs.

Emissions from the cooling tower are not authorized if the VOC concentration of the water returning to the cooling tower exceeds 0.5 ppmw. VOC concentrations above 0.5 ppmw are not subject to extensions for delay of repair under this permit condition. The results of the monitoring and maintenance efforts shall be recorded.

- C. The cooling towers (EPNs PO-CT and PP1-CT) shall be operated and monitored in accordance with the following:
- (1) Cooling towers shall each be equipped with drift eliminators having manufacturer's design assurance of 0.001% drift or less. Drift eliminators shall be maintained and inspected at least annually. The permit holder shall maintain records of all inspections and repairs.
 - (2) Total dissolved solids (TDS) shall not exceed 6,500 parts per million by weight (ppmw) on an hourly average and 4,150 ppmw on a rolling 12-month period. Dissolved solids in the cooling water drift are considered to be emitted as PM, PM₁₀, and PM_{2.5} as represented in the permit application calculations. **(04/21)**
 - (3) Cooling towers shall be analyzed for particulate emissions using one of the following methods:
 - (a) Cooling water shall be sampled at least once per day for total dissolved solids (TDS); or
 - (b) TDS monitoring may be reduced to weekly if conductivity is monitored daily and TDS is calculated using a ratio of TDS-to-conductivity (in ppmw per $\mu\text{mho/cm}$ or ppmw/siemens). The ratio of TDS-to-conductivity shall be determined by concurrently monitoring TDS and conductivity on a weekly basis. The permit holder may use the average of two consecutive TDS-to-conductivity ratios to calculate daily TDS; or
 - (c) TDS monitoring may be reduced to quarterly if conductivity is monitored daily and TDS is calculated using a correlation factor established for each cooling tower. The correlation factor shall be the average of nine consecutive weekly TDS-to-conductivity ratios determined using C(3)(b) above provided the highest ratio is not more than 10% larger than the smallest ratio.
 - (d) The permit holder shall validate the TDS-to-conductivity correlation factor once each calendar quarter. If the ratio of concurrently sampled TDS and conductivity

is more than 10% higher or lower than the established factor, the permit holder shall increase TDS monitoring to weekly until a new correlation factor can be established.

- (4) Cooling water sampling shall be representative of the cooling tower feed water and shall be conducted using approved methods.
 - (a) The analysis method for TDS shall be EPA Method 160.1, ASTM D5907, or SM 2540 C [SM - 19th edition of Standard Methods for Examination of Water]. Water samples should be capped upon collection, and transferred to a laboratory area for analysis.
 - (b) The analysis method for conductivity shall be either ASTM D1125-14 Test Method A (field or routine laboratory testing) or ASTM D1125-14 Test Method B (continuous monitor). The analysis may be conducted at the sample site or with a calibrated process conductivity meter. If a conductivity meter is used, it shall be calibrated at least annually. Documentation of the method and any associated calibration records shall be maintained.
 - (c) Alternate sampling and analysis methods may be used to comply with C(4)(a) and C(4)(b) with written approval from the TCEQ Regional Director.
 - (d) Records of all instrument calibrations and test results and process measurements used for the emission calculations shall be retained.
- (5) Emission rates of PM, PM₁₀ and PM_{2.5} shall be calculated using the measured TDS and the ratio or correlation of TDS to conductivity measurements, the design drift rate and the daily maximum and average actual cooling water circulation rate for the short term and annual average rates. Alternately, the design maximum circulation rate may be used for all calculations. Emission records shall be updated monthly.

Ongoing Demonstration of Compliance

13. Ongoing compliance with Special Condition No. 7 and with the MAERT shall be determined for each line by calculation using weekly production rates and weekly sampling and testing of the polymer immediately downstream of the extruder (A) and immediately before the point of final product loading (B). The beverage can test or an equivalent method approved by the TCEQ Austin Compliance Support Division shall be used to determine VOC.

Polymer production rates and product degassing monitoring records shall be maintained at the plant site for at least five years from the date they are made and made available upon request to TCEQ personnel. These records shall include (but are not limited to):

- A. Date and time of sampling.
- B. Actual plant production rate at the time of sampling and the weekly average production rate.
- C. Product number and melt index.
- D. Measured pounds of total VOC per million lbs of polymer after the extruder (A) and immediately prior to final product loading (B).
- E. Total VOC emitted to the atmosphere between points A and B during the operating week shall be calculated by (A - B) multiplied by the weekly production rate. Calculations shall take

into account emissions which are collected and routed to a control device and any changes in product type during the week.

Planned Maintenance, Startup, and Shutdown (MSS)

14. This permit authorizes air emissions from the planned MSS activities identified in the following table performed at the facilities authorized by this permit. **(11/12)**

Facilities	Description/ Emissions Activity	EPN
All facilities*	Depressurize and purge to control per Special Condition No. 15	1018, 1067, PP1-TEMP
All facilities*	Degas facilities to atmosphere after flare per Special Condition No. 15	PP1-MAINT
All facilities*	Fill and/or vent to control during startup	1018, 1067, PP1-TEMP
Vessels (MTR)	Vent to flare during MTR system maintenance	1018, 1067
Carrier Gas System	Vent waste gas to flare during carrier gas system maintenance	1018, 1067
All	Attachment A activities	1018,1067, PP1-TEMP, PP1-MAINT
Vacuum trucks	Load and transport liquid to support MSS on permanent facilities	PP1-MAINT

* - all facilities include piping

In addition, planned MSS emissions emitted from routine emission points are authorized provided the emissions are compliant with the respective MAERT allowable emission rates and special conditions. This permit authorizes emissions from the following temporary facilities used to support planned MSS activities at permanent site facilities: vacuum trucks and control devices meeting the requirements of Special Condition No. 22. Emissions from temporary facilities are authorized provided the temporary facility (a) does not remain on the plant site for more than 12 consecutive months, (b) is used solely to support planned MSS activities at the permanent facilities authorized by this permit, and (c) does not operate as a replacement for an existing authorized facility

Emissions from activities listed on Attachment A may be considered to be equal to the potential to emit represented in the permit amendment application, PI-1 dated January 3, 2008, and updated in subsequent application submittals. The estimated emissions from these activities must be revalidated annually. This revalidation shall consist of verifying 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 number of work orders or equivalent that month and the emissions associated with that activity identified in the permit application.

- A. The performance of each planned MSS activity identified in Attachment C and the emissions associated with it shall be recorded and include at least the following information:
- B. The process unit at which emissions from the MSS activity occurred, including the emission point number and common name of the process unit;
- C. The type of planned MSS activity and the reason for the planned activity;
- D. The common name and the facility identification number, if applicable, of the facilities at which the MSS activity and emissions occurred;
- E. The date and time of the MSS activity and its duration;
- F. The estimated quantity of each air contaminant or mixture of air contaminants, emitted with the data and methods used to determine it. The emissions shall be estimated using the methods identified in the permit application, consistent with good engineering practice.

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

15. Except for instrumentation/analyzer maintenance and vacuum trucks, process units and facilities shall be depressurized, degassed, and placed back into service in accordance with the following requirements. **(11/12)**
- A. The process equipment shall be vented to a control device or a controlled recovery system during depressurization.
 - B. All liquids from process equipment or storage vessels must be removed to the maximum extent practical prior to opening equipment or commencing depressurization, degassing and/or maintenance. Equipment that only contains material with VOC partial pressure less than 0.50 psi at the normal process temperature and 95°F may be opened to the atmosphere after liquids are removed as required by this condition. 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.
 - C. If mixed phase materials must be removed from process equipment during depressurization, liquids removal, or degassing, the cleared material shall be routed to a knockout drum or equivalent to allow for managed initial phase separation. Any vents in the knockout drum or equivalent must be routed to a control device or a controlled recovery system. Control must remain in place while mixed phase material removal is being performed.
 - D. Facilities shall be degassed using practices that 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. Records shall be maintained of the control device or recovery system utilized with the estimated emissions from controlled and uncontrolled degassing calculated using the methods that were used to determine allowable emissions for the permit application.
 - E. After degassing in accordance with Special Condition No. 15.D, the VOC concentration in the facilities being degassed shall be verified to be below 10,000 ppmv or less than 10 percent of the lower explosive limit (LEL) using one of the methods below prior to opening directly to atmosphere.
 - (1) For MSS activities other than process unit startup, shutdown, hydroblasting, or turnaround, the following option may be used in lieu of (2) below. The facilities being

prepared for maintenance shall not be vented directly to atmosphere, except as necessary to verify an acceptable VOC concentration and establish isolation of the work area, until the VOC concentration has been verified to be less than 10 percent of the lower explosive limit (LEL) per the site safety procedures.

- (2) Documentation shall be maintained of the locations and/or identifiers where the purge gas or steam enters the process equipment or storage vessel and the exit points for the purge gases. 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. 16. 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 less than 10 percent of the lower explosive limit (LEL). Documented plant 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.

- F. Gases and vapors with VOC partial pressure 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 (flare).
 - (3) There is no more than 50 lb of air contaminant to be vented to atmosphere during shutdown or startup, as applicable.

Except as noted in Attachment A, all instances of venting directly to atmosphere per Special Condition No. 15.F must be documented when occurring as part of any MSS activity. The emissions associated with venting without control must be included in the activity record for those planned MSS activities.

16. Air contaminant concentration shall be measured using an instrument/detector meeting one of the following methods: **(11/12)**

- 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, recording VOC concentration each minute. The highest measured 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 measured 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 (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*mole fraction of the total air contaminants present that can be detected by the tube.

The mole fraction may be estimated based on process knowledge. The release concentration and basis for its determination shall be recorded.
- Records shall be maintained of the tube type, range, measured concentrations, and time the samples were taken.
- C. Lower explosive limit measured with a lower explosive limit detector. **(5/13)**
- (1) The detector shall be calibrated monthly with a certified propane gas standard at 50% of the lower explosive limit (LEL) for propane. 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 50% of the LEL for propane may be used for calibration and functionality tests provided that the LEL response is within 95% of that for propane.
- D. As an alternative to an instrument/detector, the analysis may be conducted in a laboratory. Bag samples of the gas discharged may be drawn and taken to a Formosa laboratory to be analyzed by gas chromatography (GC). A minimum of two bag samples shall be drawn approximately ten minutes apart. A Tedlar bag, or a bag appropriate for the material to be sampled, shall be used and shall have a valve to seal gas in the bag. The samples shall be drawn as follows:
- (1) The sample point on the equipment being cleared shall be purged sufficiently to ensure a representative sample at the sample valve.
 - (2) The sample bag shall be connected directly to the sample valve.
 - (3) The sample valve and sample bag shall be opened to allow the bag to fill to approximately 80% of capacity. The sample connections shall be fitted such that no air is drawn into the sample bag.
 - (4) The two valves shall then be closed to seal the sample in the bag.

- (5) The sample bag shall then be disconnected and placed in a dark container out of direct sunlight for transport to the analyzer.
- (6) This process is repeated to collect additional samples.
- (7) The sample shall be analyzed within 12 hours of collection.

The laboratory GC shall meet or exceed the requirements of 40 CFR 60, Appendix A, Method 18 Sections 6 (Equipment and Supplies), 7 (Reagents and Standards), 9 (Quality Control), and 10 (Calibration and Standards). The sample shall be analyzed per Section 8.2.1.1.2 of Method 18, except the analysis does not need to be performed in triplicate. The highest measured VOC concentration shall not exceed the specified VOC concentration limit prior to uncontrolled venting.

Compliance Assurance Monitoring (CAM)

17. The following requirements apply to capture systems for each flare designated as EPNs 1018 and 1067. **(2/11)**
 - A. Either conduct a once a month visual, audible, and/or olfactory inspection of the capture system to verify there are no leaking components in the capture system; or 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.
or
If there is a bypass for the control device, comply with either of the following requirements:
 - (1) Install a flow indicator that records and verifies zero flow at least once every 15 minutes immediately downstream of each valve that if opened would allow a vent stream to bypass the control device and be emitted, either directly or indirectly, to the atmosphere; or
 - (2) Once a month, inspect the valves, verifying the position of the valves and the condition of the car seals prevent flow out the bypass.

A bypass does not include authorized analyzer vents, highpoint bleeder vents, low point drains, or rupture discs upstream of pressure relief valves if the pressure between the disc and relief valve is monitored and recorded at least weekly. A deviation shall be reported if the monitoring or inspections indicate bypass of the control device when it is required to be in service. **(6/20)**
 - C. Records of the inspections required shall be maintained and if the results of any of the above inspections are not satisfactory, the permit holder shall promptly take necessary corrective action. **(6/20)**
18. The following requirements apply to vacuum and air mover truck operations to support planned MSS at this site: **(11/12)**
 - A. Vacuum pumps and blowers shall not be operated on trucks containing or vacuuming liquids with VOC partial pressure greater than 0.50 psi at 95°F unless the vacuum/blower exhaust is routed to a control device or a controlled recovery system.

