#### FEDERAL OPERATING PERMIT

A FEDERAL OPERATING PERMIT IS HEREBY ISSUED TO

BASF Corporation

AUTHORIZING THE OPERATION OF

BASF Freeport - Caprolactam Complex Freeport

Industrial Organic Chemicals,

#### **LOCATED AT**

Brazoria County, Texas

LATITUDE 29° 0' 5" LONGITUDE 95° 24' 31"

Regulated Entity Number: RN100218049

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. Operation 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.

ı nıs permit snaii expire tive years tro	m the date of issuance.	i ne renewai	requirements
specified in 30 TAC § 122.241 must	be satisfied in order to	renew the au	thorization to
operate the site and emission units.			

Permit No: 01926

Issuance Date:

**Executive Director** 

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#### **GENERAL TERMS AND CONDITIONS**

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

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 shall be forwarded to the TCEQ regional office for your site. For reports submitted, please include a cover letter which identifies the following information: company name, TCEQ regulated entity number, site name, area name (if applicable), and Air Permits Division permit number.

#### **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. For the purpose of generating emission reduction credits through 30 TAC Chapter 101, Subchapter H, Division 1 (Emission Credit Banking and Trading), the permit holder shall comply with the following requirements:
  - (i) The General Provisions of § 101.302;
  - (ii) Emission Reduction Credit Generation Certification under § 101.303;
  - (iii) Mobile Emission Reduction Credit Generation and Certification under § 101.304;
  - (iv) Emission Credit Banking and Trading under § 101.309; and
  - (v) The terms and conditions by which the emission limits are established to generate the reduction credit are applicable requirements of this permit.
- E. The permit holder shall comply with the following 30 TAC Chapter 101, Subchapter H, Division 3 (Mass Emission Cap and Trade Program) Requirements:
  - (i) The General Provisions of § 101.352;
  - (ii) Allocation of Allowances under § 101.353;
  - (iii) Allowance Deductions under § 101.354;
  - (iv) Allowance Banking and Trading under § 101.356;
  - (v) Emission Monitoring and Compliance Demonstrations under § 101.358;
  - (vi) Reporting Requirements under § 101.359;
  - (vii) Level of Activity Certification under § 101.360; and
  - (viii) The terms and conditions by which the emission limits are established to meet or exceed the cap are applicable requirements of this permit.
- F. For the purpose of generating discrete emission reduction credits through

30 TAC Chapter 101, Subchapter H, Division 4 (Discrete Emission Credit Banking and Trading), the permit holder shall comply with the following requirements:

- (i) The General Provisions of § 101.372;
- (ii) Discrete Emission Reduction Credit Generation and Certification under § 101.373;
- (iii) Mobile Discrete Emission Reduction Credit Generation and Certification under § 101.374;
- (iv) Discrete Emission Credit Banking and Trading under § 101.378; and
- (v) The terms and conditions by which the emission limits are established to generate the discrete reduction credit are applicable requirements of this permit.
- 2. The permit holder shall comply with the following sections of 30 TAC Chapter 101 (General Rules):
  - A. Definitions of § 101.1, insofar as the terms defined in this section are used to define the terms used in other applicable requirements;
  - B. Circumvention under § 101.3;
  - C. Sampling under § 101.8, if such action has been requested by the TCEQ;
  - D. Sampling Ports under § 101.9, if such action has been requested by the TCEO;
  - E. Emissions Inventory Requirements of § 101.10;
  - F. Emission Event Reporting and Recordkeeping Requirements of § 101.201;
  - G. Scheduled Maintenance, Startup, and Shutdown Reporting and Recordkeeping Requirements of § 101.211;
  - H. Operational Requirements of § 101.221;
  - I. Demonstrations under § 101.222; and
  - J. Actions to Reduce Excessive Emissions under § 101.223.

- 3. Permit holder shall comply with the following requirements of 30 TAC Chapter 111:
  - A. For visible emissions from stationary vents constructed after January 31, 1972, the permit holder shall comply with the following requirements:
    - (i) Title 30 TAC § 111.111(a)(1)(B) (relating to Requirements for Specified Sources);
    - (ii) Title 30 TAC § 111.111(a)(1)(F)(ii), (iii), or (iv); and
    - (iii) The permit holder shall also comply with the following periodic monitoring requirements for the purpose of annual compliance certification under 30 TAC § 122.146:

An observation of stationary vents which are required to comply with 30 TAC § 111.111(a)(1)(B) shall be conducted at least once during each 3-month period. Visible emissions observations shall be made and recorded. However, if the vent is from a combustion source and an alternative to the normally fired fuel or fuel combination 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 observed. Documentation of the observations shall be maintained.

A visible emissions observation is not required if the pollutant specific emission unit is not operating for the entire 3-month period. Visible emission observations are not required for stationary vessels (which includes both storage and process vessels), tanks, reservoirs, distillation columns, decanters, or other containers holding a VOC, and water separators which separate material containing a VOC since these types of emission units are unable to exceed the opacity limitations in 30 TAC § 111.111(a)(1)(B) due to the characteristics of a VOC.

Except for those emission units that are operated only at night, the visible emissions observation 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 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.

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).

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) 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).

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.

- (iv) Vents subject to the emission limitation of § 111.111(a)(1)(B) and specific periodic monitoring, as specified in the attached Applicable Requirements Summary and "Additional Monitoring Requirements," are not subject to the requirements specified in this term and condition.
- B. For visible emissions from a building, enclosed facility, or other structure; the permit holder shall comply with the following requirements:
  - (i) Title 30 TAC § 111.111(a)(7)(A) (relating to Requirements for Specified Sources);

- (ii) Title 30 TAC § 111.111(a)(7)(B)(i) or (ii); and
- (iii) The permit holder shall also comply with the following periodic monitoring requirements for the purpose of annual compliance certification under 30 TAC § 122.146:

An observation of visible emissions from a building containing an air emission source, enclosed facility, or other structure containing or associated with an air emission source which is required to comply with 30 TAC § 111.111(a)(7)(A) shall be conducted at least once during each 3-month period. Visible emissions observations shall be made and recorded. Documentation of the observations shall be maintained.

A visible emissions observation is not required if the building or other structure is not in use or the enclosed facility is not operating for the entire 3-month period.

Except for those emission units that are operated only at night, the visible emissions observation 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 shall be determined with each structure in clear view of the observer. The observer shall be at least 15 feet, but not more than 0.25 mile, away from each structure 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.

If visible emissions are not present, the RO may certify that the source is in compliance with the applicable opacity requirement in 30 TAC § 111.111(a)(7) and (a)(7)(A).

However, if visible emissions are present during this observation, the permit holder shall either list this occurrence as a deviation on the next deviation report as required under 30 