- B. Equip fill line intake with a “duckbill” or equivalent attachment if the hose end cannot be submerged in the liquid being collected.
 - C. A daily record containing the information identified below is required for each vacuum truck in operation at the site each day.
 - (1) Prior to initial use, identify any liquid in the truck and the truck identifier (bill of lading or other unique identifier). Record the liquid level and document that the VOC partial pressure is less than 0.50 psi if the vacuum exhaust is not routed to a control device or a controlled recovery system. After each liquid transfer, identify the liquid transferred and document that the VOC partial pressure is less than 0.50 psi if the vacuum exhaust is not routed to a control device or a controlled recovery system.
 - (2) For each liquid transfer made with the vacuum operating, record the duration of any periods when air may have been entrained with the liquid transfer. The reason for operating in this manner and whether a “duckbill” or equivalent was used shall be recorded. Short, incidental periods, such as those necessary to walk from the truck to the fill line intake, do not need to be documented.
 - (3) If the vacuum truck pump exhaust is controlled with a control device other than an engine or oxidizer, records shall be maintained of VOC exhaust concentration upon commencing each transfer, at the end of each transfer, and at least every hour during each transfer, measured using an instrument meeting the requirements of Special Condition No. 16.
 - (4) The volume in the vacuum truck at the end of the day, or the volume unloaded, as applicable.
 - D. The permit holder shall determine the vacuum truck emissions each month using the daily vacuum truck records and the calculation methods utilized in the permit application. If records of the volume of liquid transferred for each pick-up are not maintained, the emissions shall be determined using the physical properties of the liquid vacuumed with the greatest potential emissions. Rolling 12 month vacuum truck emissions shall also be determined on a monthly basis.
19. Vents must be directed to a flare operating in accordance with Special Condition No. 22 during maintenance on the membrane transfer reactor (MTR) or carrier gas systems. **(11/12)**
20. Bag filter maintenance shall be performed in a manner to minimize particulate matter emissions and minimize down time. **(11/12)**
21. MSS activities represented in the permit application may be authorized under permit by rule only if the procedures, emission controls, monitoring, and recordkeeping are the same as those required by this permit. **(11/12)**
22. Control devices required by this permit for emissions from planned MSS activities are limited to those types identified and authorized in this condition. The use of any other types of devices to control emissions from MSS activities must be authorized in accordance with 30 TAC Chapter 116.

Control devices shall be operated with no visible emissions except periods not to exceed a total of five minutes during any two consecutive hours. Each device used must meet all the requirements identified for that type of control device.

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

A. Carbon Adsorption System (CAS).

- (1) The CAS shall consist of 2 carbon canisters in series with adequate carbon supply for the emission control operation.
- (2) The CAS shall be sampled downstream of the first can and the concentration recorded at least once every hour of CAS run time to determine breakthrough of the VOC. The sampling frequency may be extended using either of the following methods:
 - (a) It may be extended to up to 30 percent of the minimum potential saturation time for a new can of carbon. The permit holder shall maintain records including the calculations performed to determine the minimum saturation time.
 - (b) The carbon sampling frequency may be extended to longer periods based on previous experience with carbon control of a MSS waste gas stream. The past experience must be with the same VOC, type of facility, and MSS activity. The basis for the sampling frequency shall be recorded. If the VOC concentration on the initial sample downstream of the first carbon canister following a new polishing canister being put in place is greater than 100 ppmv above background, it shall be assumed that breakthrough occurred while that canister functioned as the final polishing canister and a permit deviation shall be recorded.
- (3) The method of VOC sampling and analysis shall be by detector meeting the requirements of Special Condition No. 16.A or B.
- (4) Breakthrough is defined as the highest measured VOC concentration at or exceeding 100 ppmv above background. When the condition of breakthrough of VOC from the initial saturation canister occurs, the waste gas flow shall be switched to the second canister and a fresh canister shall be placed as the new final polishing canister within four hours. Sufficient new activated carbon canisters shall be maintained at the site to replace spent carbon canisters such that replacements can be done in the above specified time frame.
- (5) Records of CAS monitoring shall include the following:
 - (a) Sample time and date.
 - (b) Monitoring results (ppmv).
 - (c) Canister replacement log.
- (6) Single canister systems are allowed if the time the carbon canister is in service is limited to no more than 30% of the minimum potential saturation time. The permit holder shall maintain records for these systems, including the calculations performed to determine the saturation time. The time limit on carbon canister service shall be recorded and the expiration date attached to the carbon can.

B. Thermal Oxidizer. **(6/20)**

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

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

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

C. Internal Combustion Engine. **(6/20)**

- (1) The internal combustion engine shall have a VOC destruction efficiency of at least 99 percent.
- (2) The engine must have been stack tested with butane to confirm the required destruction efficiency within the past 12 months. VOC shall be measured in accordance with the applicable United States Environmental Protection Agency (EPA) Reference Method during the stack test and the exhaust flow rate may be determined from measured fuel flow rate and measured oxygen concentration. A copy of the stack test report shall be maintained with the engine. There shall also be documentation of acceptable VOC emissions following each occurrence of engine maintenance which may reasonably be expected to increase emissions including oxygen sensor replacement and catalyst cleaning or replacement. Stain tube indicators specifically designed to measure VOC concentration shall be acceptable for this documentation, provided a hot air probe or equivalent device is used to prevent error due to high stack temperature, and three sets of concentration measurements are made and averaged. Portable VOC analyzers meeting the requirements of Special Condition No. 16 are also acceptable for this documentation
- (3) The engine shall be operated with an oxygen sensor-based air-to-fuel ratio (AFR) controller. Documentation for each AFR controller that the manufacturer's, or supplier's recommended maintenance has been performed, including replacement of the oxygen sensor as necessary for oxygen sensor-based controllers shall be maintained with the engine. The oxygen sensor shall be replaced at least quarterly in the absence of a specific written recommendation.

D. The plant flare systems (EPNs 1018 and 1067).

E. A liquid scrubbing system may be used upstream of carbon adsorption. A single carbon can or a liquid scrubbing system may be used as the sole control device if the requirements below are satisfied.

- (1) The exhaust to atmosphere shall be monitored continuously and the VOC concentration recorded at least once every 15 minutes when waste gas is directed to the scrubber.
- (2) The method of VOC sampling and analysis shall be by detector meeting the requirements of Special Condition No. 16.A or B.
- (3) An alarm shall be installed such that an operator is alerted when outlet VOC concentration exceeds 100 ppmv above background. The MSS activity shall be stopped as soon as possible when the VOC concentration exceeds 100 ppmv above background for more than one minute. The date and time of all alarms and the actions taken shall be recorded.

23. The capture systems for the flares shall not have a bypass unless: **(11/12)**

- A. A flow indicator that records and verifies zero flow at least once every fifteen minutes is installed immediately downstream of each valve that if opened would allow a vent stream to bypass the control device and be emitted, either directly or indirectly, to the atmosphere; or
- B. Inspect the valves that prevent flow out the bypass once a month, verifying the position of the valves and the condition of the car seals prevent flow out the bypass.

These requirements do not apply to high point vent and low point drain valves. A deviation shall be reported if the monitoring or inspections indicate bypass of the control device when required to be in service per this permit. If any of the above inspections is not satisfactory, the permit holder shall promptly take necessary corrective action. Records shall be maintained documenting the performance and results of the inspections required above.

(11/12)

Date: April 1, 2021

Attachment A

Permit Numbers 19200 and PSDTX1237

Inherently Low Emitting Activities

Activity	Emissions			
	VOC	NO _x	CO	PM
Vent loading arms*	X			
Liquid tanks	X	X	X	
Repair/replace filters/strainers	X	X	X	X
Repair/replace baghouses/bag filters	X	X	X	X
Catalyst charging*	X		X	
Instrument/analyzer calibration/repair, transmitter repair	X	X	X	X
Blower, pump, and valve maintenance	X	X	X	
Activities documented as having emissions <0.1 lb*	X			
Site glass cleaning*	X			
Additive filters*				X
Drain and degas liquid tanks	X	X	X	
Oil drums* and grease pots	X	X	X	

* These activities are not subject to the requirements of Special Condition No. 14.

Date: November 30, 2012

Attachment B

Permit Numbers 19200 and PSDTX1237

Routine Maintenance Activities

Heat exchanger, relief valve, and column repair and maintenance

Piping and piping component degassing

Compressor and cyclone MSS

Loading

Repair/replacement that may be isolated so that the process volume to be emptied and degassed is less than 200 cubic feet.

Date: November 30, 2012

Attachment C

Permit Numbers 19200 and PSDTX1237

Significant MSS Activity Summary

The following activities are subject to the full recordkeeping requirements specified by Special Condition No. 14.

Pressure tank repair and maintenance

Plant turnaround and reactor startup and shutdown

Maintenance on the MTR or carrier gas systems during plant operation

Reactor repair and maintenance

Activities not listed on Attachment A or B or not otherwise authorized

Date: November 30, 2012

Emission Sources - Maximum Allowable Emission Rates

Permit Numbers 19200 and PSDTX1237

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)
1018/1067	Olefins I and II Flares (6)	CO	15.40	42.79
		NO _x	3.02	8.40
		SO ₂	0.01	0.06
		VOC	12.47	18.48
B-242	Co-Catalyst Area Dip Pot	VOC	0.03	0.01
B-292A	Peroxide Dip Pot	VOC	0.05	0.01
B-292B	Peroxide Dip Pot	VOC	0.05	0.01
B-360	Pellet Buffer Vessel	PM	0.01	0.06
		PM ₁₀	0.01	0.01
		PM _{2.5}	0.01	0.01
B-406	Catalyst Slurry Prep System Dip Pot	VOC	0.05	0.01
B-460	Pellet Buffer Vessel	PM	0.01	0.06
		PM ₁₀	0.01	0.01
		PM _{2.5}	0.01	0.01
B-560	Pellet Buffer Vessel	PM	0.01	0.06
		PM ₁₀	0.01	0.01
		PM _{2.5}	0.01	0.01
B-760	Pellet Buffer Vessel	PM	0.01	0.06
		PM ₁₀	0.01	0.01
		PM _{2.5}	0.01	0.01
F-343	Powder Vent Gas Filter	VOC	0.01	0.01
		PM	0.04	0.06
		PM ₁₀	0.01	0.01
		PM _{2.5}	0.01	0.01
F-346	Additive Feed Conveying Gas Filter	VOC	0.01	0.01
		PM	0.02	0.01
		PM ₁₀	0.01	0.01
		PM _{2.5}	0.01	0.01
F-367	Pellet Water Pre-separator Sieve	PM	0.03	0.14

Emission Sources - Maximum Allowable Emission Rates

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates	
			lbs/hour	TPY (4)
		PM ₁₀	0.01	0.03
		PM _{2.5}	0.01	0.02
F-368	Classifier	PM	0.03	0.14
		PM ₁₀	0.01	0.03
		PM _{2.5}	0.01	0.02
F-387A	Silos Cyclone Separator, Train No. 1	PM	0.40	1.06
		PM ₁₀	0.08	0.21
		PM _{2.5}	0.07	0.19
F-443	Powder Vent Gas Filter	VOC	0.01	0.01
		PM	0.04	0.06
		PM ₁₀	0.01	0.01
		PM _{2.5}	0.01	0.01
F-446	Additive Feed Conveying Gas Filter	VOC	0.01	0.01
		PM	0.02	0.01
		PM ₁₀	0.01	0.01
		PM _{2.5}	0.01	0.01
F-467	Pellet Water Pre-separator Sieve	PM	0.03	0.14
		PM ₁₀	0.01	0.03
		PM _{2.5}	0.01	0.02
F-468	Classifier	PM	0.03	0.14
		PM ₁₀	0.01	0.03
		PM _{2.5}	0.01	0.02
F-487A	Silos Cyclone Separator, Train No. 2	PM	0.40	1.06
		PM ₁₀	0.08	0.21
		PM _{2.5}	0.07	0.19
F-541	500 Line-Off Spec Silo Bag Filter	PM	0.20	0.86
		PM ₁₀	0.04	0.17
		PM _{2.5}	0.04	0.16
F-543	Powder Vent Gas Filter	VOC	0.01	0.01
		PM	0.04	0.06
		PM ₁₀	0.01	0.01
		PM _{2.5}	0.01	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)
F-546	Additive Feed Conveying Gas Filter	VOC	0.01	0.01
		PM	0.02	0.01
		PM ₁₀	0.01	0.01
		PM _{2.5}	0.01	0.01
F-567	Pellet Water Pre-separator Sieve	PM	0.03	0.14
		PM ₁₀	0.01	0.03
		PM _{2.5}	0.01	0.02
F-568	Classifier	PM	0.03	0.14
		PM ₁₀	0.01	0.03
		PM _{2.5}	0.01	0.02
F-575	300/400 Line - Off Spec Silo Bag Filter	PM	0.59	2.29
		PM ₁₀	0.12	0.46
		PM _{2.5}	0.11	0.41
F-587A	Silos Cyclone Separator, Train No. 3	PM	0.40	1.06
		PM ₁₀	0.08	0.21
		PM _{2.5}	0.07	0.19
F-705	Auto Packer Cyclone	PM	0.14	0.59
		PM ₁₀	0.03	0.12
		PM _{2.5}	0.02	0.11
F-706A	Truck Silo Cyclone	PM	0.14	0.59
		PM ₁₀	0.03	0.12
		PM _{2.5}	0.02	0.11
F-706B	Auto Packer Cyclone	PM	0.16	0.69
		PM ₁₀	0.03	0.14
		PM _{2.5}	0.03	0.12
F-711A	Hopper Silo Cyclone, Train No. 1	PM	0.14	0.59
		PM ₁₀	0.03	0.12
		PM _{2.5}	0.02	0.11
F-711B	PP1 Railcar Vacuum Cleaning System	PM	0.14	0.59
		PM ₁₀	0.03	0.12
		PM _{2.5}	0.02	0.11
F-711G		PM	0.40	1.59

Emission Sources - Maximum Allowable Emission Rates

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates	
			lbs/hour	TPY (4)
	Streamer Remover Bag Filter, Train No. 4	PM ₁₀	0.08	0.32
		PM _{2.5}	0.07	0.29
F-741	700 Line Off Spec Silo Bag Filter	PM	0.12	0.48
		PM ₁₀	0.02	0.10
		PM _{2.5}	0.02	0.09
F-743	Additive Vent Gas Filter	VOC	0.01	0.01
		PM	0.01	0.01
		PM ₁₀	0.01	0.01
		PM _{2.5}	0.01	0.01
F-743A	Powder Vent Bag Filter	VOC	0.01	0.01
		PM	0.01	0.01
		PM ₁₀	0.01	0.01
		PM _{2.5}	0.01	0.01
F-746	Additive Feed Conveying Gas Filter	VOC	0.01	0.01
		PM	0.02	0.01
		PM ₁₀	0.01	0.01
		PM _{2.5}	0.01	0.01
F-747 A	Bag Dumping Unit	PM	0.02	0.01
		PM ₁₀	0.01	0.01
		PM _{2.5}	0.01	0.01
F-747 B	Bag Dumping Unit	PM	0.02	0.01
		PM ₁₀	0.01	0.01
		PM _{2.5}	0.01	0.01
F-747 C	Bag Dumping Unit	PM	0.02	0.01
		PM ₁₀	0.01	0.01
		PM _{2.5}	0.01	0.01
F-767	Pellet Water Pre-separator Sieve	PM	0.03	0.14
		PM ₁₀	0.01	0.03
		PM _{2.5}	0.01	0.02
F-768	Classifier	PM	0.03	0.14
		PM ₁₀	0.01	0.03
		PM _{2.5}	0.01	0.02

Emission Sources - Maximum Allowable Emission Rates

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates	
			lbs/hour	TPY (4)
F-781A	Product Silo Cyclone Train No. 1	PM	0.38	1.64
		PM ₁₀	0.08	0.33
		PM _{2.5}	0.07	0.30
F-781B	Product Silo Cyclone Train No. 2	PM	0.38	1.64
		PM ₁₀	0.08	0.33
		PM _{2.5}	0.07	0.30
F-781C	Product Silo Cyclone Train No. 3	PM	0.38	1.64
		PM ₁₀	0.08	0.33
		PM _{2.5}	0.07	0.30
F-787	Silo Air Filters Train No. 4	PM	0.48	1.87
		PM ₁₀	0.10	0.37
		PM _{2.5}	0.09	0.34
F-787A	Silos Cyclone Separator, Train No. 4	PM	0.40	1.06
		PM ₁₀	0.08	0.21
		PM _{2.5}	0.07	0.19
F-875	B Train Loading Station Cyclone Separator	PM	0.30	0.61
		PM ₁₀	0.06	0.12
		PM _{2.5}	0.05	0.11
F-902	Filter Receiver	PM	0.03	0.07
		PM ₁₀	0.01	0.01
		PM _{2.5}	0.01	0.01
F-975	C Train Loading Station Cyclone Separator	PM	0.30	0.61
		PM ₁₀	0.06	0.12
		PM _{2.5}	0.05	0.11
F-981	Product Silo Air Cyclone Train No. 4	PM	1.01	3.98
		PM ₁₀	0.20	0.80
		PM _{2.5}	0.18	0.72
PO-CT	Cooling Tower	VOC	1.32	5.79
		PM	0.86	2.40
		PM ₁₀	0.20	0.87
		PM _{2.5}	0.01	0.01
		Chlorine compounds	0.01	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)
PP1-300	Downstream Pellet Handling PP-1, Train No. 1 (7)	VOC	3.30	3.64
PP1-400	Downstream Pellet Handling PP-1, Train No. 2 (8)	VOC	3.46	3.77
PP1-500	Downstream Pellet Handling PP-1, Train No. 3 (9)	VOC	2.87	3.79
PP1-700	Downstream Pellet Handling PP-1, Train No. 4 (10)	VOC	1.27	3.55
PP1-CT	Cooling Tower	VOC	0.44	1.93
		PM	0.29	0.80
		PM ₁₀	0.07	0.29
		PM _{2.5}	0.01	0.01
		Chlorine compounds	0.01	0.01
PP1-FUG	Fugitives PP-1 Unit (5)	VOC	13.19	57.76
		PM	0.05	0.27
		PM ₁₀	0.05	0.27
		PM _{2.5}	0.05	0.27
		Cl ₂	0.01	0.02
T-367	Dryer Train No. 1	PM	0.33	1.21
		PM ₁₀	0.07	0.24
		PM _{2.5}	0.06	0.22
T-467	Dryer Train No. 2	PM	0.45	1.89
		PM ₁₀	0.09	0.38
		PM _{2.5}	0.08	0.34
T-567	Dryer Train No. 3	PM	0.33	1.21
		PM ₁₀	0.07	0.24
		PM _{2.5}	0.06	0.22
T-767	Dryer Train No. 4	PM	0.41	1.76
		PM ₁₀	0.08	0.35
		PM _{2.5}	0.07	0.32
Planned Maintenance, Startup and Shutdown (MSS)				
PP1-MAINT	MSS to Atmosphere	VOC	102.27	1.81
		PM	3.19	0.42
		PM ₁₀	3.19	0.42
		PM _{2.5}	3.19	0.42

Emission Sources - Maximum Allowable Emission Rates

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates	
			lbs/hour	TPY (4)
1018/1067/PP1-TEMP (11)	Olefins I and II Flares MSS	CO	513.54	26.27
		NO _x	71.24	3.55
		VOC	949.97	39.05

- (1) Emission point identification - either specific equipment designation or emission point number from plot plan.
- (2) Specific point source name. For fugitive sources, use area name or fugitive source name.
- (3) VOC - volatile organic compounds as defined in Title 30 Texas Administrative Code § 101.1
 NO_x - total oxides of nitrogen
 SO₂ - sulfur dioxide
 PM - total particulate matter, suspended in the atmosphere, including PM₁₀ and PM_{2.5}, as represented
 PM₁₀ - total particulate matter equal to or less than 10 microns in diameter, including PM_{2.5}, as represented
 PM_{2.5} - particulate matter equal to or less than 2.5 microns in diameter
 CO - carbon monoxide
 Cl₂ - chlorine
 Chlorine compounds - hypochlorous acid and hydrogen chloride
- (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) PP1 vents shall all be routed to one flare or the other.
- (7) Total VOC emissions from the following emissions points: B-360, F-367, F-368, F-387A, F-575, F-705, F-706A, F-706B, F-781A, F-711A, F-711G, F-711B, F-975, and T-367.
- (8) Total VOC emissions from the following emissions points: B-460, F-467, F-468, F-487A, F-575, F-705, F-706A, F-706B, F-711A, F-711B, F-711G, F-781B, F-975, and T-467.
- (9) Total VOC emissions from the following emissions points: B-560, F-541, F-567, F-568, F-587A, F-705, F-706A, F-706B, F-711A, F-711B, F-711G, F-781C, F-975, and T-567.
- (10) Total VOC emissions from the following emissions points: B-760, F-705, F-706A, F-706B, F-711A, F-711B, F-711G, F-741, F-767, F-768, F-787, F-787A, F-975, F-981, and T-767.
- (11) The Olefins I and II Flares MSS emissions include emissions from the Olefins I Flare (EPN 1018) Olefins II Flare (EPN 1067) and portable flare (EPN PP1-TEMP).

Date: April 1, 2021



Texas Commission on Environmental Quality Air Quality Permit

A Permit Is Hereby Issued To
Formosa Plastics Corporation, Texas
Authorizing the Continued Operation of
Formosa Point Comfort Plant
Located at Point Comfort, Calhoun County, Texas
Latitude 28° 41' 20" Longitude-96° 32' 50"

Permit: 91780 and PSDTX1240

Issuance Date: September 23, 2019

Expiration Date: September 23, 2029

For the Commission

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

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

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

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

Special Conditions

Permit Number 91780 and PSDTX1240

1. This permit covers only those sources of emissions listed in the attached table entitled "Emission Sources - Maximum Allowable Emission Rates" (MAERT), and those sources are limited to the emission limits and other conditions specified in that table.
2. Non-fugitive emissions from relief valves, safety valves, or rupture discs of gases containing volatile organic compounds (VOC) at a concentration of greater than 1 percent are not authorized by this permit unless authorized on the MAERT. Any releases directly to atmosphere from relief valves, safety valves, or rupture discs of gases containing VOC at a concentration greater than 1 weight percent are not consistent with good practice for minimizing emissions with the exception of Relief Valve PSV-3032.

Train No. 1 and Train No. 2

3. Special Condition Nos. 1 through 31 and Appendices A, B, and C shall apply to Train No. 1 and Train No. 2.

Federal Applicability

4. These facilities shall comply with all applicable requirements of the U.S. Environmental Protection Agency (EPA) regulations on Standards of Performance for New Stationary Sources promulgated in Title 40 Code of Federal Regulations Part 60 (40 CFR Part 60):
 - A. Subpart A, General Provisions.
 - B. Subpart Kb, Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced after July 23, 1984.
 - C. Subpart VV, Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry for which Construction Commenced After January 5, 1981, and on or Before November 7, 2006.
 - D. Subpart DDD, Standards of Performance for Volatile Organic Compound (VOC) Emissions from the Polymer Manufacturing Industry.
5. These facilities shall comply with all applicable requirements of the EPA regulations on National Emission Standards for Hazardous Air Pollutants for Source Categories in 40 CFR Part 63:
 - A. Subpart A, General Provisions.
 - B. Subpart FFFF, National Emission Standard for Hazardous Air Pollutants: Miscellaneous Organic Chemical Manufacturing.

Operational Specifications

6. The facilities in Train No. 1 and Train No. 2 covered by this permit shall not operate unless all associated air pollution abatement equipment is maintained in good working order and operating during normal facility operations. The following steps shall be performed, at a minimum, to ensure the proper operation of the baghouses, fabric filters, and cyclones:

- A. Baghouse and fabric filter pressure drops shall be recorded continuously during operation of the facility. All pressure drop records shall be dated for each day the facility is operated, and these records shall be maintained on-site for a rolling 60-month period and made available for inspection by the Executive Director of the TCEQ or a designated representative upon request.
 - B. When there are visible emissions from a baghouse, fabric filter, or cyclone, the operation associated with the event shall be shut down as soon as practicable and the entire baghouse, fabric filter system or cyclone shall be tested/inspected, and the failed or damaged parts shall be repaired or replaced.
 - C. A spare parts inventory with an adequate number of replacement bags for each baghouse and an adequate number of replacement filters for each fabric filter shall be maintained on site at all times. All baghouses, fabric filters, and cyclones shall undergo a preventative maintenance inspection on an annual basis.
 - D. The TCEQ Regional Director shall be notified as soon as possible of any baghouse, fabric filter, or cyclone system malfunction that results in visible emissions or necessitates repair.
7. Each flare (EPN 1018 and 1067) shall operate with no less than 98 percent efficiency in disposing of the carbon compounds captured by the collection system from the Polypropylene II Unit.
8. The flares (EPN 1018 and 1067) shall be designed and operated in accordance with the following requirements:
- A. The flare systems shall be designed such that the combined assist natural gas and waste stream to each flare meets the 40 CFR § 60.18 specifications of minimum heating value and maximum tip velocity at all times when emissions may be vented to them.

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

The monitors shall be calibrated or have a calibration check performed on an annual basis to meet the following accuracy specifications: the flow monitor shall be $\pm 5.0\%$, and, within 12 months of start of operation of PPII Train 3 temperature monitor shall be $\pm 2.0\%$ at absolute temperature, and pressure monitor shall be ± 5.0 mm Hg.

The calorimeter shall be calibrated, installed, operated, and maintained, in accordance with manufacturer recommendations, to continuously measure and record the net heating value of the gas sent to the flare, in British thermal units/standard cubic foot of the gas.

The monitors and analyzers shall operate as required by this section at least 95% of the time when the flare is operational, averaged over a rolling 12 month period. Flared gas net heating value and actual exit velocity determined in accordance with 40 CFR §§60.18(f)(3) and 60.18(f)(4) shall be recorded at least once every hour.

9. Fuel gas combusted at this facility shall be sweet natural gas containing no more than 5 grains of total sulfur per 100 dry standard cubic feet.
10. This permit authorizes product grade transition emissions from the flares (EPN 1018 and EPN 1067). These emissions are subject to the maximum allowable emission rates indicated on the MAERT. The performance of each product grade transition activity and the emissions associated with it shall be recorded and the rolling 12 month emissions shall be updated on a monthly basis. These records shall include at least the following information:
 - A. The physical location at which emissions from the product grade transition activity occurred, including the emission point number, common name, and any other identifier for the point at which the emissions were released into the atmosphere;
 - B. The type of planned product grade transition activity and the reason for the planned activity;
 - C. The common name and the facility identification number of the facilities at which the product grade transition activity and emissions occurred;
 - D. The date and time of the product grade transition activity and its duration;
 - E. The estimated quantity of each air contaminant or mixture of air contaminants, emitted with the data and methods used to determine it.
11. Total VOC emitted to the atmosphere between the extruder and the point of final product loading shall not exceed 90 pounds per million pounds of polypropylene product on a rolling 12 month average.
12. Hexane shall be used as the solvent carrier in the Polypropylene II process.
13. The total annual production of product for Train No. 1 and Train No. 2 is limited to 482,000 tons per 12 consecutive months. Records of production totals shall be maintained on a rolling 12 month basis.

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

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

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

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

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

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

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

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

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

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

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

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

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

- J. Records of repairs shall include date of repairs, repair results, justification for delay of repairs, and corrective actions taken for all components. Records of instrument monitoring shall indicate dates and times, test methods, and instrument readings. The instrument monitoring record shall include the time that monitoring took place for no less than 95% of the instrument readings recorded. Records of physical inspections shall be noted in the operator's log or equivalent.
 - K. Alternative monitoring frequency schedules of 30 TAC §§ 115.352 - 115.359 or National Emission Standards for Organic Hazardous Air Pollutants, 40 CFR Part 63, Subpart H, may be used in lieu of Items F through G of this condition.
 - L. Compliance with the requirements of this condition does not assure compliance with requirements of 30 TAC Chapter 115, an applicable New Source Performance Standard (NSPS), or an applicable National Emission Standard for Hazardous Air Pollutants (NESHAPS) and does not constitute approval of alternative standards for these regulations.
 - M. With respect to Special Condition 14, new and reworked is meant to apply to major changes in piping. It is not intended to apply to minor activities including but not limited to: installation/replacement of small number of valves and flanges; minor repairs; gasket replacement; repair/replacement of small sections of piping, etc. Also, "process pipelines" does not apply to underground process sewer lines, cooling tower water, fire water, etc. Additionally, the requirement for new and reworked buried connectors to be welded will not apply if compliance would require a process unit shutdown or would create a safety issue including, but not limited to, close proximity of other process pipelines and equipment or unsafe access to the piping.
15. In lieu of the 2000 ppmv VOC limit in Paragraph H of Special Condition 14, damaged or leaking pump, compressor, and agitator seals found to be emitting VOC in excess of 500 ppmv or found by visual inspection to be leaking (e.g., dripping process fluids) shall be tagged and replaced or repaired. A first attempt to repair the leak must be made within 5 days. Records of the first attempt to repair shall be maintained.

Cooling Tower (EPN PP2-CT)

16. The cooling tower (EPN PP2-CT) shall be subject to the following conditions:

- A. The holder of this permit shall execute weekly cooling tower water monitoring using the El Paso Products Company Method of Analysis. This method is described in the TCEQ guidance document entitled "Air Quality Permit Technical Guidance for Chemical Sources - Cooling Towers," dated May, 1997.
 - B. Instead of the monitoring method required in A of this condition, the holder of this permit may use an air stripping system equivalent to the El Paso Products Company Method of Analysis, provided that he previously obtains written approval from the TCEQ Office of Air, Air Permits Division.
 - C. The holder of this permit shall perform sampling and other testing as necessary to establish the lbs per hour of VOC being emitted into the atmosphere from the cooling towers associated with this permit. All sampling and testing methods shall be subject to approval of the TCEQ Executive Director prior to their implementation. The VOC concentration (ppmv) in the exhaust from the air stripping testing system or equivalent testing system and the corresponding pounds of strippable VOC/gallon of cooling water shall be reported. These will be used to determine the level (either ppmv or lb/VOC/gal) at which a leak into cooling water will be assumed in the ongoing monitoring program. Within 30 days after completion of sampling, copies of the test report shall be submitted to the TCEQ Office of Air, Air Permits Division and the TCEQ Corpus Christi Regional Office.
 - D. The VOC associated with cooling tower water shall be monitored weekly with an approved air stripping system or equivalent. The appropriate equipment shall be maintained so as to minimize fugitive VOC emissions from the cooling tower. Faulty equipment shall be repaired at the earliest opportunity but no later than the next scheduled shutdown of the process unit in which the leak occurs. The results of the monitoring and maintenance efforts shall be recorded and such records shall be maintained for a period of two years. The records shall be made available to the TCEQ Executive Director or his designated representative upon request.
 - E. Instead of the weekly monitoring frequency specified in paragraphs A and D of this special condition, the cooling water can be monitored monthly if 12 consecutive months of data are provided to TCEQ showing no leaks into the cooling water as defined in paragraph C of this special condition. If, after the monthly monitoring frequency has been implemented, two leaks in 12 consecutive months are detected as defined in paragraph C of this special condition, the monitoring frequency will return to a weekly basis until such time that 12 consecutive months of data are provided to again show no leaks.
17. The cooling tower (EPN PP2-CT) shall be operated and monitored in accordance with the following:
- A. Cooling tower shall be equipped with drift eliminators having manufacturer's design assurance of 0.001% drift or less. Drift eliminators shall be maintained and inspected at least annually. The permit holder shall maintain records of all inspections and repairs.
 - B. Total dissolved solids (TDS) shall not exceed 4,150 parts per million by weight (ppmw). Dissolved solids in the cooling water drift are considered to be emitted as PM, PM₁₀, and PM_{2.5} as represented in the permit application calculations.
 - C. The cooling tower shall be analyzed for particulate emissions using one of the following methods:
 - (1) Cooling water shall be sampled at least once per day for total dissolved solids (TDS);
or

- (2) TDS monitoring may be reduced to weekly if conductivity is monitored daily and TDS is calculated using a ratio of TDS-to-conductivity (in ppmw per $\mu\text{mho/cm}$ or ppmw/siemens). The ratio of TDS-to-conductivity shall be determined by concurrently monitoring TDS and conductivity on a weekly basis. The permit holder may use the average of two consecutive TDS-to-conductivity ratios to calculate daily TDS; or
 - (3) TDS monitoring may be reduced to quarterly if conductivity is monitored daily and TDS is calculated using a correlation factor established for the cooling towers. The correlation factor shall be the average of nine consecutive weekly TDS-to-conductivity ratios determined using C.(2) above provided the highest ratio is not more than 10% larger than the smallest ratio.
 - (4) The permit holder shall validate the TDS-to-conductivity correlation factor once each calendar quarter. If the ratio of concurrently sampled TDS and conductivity is more than 10% higher or lower than the established factor, the permit holder shall increase TDS monitoring to weekly until a new correlation factor can be established.
- D. Cooling water sampling shall be representative of the cooling tower feed water and shall be conducted using approved methods.
- (1) The analysis method for TDS shall be EPA Method 160.1, ASTM D5907, or SM 2540 C [SM - 19th edition of Standard Methods for Examination of Water]. Water samples should be capped upon collection, and transferred to a laboratory area for analysis.
 - (2) The analysis method for conductivity shall be either ASTM D1125-95A (field or routine laboratory testing) or ASTM D1125-95B (continuous monitor). The analysis may be conducted at the sample site or with a calibrated process conductivity meter. If a conductivity meter is used, it shall be calibrated at least annually. Documentation of the method and any associated calibration records shall be maintained.
 - (3) Alternate sampling and analysis methods may be used to comply with D(1) and D(2) with written approval from the TCEQ Regional Director.
 - (4) Records of all instrument calibrations and test results and process measurements used for the emission calculations shall be retained.
- E. Emission rates of PM, PM₁₀ and PM_{2.5} shall be calculated using the measured TDS and the ratio or correlation of TDS to conductivity measurements, the design drift rate and the daily maximum and average actual cooling water circulation rate for the short term and annual average rates. Alternately, the design maximum circulation rate may be used for all calculations. Emission records shall be updated monthly.

Storage Tank (FIN D-910)

18. Hexane storage tank (FIN D-910) service is limited to storing hexane. The maximum fill rate is 19,527 gallons/hour and the rolling 12 month throughput is 3,200,000 pounds.
19. Except for labels, logos, etc. not to exceed 15 percent of the tank total surface area, uninsulated tank exterior surfaces exposed to the sun shall be white or unpainted aluminum. The storage tank must be equipped with permanent submerged fill pipes.

Ongoing Demonstration of Compliance

20. Ongoing compliance with Special Condition No. 11 and with the MAERT shall be determined for each line by calculation using weekly production rates and weekly sampling and testing of the polymer immediately downstream of the extruder (A) and immediately before the point of final product loading (B). The beverage can test or an equivalent method approved by the TCEQ Austin Regional Office shall be used to determine VOC.

Polymer production rates and product degassing monitoring records shall be maintained at the plant site for at least five years from the date they are made and made available upon request to TCEQ personnel. These records shall include (but are not limited to):

- A. Date and time of sampling.
 - B. Actual plant production rate at the time of sampling and the weekly average production rate.
 - C. Product number and melt index.
 - D. Measured pounds of total VOC per million lbs of polymer after the extruder (A) and immediately prior to final product loading (B).
 - E. Total VOC emitted to the atmosphere between points A and B during the operating week shall be calculated by (A minus B) multiplied by the weekly production rate. Calculations shall take into account any changes in product type during the week.
21. The following requirements apply to capture systems for each flare designated as EPN 1018 and EPN 1067.
- A. Either (1) conduct a once a month visual, audible, and/or olfactory inspection of the capture system to verify there are no leaking components in the capture system; or (2) once a year, verify the capture system is leak free by inspecting in accordance with 40 CFR Part 60, Appendix A, Test Method 21. Leaks shall be indicated by an instrument reading greater than or equal to 500 ppmv above background.
 - B. The control device shall not have a bypass.
- or
- If there is a bypass for the control device, comply with either of the following requirements:
- (1) Install a flow indicator that records and verifies zero flow at least once every fifteen minutes immediately downstream of each valve that if opened would allow a vent stream to bypass the control device and be emitted, either directly or indirectly, to the atmosphere; or
 - (2) Once a month, inspect the valves, verifying the position of the valves and the condition of the car seals prevent flow out the bypass.
- A bypass does not include authorized PSV 3032, analyzer vents, highpoint bleeder vents, low point drains, or rupture discs upstream of pressure relief valves (that do not relieve to a control device) if the pressure between the disc and relief valve is monitored and recorded at least weekly. A deviation shall be reported if the monitoring or inspections indicate bypass of the control device when it is required to be in service.

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

Maintenance, Startup, and Shutdown

22. This permit authorizes air emissions from the planned maintenance, startup, and shutdown (MSS) activities identified in the following table performed at the facilities authorized by this permit.

Facilities	Description/ Emissions Activity	EPN
All facilities*	Depressurize and purge to control per Special Condition 23	1018, 1067, PP2-TEMP
All facilities*	Degas facilities to atmosphere after control per Special Condition 23	PP2-MAINT
All facilities*	Fill and/or vent to control during startup and shutdown	1018, 1067, PP2-TEMP
Vessels	Vent waste gas to control during maintenance	1018, 1067, PP2-TEMP
Propylene Recovery Unit	Vent waste gas to flare during maintenance	1018, 1067
All	Attachment A activities	1018, 1067, PP2-MAINT, PP2-TEMP
Vacuum trucks	Load and transport liquid to support MSS on permanent facilities	PP2-MAINT

* - all facilities include piping

In addition, planned MSS emissions emitted from routine emission points are authorized provided the emissions are compliant with the respective MAERT allowable emission rates and special conditions. This permit authorizes emissions from the following temporary facilities used to support planned MSS activities at permanent site facilities: vacuum trucks and control devices meeting the requirements of Special Condition 25. Emissions from temporary facilities are authorized provided the temporary facility (a) does not remain on the plant site for more than 12 consecutive months, (b) is used solely to support planned MSS activities at the permanent facilities authorized by this permit, and (c) does not operate as a replacement for an existing authorized facility.

Emissions from activities listed on Attachment A may be considered to be equal to the potential to emit represented in the permit amendment application, PI-1 dated January 3, 2008, and updated in subsequent application submittals. The estimated emissions from these activities must be revalidated annually. This revalidation shall consist of verifying 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 number of work orders or equivalent that month and the emissions associated with that activity identified in the permit application.

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

- A. the process unit at which emissions from the MSS activity occurred, including the emission point number and common name of the process unit;
- B. the type of planned MSS activity and the reason for the planned activity;
- C. the common name and the facility identification number, if applicable, of the facilities at which the MSS activity and emissions occurred;
- D. the date and time of the MSS activity and its duration;
- E. the estimated quantity of each air contaminant, or mixture of air contaminants, emitted with the data and methods used to determine it. The emissions shall be estimated using the methods identified in the permit application, consistent with good engineering practice.

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

23. Except for instrumentation/analyzer maintenance and vacuum trucks, process units and facilities shall be depressurized, degassed, and placed back into service in accordance with the following requirements.
 - A. The process equipment shall be vented to a control device or a controlled recovery system during depressurization.
 - B. All liquids from process equipment or storage vessels must be removed to the maximum extent practical prior to opening equipment or commencing depressurization, degassing and/or maintenance. Equipment that only contains material with VOC partial pressure less than 0.50 psi at the normal process temperature and 95°F may be opened to the atmosphere after liquids are removed as required by this condition. 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.
 - C. If mixed phase materials must be removed from process equipment during depressurization, liquids removal, or degassing, the cleared material shall be routed to a knockout drum or equivalent to allow for managed initial phase separation. Any vents in the knockout drum or equivalent must be routed to a control device or a controlled recovery system. Control must remain in place while mixed phase material removal is being performed.
 - D. Facilities shall be degassed using practices that 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. Records shall be maintained of the control device or recovery system utilized with the estimated emissions from controlled and uncontrolled degassing calculated using the methods that were used to determine allowable emissions for the permit application.
 - E. After degassing in accordance with Special Condition 23.D, the VOC concentration in the facilities being degassed shall be verified to be below 10,000 ppmv or less than 10 percent of the lower explosive limit (LEL) using one of the methods below prior to opening directly to atmosphere.
 - (1) For MSS activities other than process unit startup, shutdown, hydroblasting, or turnaround, the following option may be used in lieu of (2) below. The facilities being

prepared for maintenance shall not be vented directly to atmosphere, except as necessary to verify an acceptable VOC concentration and establish isolation of the work area, until the VOC concentration has been verified to be less than 10 percent of the lower explosive limit (LEL) per the site safety procedures.

- (2) Documentation shall be maintained of the locations and/or identifiers where the purge gas or steam enters the process equipment or storage vessel and the exit points for the purge gases. 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 24. The sampling point shall be upstream of the inlet to the control device or controlled recovery system. The sample ports and the collection system must be designed and operated such that there is no air leakage into the sample probe or the collection system downstream of the process equipment or vessel being purged. The facilities shall be degassed to a control device or controlled recovery system until the VOC concentration is less than 10,000 ppmv or less than 10 percent of the lower explosive limit (LEL). Documented plant 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.
- F. Gases and vapors with VOC partial pressure 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 (flare).
 - (3) There is no more than 50 lb of air contaminant to be vented to atmosphere during shutdown or startup, as applicable.

Except as noted in Attachment A, all instances of venting directly to atmosphere per Special Condition 23.F must be documented when occurring as part of any MSS activity. The emissions associated with venting without control must be included in the activity record for those planned MSS activities.

24. Air contaminant concentration shall be measured using an instrument/detector meeting one of the following methods:
- 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, recording VOC concentration each minute. The highest measured 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 measured 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 (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*mole fraction of the total air contaminants present that can be detected by the tube.

The mole fraction may be estimated based on process knowledge. The release concentration and basis for its determination shall be recorded.
- Records shall be maintained of the tube type, range, measured concentrations, and time the samples were taken.
- C. Lower explosive limit measured with a lower explosive limit detector.
- (1) The detector shall be calibrated monthly with a certified propane gas standard at 50% of the lower explosive limit (LEL) for propane. 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 50% of the LEL for propane may be used for calibration and functionality tests provided that the LEL response is within 95% of that for propane.
- D. As an alternative to an instrument/detector, the analysis may be conducted in a laboratory. Bag samples of the gas discharged may be drawn and taken to a Formosa laboratory to be analyzed by gas chromatography (GC). A minimum of two bag samples shall be drawn approximately ten minutes apart. A Tedlar bag, or a bag appropriate for the material to be sampled, shall be used and shall have a valve to seal gas in the bag. The samples shall be drawn as follows:
- (1) The sample point on the equipment being cleared shall be purged sufficiently to ensure a representative sample at the sample valve.
 - (2) The sample bag shall be connected directly to the sample valve.
 - (3) The sample valve and sample bag shall be opened to allow the bag to fill to approximately 80% of capacity. The sample connections shall be fitted such that no air is drawn into the sample bag.
 - (4) The two valves shall then be closed to seal the sample in the bag.

- (5) The sample bag shall then be disconnected and placed in a dark container out of direct sunlight for transport to the analyzer.
- (6) This process is repeated to collect additional samples.
- (7) The sample shall be analyzed within 12 hours of collection.

The laboratory GC shall meet or exceed the requirements of 40 CFR 60, Appendix A, Method 18 Sections 6 (Equipment and Supplies), 7 (Reagents and Standards), 9 (Quality Control), and 10 (Calibration and Standards). The sample shall be analyzed per Section 8.2.1.1.2 of Method 18, except the analysis does not need to be performed in triplicate. The highest measured VOC concentration shall not exceed the specified VOC concentration limit prior to uncontrolled venting.

25. The following requirements apply to vacuum and air mover truck operations to support planned MSS at this site:
 - A. Vacuum pumps and blowers shall not be operated on trucks containing or vacuuming liquids with VOC partial pressure greater than 0.50 psi at 95°F unless the vacuum/blower exhaust is routed to a control device or a controlled recovery system.
 - B. Equip fill line intake with a “duckbill” or equivalent attachment if the hose end cannot be submerged in the liquid being collected.
 - C. A daily record containing the information identified below is required for each vacuum truck in operation at the site each day.
 - (1) Prior to initial use, identify any liquid in the truck and the truck identifier (bill of lading or other unique identifier). Record the liquid level and document that the VOC partial pressure is less than 0.50 psi if the vacuum exhaust is not routed to a control device or a controlled recovery system. After each liquid transfer, identify the liquid transferred and document that the VOC partial pressure is less than 0.50 psi if the vacuum exhaust is not routed to a control device or a controlled recovery system.
 - (2) For each liquid transfer made with the vacuum operating, record the duration of any periods when air may have been entrained with the liquid transfer. The reason for operating in this manner and whether a “duckbill” or equivalent was used shall be recorded. Short, incidental periods, such as those necessary to walk from the truck to the fill line intake, do not need to be documented.
 - (3) If the vacuum truck pump exhaust is controlled with a control device other than an engine or oxidizer, records shall be maintained of VOC exhaust concentration upon commencing each transfer, at the end of each transfer, and at least every hour during each transfer, measured using an instrument meeting the requirements of Special Condition 24.A or B.
 - (4) The volume in the vacuum truck at the end of the day, or the volume unloaded, as applicable.
 - D. The permit holder shall determine the vacuum truck emissions each month using the daily vacuum truck records and the calculation methods utilized in the permit application. If records of the volume of liquid transferred for each pick-up are not maintained, the emissions shall be determined using the physical properties of the liquid vacuumed with the greatest potential emissions. Rolling 12 month vacuum truck emissions shall also be determined on a monthly basis.

26. Vents must be directed to a flare operating in accordance with Special Condition 29 during maintenance on the Propylene Recovery Unit (MTR).
27. Bag filter maintenance shall be performed in a manner to minimize particulate matter emissions and minimize down time.
28. MSS activities represented in the permit application may be authorized under permit by rule only if the procedures, emission controls, monitoring, and recordkeeping are the same as those required by this permit.
29. Control devices required by this permit for emissions from planned MSS activities are limited to those types identified and authorized in this condition. The use of any other types of devices to control emissions from MSS activities must be authorized in accordance with 30 TAC Chapter 116.
 - A. Carbon Adsorption System (CAS).
 - (1) The CAS shall consist of 2 carbon canisters in series with adequate carbon supply for the emission control operation.
 - (2) The CAS shall be sampled downstream of the first can and the concentration recorded at least once every hour of CAS run time to determine breakthrough of the VOC. The sampling frequency may be extended using either of the following methods:
 - (a) It may be extended to up to 30 percent of the minimum potential saturation time for a new can of carbon. The permit holder shall maintain records including the calculations performed to determine the minimum saturation time.
 - (b) The carbon sampling frequency may be extended to longer periods based on previous experience with carbon control of a MSS waste gas stream. The past experience must be with the same VOC, type of facility, and MSS activity. The basis for the sampling frequency shall be recorded. If the VOC concentration on the initial sample downstream of the first carbon canister following a new polishing canister being put in place is greater than 100 ppmv above background, it shall be assumed that breakthrough occurred while that canister functioned as the final polishing canister and a permit deviation shall be recorded.
 - (3) The method of VOC sampling and analysis shall be by detector meeting the requirements of Special Condition 24.A or B.
 - (4) Breakthrough is defined as the highest measured VOC concentration at or exceeding 100 ppmv above background. When the condition of breakthrough of VOC from the initial saturation canister occurs, the waste gas flow shall be switched to the second canister and a fresh canister shall be placed as the new final polishing canister within four hours. Sufficient new activated carbon canisters shall be maintained at the site to replace spent carbon canisters such that replacements can be done in the above specified time frame.
 - (5) Records of CAS monitoring shall include the following:
 - (a) Sample time and date.
 - (b) Monitoring results (ppmv).
 - (c) Canister replacement log.

- (6) Single canister systems are allowed if the time the carbon canister is in service is limited to no more than 30% of the minimum potential saturation time. The permit holder shall maintain records for these systems, including the calculations performed to determine the saturation time. The time limit on carbon canister service shall be recorded and the expiration date attached to the carbon can.

B. Thermal Oxidizer.

- (1) The thermal oxidizer firebox exit temperature shall be maintained at not less than 1400°F and waste gas flows shall be limited to assure at least a 0.5 second residence time in the fire box while waste gas is being fed into the oxidizer.
- (2) The thermal oxidizer exhaust temperature shall be continuously monitored and recorded when waste gas is directed to the oxidizer. The temperature measurements shall be made at intervals of six minutes or less and recorded at that frequency.

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

C. Internal Combustion Engine.

- (1) The internal combustion engine shall have a VOC destruction efficiency of at least 99 percent.
- (2) The engine must have been stack tested with butane or propane to confirm the required destruction efficiency within the period specified in part (3) below. VOC shall be measured in accordance with the applicable EPA Reference Method during the stack test and the exhaust flow rate may be determined from measured fuel flow rate and measured oxygen concentration. A copy of the stack test report shall be maintained with the engine. There shall also be documentation of acceptable VOC emissions following each occurrence of engine maintenance that may reasonably be expected to increase emissions including oxygen sensor replacement and catalyst cleaning or replacement. Stain tube indicators specifically designed to measure VOC concentration shall be acceptable for this documentation, provided a hot air probe or equivalent device is used to prevent error due to high stack temperature, and three sets of concentration measurements are made and averaged. Portable VOC analyzers meeting the requirements of Special Condition No. 24.A are also acceptable for this documentation.
- (3) The engine shall be operated and monitored as specified below.
 - (a) If the engine is operated with an oxygen sensor-based air-to-fuel ratio (AFR) controller, documentation for each AFR controller that the manufacturer's or supplier's recommended maintenance has been performed, including replacement of the oxygen sensor as necessary for oxygen sensor-based controllers shall be maintained with the engine. The oxygen sensor shall be replaced at least quarterly in the absence of a specific written recommendation. The engine must have been stack tested within the past 12 months in accordance with part (2) of this condition.

The test period may be extended to 24 months if the engine exhaust is sampled once an hour when waste gas is directed to the engine using a detector meeting the requirements of Special Condition No. 24.A. The sample ports and the collection system must be designed and operated such that there is no air

leakage into the sample probe or the collection system downstream of the engine. The concentrations shall be recorded and the MSS activity shall be stopped as soon as possible if the VOC concentration exceeds 100 ppmv above background.

- (b) If an oxygen sensor-based AFR controller is not used, the engine exhaust to atmosphere shall be monitored continuously and the VOC concentration recorded at least once every 15 minutes when waste gas is directed to the engine. The sample ports and the collection system must be designed and operated such that there is no air leakage into the sample probe or the collection system downstream of the engine. The method of VOC sampling and analysis shall be by detector meeting the requirements of Special Condition No. 24.A. An alarm shall be installed such that an operator is alerted when outlet VOC concentration exceeds 100 ppmv above background. The MSS activity shall be stopped as soon as possible if the VOC concentration exceeds 100 ppmv above background for more than one minute. The date and time of all alarms and the actions taken shall be recorded. The engine must have been stack tested within the past 24 months in accordance with part (2) of this condition.
 - D. The plant flare system (EPNs 1067 and 1018) and temporary flare (EPN PP2-TEMP) shall be operating in accordance with the Special Condition No. 8.
 - E. A liquid scrubbing system may be used upstream of carbon adsorption. A single carbon can or a liquid scrubbing system may be used as the sole control device if the requirements below are satisfied.
 - (1) The exhaust to atmosphere shall be monitored continuously and the VOC concentration recorded at least once every 15 minutes when waste gas is directed to the scrubber.
 - (2) The method of VOC sampling and analysis shall be by detector meeting the requirements of Special Condition 24.A or B.
 - (3) An alarm shall be installed such that an operator is alerted when outlet VOC concentration exceeds 100 ppmv above background. The MSS activity shall be stopped as soon as possible when the VOC concentration exceeds 100 ppmv above background for more than one minute. The date and time of all alarms and the actions taken shall be recorded.
30. The capture systems for the flares shall not have a bypass unless:
- A. A flow indicator that records and verifies zero flow at least once every fifteen vent stream to bypass the control device and be emitted, either directly or indirectly, to the atmosphere; or
 - B. Inspect the valves that prevent flow out the bypass once a month, verifying the position of the valves and the condition of the car seals prevent flow out the bypass.

These requirements do not apply to high point vent and low point drain valves. A deviation shall be reported if the monitoring or inspections indicate bypass of the control device when required to be in service per this permit. If any of the above inspections is not satisfactory, the permit holder shall promptly take necessary corrective action. Records shall be maintained documenting the performance and results of the inspections required above.

Permit by Rule

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

Authorization	Source or Activity
30 TAC § 106.393	Pulse clean in-line filter for the undersize pellet recycle system

Train No. 3

32. Special Condition Nos. 1 through 2, 32 through 59, and Appendices D through F shall apply to Train No. 3.

Federal Applicability

33. These facilities shall comply with all applicable requirements of the EPA regulations on Standards of Performance for New Stationary Sources promulgated in Title 40 Code of Federal Regulations Part 60 (40 CFR Part 60):
- A. Subpart A, General Provisions.
 - B. Subpart Kb, Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced after July 23, 1984.
 - C. Subpart VVa, Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry for which Construction, Reconstruction, or Modification Commenced After November 7, 2006.
 - D. Subpart DDD, Standards of Performance for Volatile Organic Compound (VOC) Emissions from the Polymer Manufacturing Industry.
34. These facilities shall comply with all applicable requirements of the EPA regulations on National Emission Standards for Hazardous Air Pollutants for Source Categories in 40 CFR Part 63:
- A. Subpart A, General Provisions.
 - B. Subpart FFFF, National Emission Standard for Hazardous Air Pollutants: Miscellaneous Organic Chemical Manufacturing.

Operational Specifications

35. The facilities covered by this permit shall not operate unless all associated air pollution abatement equipment is maintained in good working order and operating during normal facility operations. The following steps shall be performed, at a minimum, to ensure the proper operation of the baghouses, fabric filters, and cyclones:

- A. Particulate matter outlet grain loading shall not exceed 0.004 grain per dscf of air from the following vents located in Train 3: EPN PP2-3F402, EPN PP2-3F400, EPN PP2-3F403, EPN PP2-3F405, EPN PP2-3F406B, EPN PP2-3F501, EPN PP2-3F985, and EPN PP2-3F987. Particulate matter outlet grain loading shall not exceed 0.008 grain per dscf from EPN PP2-3F982, located in Train No. 3. Particulate matter grain loading shall not exceed 0.01 grain per dscf of air from all other vents in Train No. 3. There shall be no visible emissions exceeding 30 seconds in any six-minute period as determined using EPA Test Method 22.
- B. The vents covered by this permit shall not operate unless control devices and associated equipment are maintained in good working order and operating. All vents will be inspected for visible emissions once per day and a spare-parts filter inventory will be maintained on site. Records shall be maintained of all inspections and maintenance performed.
- C. The differential pressure across each baghouse in Train 3 of the Polypropylene II Unit shall be continuously monitored and be recorded at least once an hour. The pressure drop shall be at least the minimum pressure drop and shall not exceed the maximum pressure drop for the following baghouses in the table below:

EPN	Minimum pressure drop (inches of H2O)	Maximum pressure drop (inches of H2O)
PP2-3F405	8	17
PP2-3F406B	8	17
PP2-3F982	7.5	17
PP2-3F985	7.5	17
PP2-3F987	15	25
PP2-3F501	7.5	17
PP2-3F400	4	17
PP2-3F402	6.5	17
PP2-3F403	19	40

Each monitoring device in Train No. 3 of the Polypropylene II Unit 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 0.5 inches water gauge pressure or 0.5 percent of span.

Quality assured (or valid) data must be generated when each baghouse is 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 time (in hours) that the baghouse operated over the previous rolling 12 month period. The measurements missed shall be estimated using engineering judgment and the methods used recorded.

- 36. Vapors from the hexane storage tank (FIN D-910) shall be vented to the flares (EPN 1018 and EPN 1067) during routine operations.
- 37. The flares (EPN 1018 and EPN 1067) shall be subject to Special Condition Nos. 7-9.

38. Product grade transition emissions from the flares (EPN 1018 and EPN 1067) shall be subject to Special Condition No. 10.
39. Total VOC emitted to the atmosphere between the extruder and the point of final product loading shall not exceed 25 pounds per million pounds of polypropylene product on a rolling 12 month average.
40. Hexane shall be used as the solvent carrier in the Polypropylene II process.
41. Annual production from Train No. 3 is limited to 276,000 tons per 12 consecutive months. Records of production totals shall be maintained on a rolling 12 month basis.
42. Records of total VOC emitted to the atmosphere from the peroxide dip pot (EPN PP2-3D407) on a rolling 12 month average shall be maintained. Emissions from the peroxide dip pot shall be calculated using the methods that were used to determine the MAERT limits in the amendment application, form PI-1 dated October 2015. Sample calculations from the application shall be attached to a copy of this permit at the plant site.

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

43. Special Condition Nos. 14 and 15 shall apply to Train No. 3.

Piping, Valves, Pumps, and Compressors in Chlorine Service – 28AVO

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

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

Cooling Tower (EPN PP2-CT3)

45. The VOC associated with cooling tower (EPN PP2-CT3) water shall be monitored monthly with an air stripping system meeting the requirements of the TCEQ Sampling Procedures Manual, Appendix P (dated January 2003 or a later edition) or an approved equivalent sampling method. The results of the monitoring, cooling water flow rate and maintenance activities on the cooling water system shall be recorded. The monitoring results and cooling water hourly mass flow rate

shall be used to determine cooling towers hourly VOC emissions. The rolling 12 month cooling water emission rate shall be recorded on a monthly basis and be determined by summing the VOC emissions between VOC monitoring periods over the rolling 12 month period. The emissions between VOC monitoring periods shall be obtained by multiplying the total cooling water mass flow between cooling water monitoring periods by the higher of the 2 VOC monitored results.

46. The cooling tower (EPN PP2-CT3) shall be operated and monitored in accordance with the following:
- A. Cooling tower shall be equipped with drift eliminators having manufacturer's design assurance of 0.001% drift or less. Drift eliminators shall be maintained and inspected at least annually. The permit holder shall maintain records of all inspections and repairs.
 - B. Total dissolved solids (TDS) shall not exceed 4,150 parts per million by weight (ppmw). Dissolved solids in the cooling water drift are considered to be emitted as PM, PM₁₀, and PM_{2.5} as represented in the permit application calculations.
 - C. The Train No. 3 cooling tower shall be analyzed for particulate emissions using one of the following methods:
 - (1) Cooling water shall be sampled at least once per day for total dissolved solids (TDS); or
 - (2) TDS monitoring may be reduced to weekly if conductivity is monitored daily and TDS is calculated using a ratio of TDS-to-conductivity (in ppmw per $\mu\text{mho/cm}$ or ppmw/siemens). The ratio of TDS-to-conductivity shall be determined by concurrently monitoring TDS and conductivity on a weekly basis. The permit holder may use the average of two consecutive TDS-to-conductivity ratios to calculate daily TDS; or
 - (3) TDS monitoring may be reduced to quarterly if conductivity is monitored daily and TDS is calculated using a correlation factor established for the cooling towers. The correlation factor shall be the average of nine consecutive weekly TDS-to-conductivity ratios determined using C.(2) above provided the highest ratio is not more than 10% larger than the smallest ratio.
 - (4) The permit holder shall validate the TDS-to-conductivity correlation factor once each calendar quarter. If the ratio of concurrently sampled TDS and conductivity is more than 10% higher or lower than the established factor, the permit holder shall increase TDS monitoring to weekly until a new correlation factor can be established.
 - D. Cooling water sampling shall be representative of the cooling tower feed water and shall be conducted using approved methods.
 - (1) The analysis method for TDS shall be EPA Method 160.1, ASTM D5907, or SM 2540 C [SM - 19th edition of Standard Methods for Examination of Water]. Water samples should be capped upon collection, and transferred to a laboratory area for analysis.
 - (2) The analysis method for conductivity shall be either ASTM D1125-95A (field or routine laboratory testing) or ASTM D1125-95B (continuous monitor). The analysis may be conducted at the sample site or with a calibrated process conductivity meter. If a conductivity meter is used, it shall be calibrated at least annually. Documentation of the method and any associated calibration records shall be maintained.
 - (3) Alternate sampling and analysis methods may be used to comply with D(1) and D(2) with written approval from the TCEQ Regional Director.

- (4) Records of all instrument calibrations and test results and process measurements used for the emission calculations shall be retained.
- E. Emission rates of PM, PM₁₀ and PM_{2.5} shall be calculated using the measured TDS and the ratio or correlation of TDS to conductivity measurements, the design drift rate and the daily maximum and average actual cooling water circulation rate for the short term and annual average rates. Alternately, the design maximum circulation rate may be used for all calculations. Emission records shall be updated monthly.

Storage Tank (FIN D-910)

47. Hexane storage tank FIN D-910 shall be subject to Special Conditions Nos. 18 and 19.

Initial Determination of Compliance – Train No. 3

48. The permit holder shall perform stack sampling and other testing as required to establish the actual pattern and quantities of air contaminants being emitted into the atmosphere to demonstrate compliance with the MAERT and the maximum outlet grain loading concentrations specified for the vents (EPN PP2-3F402, EPN PP2-3F400, EPN PP2-3F403, EPN PP2-3F405, EPN PP2-3F406B, EPN PP2-3F501, EPN PP2-3F982, EPN PP2-3F985, EPN PP2-3F987) in Special Condition 35. The permit holder is responsible for providing sampling and testing facilities and conducting the sampling and testing operations at his expense. Sampling shall be conducted in accordance with the appropriate procedures of the TCEQ Sampling Procedures Manual and the EPA Reference Methods.

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

- A. The appropriate TCEQ Regional Office shall be notified not less than 45 days prior to sampling. The notice shall include:
 - (1) Proposed date for pretest meeting.
 - (2) Date sampling will occur.
 - (3) Name of firm conducting sampling.
 - (4) Type of sampling equipment to be used.
 - (5) Method or procedure to be used in sampling.
 - (6) Description of any proposed deviation from the sampling procedures specified in this permit or TCEQ/EPA sampling procedures.
 - (7) Procedure/parameters to be used to determine worst case emissions during the sampling period.

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

- B. Air contaminants emitted from the vents (EPN PP2-3F402, EPN PP2-3F400, EPN PP2-3F403, EPN PP2-3F405, EPN PP2-3F406B, EPN PP2-3F501, EPN PP2-3F982, EPN PP2-3F985, and EPN PP2-3F987) to be tested for include (but are not limited to) PM, PM₁₀, and PM_{2.5}.
- C. Sampling shall occur within 60 days after achieving the maximum operating rate, but no later than 180 days after initial start-up of the Train No. 3 production line and at such other times as may be required by the TCEQ Executive Director. Requests for additional time to perform sampling shall be submitted to the appropriate regional office.
- D. The facility being sampled shall operate at the maximum polypropylene production rate and maximum airflow rate during stack emission testing. These conditions/parameters and any other primary operating parameters that affect the emission rate shall be monitored and recorded during the stack test. Any additional parameters shall be determined at the pretest meeting and shall be stated in the sampling report. Permit conditions and parameter limits may be waived during stack testing performed under this condition if the proposed condition/parameter range is identified in the test notice specified in paragraph A and accepted by the TCEQ Regional Office. Permit allowable emissions and emission control requirements are not waived and still apply during stack testing periods.

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

- E. Copies of the final sampling report shall be forwarded to the offices below within 60 days after sampling is completed. Sampling reports shall comply with the attached provisions entitled "Chapter 14, Contents of Sampling Reports" of the TCEQ Sampling Procedures Manual. The reports shall be distributed as follows:
 - One copy to the appropriate TCEQ Regional Office.
 - One copy to each local air pollution control program.
- F. Sampling ports and platform(s) shall be incorporated into the design of the vents according to the specifications set forth in the attachment entitled "Chapter 2, Stack Sampling Facilities" of the TCEQ Sampling Procedures Manual. Alternate sampling facility designs must be submitted for approval to the TCEQ Regional Director.
- G. The permit holder may submit a request to substitute vendor specification data in lieu of the testing required in this condition for the vents listed in Special Condition No. 48.B. The vendor specification data shall guarantee the maximum outlet grain loading specified in Special Condition No. 35 at each particle size (PM, PM₁₀ and PM_{2.5}), and the removal efficiency for each particle size (PM, PM₁₀ and PM_{2.5}) to demonstrate compliance with the emission rates specified in the MAERT. The vendor specification data shall provide this information at the maximum airflow rate through the specific control device represented in the amendment application dated October 2015. The vendor specification data shall also include all documentation and test methods that were used to derive the specification data and support the statements in the guarantee.

The request for approval of the vendor specification data and all supporting documentation shall be submitted through a permit alteration or amendment application. This request shall be made no later than 180 days prior to the start of operations of Train No. 3. If authorized, the permit shall be updated with the alteration or amendment application date of the vendor guarantee submittal, and shall specify the EPN for which the vendor guarantee was

approved. If the substitution of the vendor specification data in lieu of the testing is not authorized through a permit alteration or amendment, then the testing delineated in this condition shall apply.

If any of the EPNs listed in Special Condition No. 48.B that have had vendor specification data approved are modified after the approval, or if the manufacturer or model has changed, then a new vendor specification shall be submitted in accordance with this condition. Testing of any vent where vendor specification data has been approved may be required by the TCEQ Executive Director and shall be performed in accordance with this condition.

Ongoing Demonstration of Compliance

49. Ongoing compliance with VOC emission limits for the polypropylene pellet handling systems between each extruder and product loadout (inclusive) will be determined by calculation using weekly production rates and weekly average sampling and testing of the polypropylene for residual VOC at the following two locations: (A) immediately after the pellet extruder and (B) at final product loading. The VOC head space test attached to these conditions shall be used to determine the residual VOC. Weekly average sampling will be based on a minimum of three samples. Separate samples are required for each product type produced during the month.

Polymer production rates and monitoring records will be maintained at the plant site and will include (but are not limited to):

- A. Date and time of sampling.
- B. Actual plant production rate at the time of sampling and the weekly average production rate.
- C. Product number and melt index.
- D. Polymer handling emissions will be calculated by multiplying the average of the residual VOC (ppmw) for the samples ("A" minus "B") by (weekly production).

Compliance Assurance Monitoring

50. Special Condition No. 21 shall apply to capture systems for each flare designated as EPN 1018 and EPN 1067.

Maintenance, Startup, and Shutdown

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

Attachment D identifies the inherently low emitting MSS activities that may be performed at the plant. Emissions from activities identified in Attachment D shall be considered to be equal to the potential to emit represented in the permit application, PI-1 dated October 2015, and updated in subsequent application submittals. The estimated emissions from the activities listed in Attachment D must be revalidated annually. This revalidation shall consist of the estimated emissions for each type of activity and the basis for that emission estimate.

In addition, planned MSS emissions emitted from routine emission points are authorized provided the emissions are compliant with the respective MAERT allowable emission rates and special conditions. This permit authorizes emissions from the following temporary facilities used to support planned MSS activities at permanent site facilities: vacuum trucks and control devices meeting the requirements of Special Condition 55. Emissions from temporary facilities are authorized provided the temporary facility (a) does not remain on the plant site for more than 12 consecutive months, (b) is used solely to support planned MSS activities at the permanent facilities authorized by this permit, and (c) does not operate as a replacement for an existing authorized facility.

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

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

- A. the process unit at which emissions from the MSS activity occurred, including the emission point number and common name of the process unit;
- B. the type of planned MSS activity and the reason for the planned activity;
- C. the common name and the facility identification number, if applicable, of the facilities at which the MSS activity and emissions occurred;
- D. the date and time of the MSS activity and its duration;
- E. the estimated quantity of each air contaminant, or mixture of air contaminants, emitted with the data and methods used to determine it. The emissions shall be estimated using the methods identified in the permit application, consistent with good engineering practice.

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

52. Process units and facilities, with the exception of those identified in Special Condition No. 54 and Attachment D shall be depressurized, emptied, degassed, and placed in service in accordance with the following requirements.
 - A. The process equipment shall be depressurized to a control device or a controlled recovery system prior to venting to atmosphere, degassing, or draining liquid. Equipment that only contains material that is liquid with VOC partial pressure less than 0.50 psi at the normal process temperature and 95°F may be opened to atmosphere and drained in accordance with paragraph C of this special condition. The vapor pressure at 95°F may be used if the actual temperature of the liquid is verified to be less than 95°F and the temperature is recorded.
 - B. If mixed phase materials must be removed from process equipment, the cleared material shall be routed to a knockout drum or equivalent to allow for managed initial phase separation. If the VOC partial pressure is greater than 0.50 psi at either the normal process temperature or 95°F, any vents in the system must be routed to a control device or a controlled recovery system. The vapor pressure at 95°F may be used if the actual temperature of the liquid is verified to be less than 95°F and the temperature is recorded.

Control must remain in place until degassing has been completed or the system is no longer vented to atmosphere.

- C. All liquids from process equipment or storage vessels must be removed to the maximum extent practical prior to opening equipment to commence degassing and/or maintenance. Liquids must be drained into a closed vessel or closed liquid recovery system unless prevented by the physical configuration of the equipment. If it is necessary to drain liquid into an open pan or sump, the liquid must be covered or transferred to a covered vessel within one hour of being drained.
- D. If the VOC partial pressure is greater than 0.50 psi at the normal process temperature or 95°F, facilities shall be degassed using good engineering practice to ensure air contaminants are removed from the system through the control device or controlled recovery system to the extent allowed by process equipment or storage vessel design. The vapor pressure at 95°F may be used if the actual temperature of the liquid is verified to be less than 95°F and the temperature is recorded. The facilities to be degassed shall not be vented directly to atmosphere, except as necessary to establish isolation of the work area or to monitor VOC concentration following controlled depressurization. The venting shall be minimized to the maximum extent practicable and actions taken recorded. The control device or recovery system utilized shall be recorded with the estimated emissions from controlled and uncontrolled degassing calculated using the methods that were used to determine allowable emissions for the permit application.
 - (1) For MSS activities identified in Attachment E, the following option may be used in lieu of (2) below. The facilities being prepared for maintenance shall not be vented directly to atmosphere until the VOC concentration has been verified to be less than 10 percent of the lower explosive limit (LEL) per the site safety procedures.
 - (2) The locations and/or identifiers where the purge gas or steam enters the process equipment or storage vessel and the exit points for the exhaust gases shall be recorded (process flow diagrams [PFDs] or piping and instrumentation diagrams [P&IDs] may be used to demonstrate compliance with the requirement). If the process equipment is purged with a gas, two system volumes of purge gas must have passed through the control device or controlled recovery system before the vent stream may be sampled to verify acceptable VOC concentration prior to uncontrolled venting. The VOC sampling and analysis shall be performed using an instrument meeting the requirements of Special Condition 53. The sampling point shall be upstream of the inlet to the control device or controlled recovery system. The sample ports and the collection system must be designed and operated such that there is no air leakage into the sample probe or the collection system downstream of the process equipment or vessel being purged. If there is not a connection (such as a sample, vent, or drain valve) available from which a representative sample may be obtained, a sample may be taken upon entry into the system after degassing has been completed. The sample shall be taken from inside the vessel so as to minimize any air or dilution from the entry point. The facilities shall be degassed to a control device or controlled recovery system until the VOC concentration is less than 10,000 ppmv or 10 percent of the LEL. Documented site procedures used to de-inventory equipment to a control device for safety purposes (i.e., hot work or vessel entry procedures) that achieve at least the same level of purging may be used in lieu of the above.
- E. Gases and vapors with VOC partial pressure 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 (flare).
- (3) There is no more than 50 lb of air contaminant to be vented to atmosphere during shutdown or startup, as applicable.

All instances of venting directly to atmosphere per Special Condition 52.E must be documented when occurring as part of any MSS activity. The emissions associated with venting without control must be included in the work order or equivalent for those planned MSS activities identified in Attachment E.

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

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

- (1) The instrument shall be calibrated within 24 hours of use with a calibration gas such that the response factor (RF) of the VOC (or mixture of VOCs) to be monitored shall be less than 2.0. The calibration gas and the gas to be measured, and its approximate (RF) shall be recorded.
- (2) Sampling shall be performed as directed by this permit in lieu of section 8.3 of Method 21. During sampling, data recording shall not begin until after two times the instrument response time. The date and time shall be recorded, and VOC concentration shall be monitored for at least 5 minutes, recording VOC concentration each minute. As an alternative the VOC concentration may be monitored over a five-minute period with an instrument designed to continuously measure concentration and record the highest concentration read. The highest measured VOC concentration shall be recorded and shall not exceed the specified VOC concentration limit prior to uncontrolled venting.

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

- (1) The air contaminant concentration measured as defined in (3) is less than 80 percent of the range of the tube and is at least 20 percent of the maximum range of the tube.
- (2) The tube is used in accordance with the manufacturer's guidelines.
- (3) At least 2 samples taken at least 5 minutes apart must satisfy the following prior to uncontrolled venting:

measured contaminant concentration (ppmv) < release concentration.

Where the release concentration is:

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

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

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

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

- (1) The detector shall be calibrated within 30 days of use with a certified propane gas standard at 50% of the lower explosive limit (LEL) for propane. Records of the calibration date/time and calibration result (pass/fail) shall be maintained.
 - (2) A functionality test shall be performed on each detector within 24 hours of use with a certified gas standard at 50% of the LEL for propane. 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 50% of the LEL for propane may be used for calibration and functionality tests provided that the LEL response is within 95% of that for propane.
- D. As an alternative to an instrument/detector, the analysis may be conducted in a laboratory. Bag samples of the gas discharged may be drawn and taken to a Formosa laboratory to be analyzed by gas chromatography (GC). A minimum of two bag samples shall be drawn approximately ten minutes apart. A Tedlar bag, or a bag appropriate for the material to be sampled, shall be used and shall have a valve to seal gas in the bag. The samples shall be drawn as follows:
- (1) The sample point on the equipment being cleared shall be purged sufficiently to ensure a representative sample at the sample valve.
 - (2) The sample bag shall be connected directly to the sample valve.
 - (3) The sample valve and sample bag shall be opened to allow the bag to fill to approximately 80% of capacity. The sample connections shall be fitted such that no air is drawn into the sample bag.
 - (4) The two valves shall then be closed to seal the sample in the bag.
 - (5) The sample bag shall then be disconnected and placed in a dark container out of direct sunlight for transport to the analyzer.
 - (6) This process is repeated to collect additional samples.
 - (7) The sample shall be analyzed within 12 hours of collection.

The laboratory GC shall meet or exceed the requirements of 40 CFR 60, Appendix A, Method 18 Sections 6 (Equipment and Supplies), 7 (Reagents and Standards), 9 (Quality Control), and 10 (Calibration and Standards). The sample shall be analyzed per Section 8.2.1.1.2 of Method 18, except the analysis does not need to be performed in triplicate. The highest measured VOC concentration shall not exceed the specified VOC concentration limit prior to uncontrolled venting.

54. Fixed roof storage tanks are subject to the following requirements:

- A. The tank shall not be opened or ventilated without control, unless the air circulation in the tank vapor space is minimized and meets the requirements of (1) and (2) below, until one of the criteria in part B of this condition is satisfied.
- (1) One manway may be opened to allow access to the tank to remove or de-volatilize the remaining liquid. Other manways or access points may be opened as necessary to remove or de-volatilize the remaining liquid. Wind barriers shall be installed at all open manways and access points to minimize air flow through the tank.
 - (2) Access points shall be closed when not in use.

- B. The tank may be opened without restriction and ventilated without control, after all standing liquid has been removed from the tank or the liquid remaining in the tank has a VOC partial pressure less than 0.02 psia. These criteria shall be demonstrated in any one of the following ways.
- (1) Low VOC partial pressure liquid that is soluble with the liquid previously stored may be added to the tank to lower the VOC partial pressure of the liquid mixture remaining in the tank to less than 0.02 psia. This liquid shall be added during tank degassing if practicable. The estimated volume of liquid remaining in the drained tank and the volume and type of liquid added shall be recorded. The liquid VOC partial pressure may be estimated based on this information and engineering calculations.
 - (2) If water is added or sprayed into the tank to remove standing VOC, one of the following must be demonstrated:
 - (a) Take a representative sample of the liquid remaining in the tank and verify no visible sheen using the static sheen test from 40 CFR 435 Subpart A Appendix 1.
 - (b) Take a representative sample of the liquid remaining in the tank and verify hexane soluble VOC concentration is less than 1000 ppmw using EPA method 1664 (may also use 8260B or 5030 with 8015 from SW-846).
 - (c) Stop ventilation and close the tank for at least 24 hours. When the tank manway is opened after this period, verify VOC concentration is less than 1000 ppmv through the procedure in Special Condition 53.
 - (3) No standing liquid verified through visual inspection.

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

- C. If the ventilation of the vapor space is controlled, the emission control system shall meet the following requirements.
- (1) Any gas or vapor removed from the vapor space under the roof must be routed to a control device or a controlled recovery system and controlled degassing must be maintained until the VOC concentration is less than 10,000 ppmv or 10 percent of the LEL. The locations and identifiers of vents other than permanent roof fittings and seals, control device or controlled recovery system, and controlled exhaust stream shall be recorded. There shall be no other gas/vapor flow out of the vapor space under the floating roof when degassing to the control device or controlled recovery system.
 - (2) The vapor space under the roof shall be vented using good engineering practice to ensure air contaminants are flushed out of the tank through the control device or controlled recovery system to the extent allowed by the storage tank design.
 - (3) A volume of purge gas equivalent to twice the volume of the vapor space under the roof must have passed through the control device or into a controlled recovery system, before the vent stream may be sampled to verify acceptable VOC concentration. The measurement of purge gas volume shall not include any make-up air introduced into the control device or recovery system. The VOC sampling and analysis shall be performed as specified in Special Condition 53.
 - (4) The sampling point shall be upstream of the inlet to the control device or controlled recovery system. The sample ports and the collection system must be designed and operated such that there is no air leakage into the sample probe or the collection system downstream of the process equipment or vessel being purged.

- D. The following records shall be maintained:
- (1) start and completion of controlled degassing, and total volumetric flow,
 - (2) all standing liquid was removed from the tank or any transfers of low VOC partial pressure liquid to or from the tank including volumes and vapor pressures to reduce tank liquid VOC partial pressure to <0.02 psi,
 - (3) if there is liquid in the tank, VOC partial pressure of liquid, start and completion of uncontrolled degassing, and total volumetric flow,
 - (4) the estimated quantity of each air contaminant, or mixture of air contaminants, emitted between events (1) and (3) with the data and methods used to determine it. The emissions associated with roof landing activities shall be calculated using the methods described in Section 7.1.3.2 of AP-42 "Compilation of Air Pollution Emission Factors, Chapter 7 - Storage of Organic Liquids" dated November 2006 and the permit application.
55. The following requirements apply to vacuum and air mover truck operations to support planned MSS at this site:
- A. Prior to initial use, identify any liquid in the truck. Record the liquid level and document the VOC partial pressure. After each liquid transfer, identify the liquid, the volume transferred, and its VOC partial pressure.
 - B. If vacuum pumps or blowers are operated when liquid is in or being transferred to the truck, the following requirements apply:
 - (1) If the VOC partial pressure of the liquid in or being transferred to the truck is greater than 0.50 psi at 95°F, the vacuum/blower exhaust shall be routed to a control device or a controlled recovery system.
 - (2) Equip fill line intake with a "duckbill" or equivalent attachment if the hose end cannot be submerged in the liquid being collected.
 - (3) A daily record containing the information identified below is required for each vacuum truck in operation at the site each day.
 - (a) For each liquid transfer made with the vacuum operating, record the duration of any periods when air may have been entrained with the liquid transfer. The reason for operating in this manner and whether a "duckbill" or equivalent was used shall be recorded. Short, incidental periods, such as those necessary to walk from the truck to the fill line intake, do not need to be documented.
 - (b) If the vacuum truck exhaust is controlled with a control device other than an engine or oxidizer, VOC exhaust concentration upon commencing each transfer, at the end of each transfer, and at least every hour during each transfer shall be recorded, measured using an instrument meeting the requirements of Special Condition No. 53.A or B.
 - C. Record the volume in the vacuum truck at the end of the day, or the volume unloaded, as applicable.
 - D. The permit holder shall determine the vacuum truck emissions each month using the daily vacuum truck records and the calculation methods utilized in the permit application. If records of the volume of liquid transferred for each pick-up are not maintained, the emissions

shall be determined using the physical properties of the liquid vacuumed with the greatest potential emissions. Rolling 12 month vacuum truck emissions shall also be determined on a monthly basis.

- E. If the VOC partial pressure of all the liquids vacuumed into the truck is less than 0.10 psi, this shall be recorded when the truck is unloaded or leaves the plant site and the emissions may be estimated as the maximum potential to emit for a truck in that service as documented in the permit application. The recordkeeping requirements in Special Condition Nos. 55.A through 55.D do not apply.
- 56. Vents must be directed to a flare operating in accordance with Special Condition No. 59 during maintenance on the Propylene Recovery Unit.
- 57. Bag filter maintenance shall be performed in a manner to minimize particulate matter emissions and minimize down time.
- 58. Additional occurrences of MSS activities authorized by this permit (see Attachment D, E, and F) may be authorized under permit by rule only if conducted in compliance with this permit's procedures, emission controls, monitoring, and recordkeeping requirements applicable to the activity.
- 59. Control devices required by this permit for emissions from planned MSS activities are limited to those types identified in this condition. Control devices shall be operated with no visible emissions except periods not to exceed a total of five minutes during any two consecutive hours. Each device used must meet all the requirements identified for that type of control device.

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

The plant flare system (EPNs 1067 and 1018).

- A. The heating value and velocity requirements in 40 CFR 60.18 shall be satisfied during operations authorized by this permit.
- B. The flare shall be operated with a flame present at all times and/or have a constant pilot flame. The pilot flame shall be continuously monitored by a thermocouple or an infrared monitor. The time, date, and duration of any loss of pilot flame shall be recorded. Each monitoring device shall be accurate to, and shall be calibrated at a frequency in accordance with, the manufacturer's specifications.
- C. Waste gas flow and assist gas shall be monitored by flow monitor and calorimeter when degassing process units to ensure adequate Btu/scf at the flare tip for unit shutdowns/startups.

Date: September 23, 2019

Permit Numbers 91780 and PSDTX1240

Attachment A

Inherently Low Emitting Activities (Train Nos. 1 and 2)

Activity	Emissions			
	VOC	NO _x	CO	PM
Blowers	X	X	X	
Repair/replace baghouses/bag filters	X			X
Catalyst charging	X			
Instrument/analyzer calibration/repair, sight glass cleaning/repair	X	X	X	
Water draining*	X			
Material conveying*	X			X
Open container,* routine quality,* and closed system sampling	X	X	X	X
Activities documented as having emissions <0.1 lb*	X			

* These activities are not subject to the requirements of Special Condition 22.

Date: September 23, 2019

Permit Numbers 91780 and PSDTX1240

Attachment B

Routine Maintenance Activities (Train Nos. 1 and 2)

Dryer vents

Heat exchangers, relief valves, filters/strainers, pumps, and compressors

Piping, tubing, and component degassing

Repair/replacement that may be isolated so that the process volume to be emptied and degassed is less than 200 cubic feet.

Date: September 23, 2019

Permit Numbers 91780 and PSDTX1240

Attachment C

Significant MSS Activity Summary (Train Nos. 1 and 2)

The following activities are subject to the full recordkeeping requirements specified by Special Condition 22.

Vessel and reactor repair and maintenance

Plant startup, shutdown, and turnaround

Maintenance on the Propylene Recovery Unit systems and vessels during plant operation

Activities not listed on Attachments A or B

Date: September 23, 2019

Permit Numbers 91780 and PSDTX1240

Attachment D

Inherently Low Emitting Activities (Train No. 3)

Activity	Emissions				
	VOC	NO _x	CO	PM	SO ₂
Catalyst charging	X				
Instrument/analyzer calibration/repair, sight glass cleaning/repair	X	X	X		

Date: September 23, 2019

Permit Numbers 91780 and PSDTX1240

Attachment E

Routine Maintenance Activities (Train No. 3)

Filters/strainer maintenance and replacement

Heat exchangers, relief valves, filters/strainers, pumps, and compressors

Pumps

Drums and separators

Blower maintenance

Vacuum trucks

Piping, tubing, and component degassing

Date: September 23, 2019

Permit Numbers 91780 and PSDTX1240

Attachment F

MSS Activity Summary (Train No. 3)

Facilities	Description	Emissions Activity	EPN
all process units	process unit shutdown/depressurize/drain	vent to flare	1018, 1067
all process units	process unit purge/degas/drain	vent to atmosphere	PP2-MAINT
all process units	process unit startup	vent to flare	1018, 1067
all baghouses	Baghouse repair and replacement	vent to atmosphere	PP2-MAINT
propylene recovery unit	maintenance bypass	vent to flare	1018, 1067
see Attachment D	miscellaneous low emitting activities	see Attachment D	PP2-MAINT

Date: September 23, 2019

Emission Sources - Maximum Allowable Emission Rates

Permit Number 91780 and PSDTX1240

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)
1018/1067	Olefins I and II Flares Elevated Flares (6)	NO _x	2.81	6.11
		CO	14.37	31.27
		VOC	15.16	10.83
		SO ₂	0.02	0.05
1018/1067 / PP2-TEMP	Olefins I and II Flares – MSS Contribution	NO _x	140.22	2.47
		CO	899.55	15.80
		VOC	718.09	22.06
1018/1067	Olefins I and II Flares Elevated Flares Product Transition	NO _x	13.16	0.75
		CO	81.58	4.64
		VOC	116.28	6.58
PP2-FUG	Fugitives, PP-2 Unit (5)	VOC	8.01	35.09
		Cl ₂	0.01	0.05
Train No. 1 and Train No. 2				
D-407	Peroxide Drum	VOC	0.01	0.01
F-400	Vacuum Cleaner Bag Filter	PM	0.03	0.11
		PM ₁₀	0.03	0.11
		PM _{2.5}	0.03	0.11
F-402	Masterbatch Vent Bag Filter	PM	0.02	0.09
		PM ₁₀	0.02	0.09
		PM _{2.5}	0.02	0.09
		VOC	0.02	0.06

Emission Sources - Maximum Allowable Emission Rates

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates	
			lbs/hour	TPY (4)
F-403	Off Pellet Bag Filter	PM	0.49	1.95
		PM ₁₀	0.49	1.95
		PM _{2.5}	0.49	1.95
F-987	Railcar Vacuum Cleaning System	PM	0.02	0.08
		PM ₁₀	0.02	0.08
		PM _{2.5}	0.02	0.08
PP2-CT	Cooling Tower	VOC	1.32	5.77
		PM	1.09	4.79
		PM ₁₀	0.40	1.74
		PM _{2.5}	0.01	0.01
		Chlorine Compounds	<0.01	<0.01
PP2-T1	Downstream Pellet Handling PP-2, Train No. 1 (7)	VOC	6.37	5.60
PP2-T2	Downstream Pellet Handling PP-2, Train No. 2 (8)	VOC	6.37	5.60
1F-404	Additive Hopper Vent Bag Filters	PM	0.02	0.02
		PM ₁₀	0.02	0.02
		PM _{2.5}	0.02	0.02
1F-405	Vent Bag Filter, Train No. 1	PM	0.12	0.48
		PM ₁₀	0.12	0.48
		PM _{2.5}	0.12	0.48
		VOC	0.74	3.23
1F-406B	Vent Hopper Sock, Train No. 1	PM	0.01	0.04
		PM ₁₀	0.01	0.04
		PM _{2.5}	0.01	0.04
1F-501	Blending Silos Bag Filter, Train No. 1	PM	0.49	1.95
		PM ₁₀	0.49	1.95
		PM _{2.5}	0.49	1.95

Emission Sources - Maximum Allowable Emission Rates

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates	
			lbs/hour	TPY (4)
1F-982	Elutriator Bag Filter, Train No. 1	PM	0.98	3.89
		PM ₁₀	0.98	3.89
		PM _{2.5}	0.98	3.89
1F-985	Railcar Bag Filter Train No. 1	PM	0.49	1.95
		PM ₁₀	0.49	1.95
		PM _{2.5}	0.49	1.95
1S-404	Dryer Train No. 1	PM	0.51	1.99
		PM ₁₀	0.51	1.99
		PM _{2.5}	0.51	1.99
1S-405	Classifier	PM	0.04	0.18
		PM ₁₀	0.04	0.18
		PM _{2.5}	0.04	0.18
2F-405	Vent Bag Filter, Train No. 2	PM	0.12	0.48
		PM ₁₀	0.12	0.48
		PM _{2.5}	0.12	0.48
		VOC	0.74	3.23
2F-406B	Vent Hopper Sock	PM	0.01	0.04
		PM ₁₀	0.01	0.04
		PM _{2.5}	0.01	0.04
2F-501	Blending Silos Bag Filter, Train No. 2	PM	0.49	1.95
		PM ₁₀	0.49	1.95
		PM _{2.5}	0.49	1.95
2F-982	Elutriator Bag Filter, Train No. 2	PM	0.98	3.89
		PM ₁₀	0.98	3.89
		PM _{2.5}	0.98	3.89

Emission Sources - Maximum Allowable Emission Rates

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates	
			lbs/hour	TPY (4)
2F-985	Railcar Bag Filter Train No. 2	PM	0.49	1.95
		PM ₁₀	0.49	1.95
		PM _{2.5}	0.49	1.95
2S-404	Dryer Train No. 2	PM	0.51	1.99
		PM ₁₀	0.51	1.99
		PM _{2.5}	0.51	1.99
2S-405	Classifier	PM	0.04	0.18
		PM ₁₀	0.04	0.18
		PM _{2.5}	0.04	0.18
Train No. 3				
PP2-3F405	Vent Bag Filter	PM	0.16	0.63
		PM ₁₀	0.03	0.13
		PM _{2.5}	0.01	0.05
		VOC	0.61	2.43
PP2-3F406B	Vent Hopper Sock	PM	0.01	0.04
		PM ₁₀	<0.01	<0.01
		PM _{2.5}	<0.01	<0.01
PP2-3F982	Elutriator Bag Filter	PM	1.30	5.16
		PM ₁₀	0.26	1.03
		PM _{2.5}	0.10	0.41
PP2-3F985	Railcar Bag Filter	PM	0.71	2.83
		PM ₁₀	0.14	0.57
		PM _{2.5}	0.06	0.23
PP2-3F987	Railcar Vacuum	PM	0.02	0.08
		PM ₁₀	<0.01	0.02
		PM _{2.5}	<0.01	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)
PP2-3S404	Dryer Train No. 3	PM	0.67	2.64
		PM ₁₀	0.13	0.53
		PM _{2.5}	0.05	0.21
PP2-3S405	Classifier	PM	0.01	0.05
		PM ₁₀	<0.01	0.01
		PM _{2.5}	<0.01	<0.01
PP2-3F501	Silo Bag Filter	PM	0.70	2.78
		PM ₁₀	0.14	0.56
		PM _{2.5}	0.06	0.22
PP2-3F400	Vacuum Cleaner Bag Filter	PM	0.03	0.11
		PM ₁₀	0.01	0.02
		PM _{2.5}	<0.01	0.01
PP2-3F402	Masterbatch Vent Bag Filter	PM	0.02	0.09
		PM ₁₀	<0.01	0.02
		PM _{2.5}	<0.01	0.01
		VOC	0.02	0.08
PP2-3F403	Off Pellet Vent Bag Filter	PM	0.49	1.94
		PM ₁₀	0.10	0.39
		PM _{2.5}	0.04	0.15
PP2-CT3	PP2 Train 3 Cooling Tower	Chlorine Compounds	<0.01	<0.01
		PM	1.25	5.46
		PM ₁₀	0.45	1.98
		PM _{2.5}	< 0.01	0.01
		VOC	1.50	6.58
PP2-T3	Train 3 - Downstream Pellet Handling (9)	VOC	8.75	6.90
PP2-3D407	Peroxide Dip Pot	VOC	<0.01	<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)
Maintenance, Startup, and Shutdown (MSS) – Train Nos. 1, 2, and 3				
PP2-MAINT	MSS to Atmosphere	VOC	202.88	3.61
		PM	3.94	0.24
		PM ₁₀	3.94	0.24
		PM _{2.5}	3.94	0.24

- (1) Emission point identification - either specific equipment designation or emission point number from plot plan.
- (2) Specific point source name. For fugitive sources, use area name or fugitive source name.
- (3) VOC - volatile organic compounds as defined in Title 30 Texas Administrative Code § 101.1
 - NO_x - total oxides of nitrogen
 - SO₂ - sulfur dioxide
 - PM - total particulate matter, suspended in the atmosphere, including PM₁₀ and PM_{2.5}, as represented
 - PM₁₀ - total particulate matter equal to or less than 10 microns in diameter, including PM_{2.5}, as represented
 - PM_{2.5} - particulate matter equal to or less than 2.5 microns in diameter
 - CO - carbon monoxide
 - 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) PP II vents shall be rerouted to one flare or the other.
- (7) Total VOC emissions from the following emission points: F-403, 1F-406B, 1F-501, 1F-982, 1F-985, 1S-404 and 1S-405.
- (8) Total VOC emissions from the following emission points: F-403, 2F-406B, 2F-501, 2F-982, 2F-985, 2S-404 and 2S-405.
- (9) Total VOC emissions from the following emission points: PP2-3F403, PP2-3F501, PP2-3S405, PP2-3F985, PP2 3F982, PP2-3F406B, and PP2-3S404

Date: September 23, 2019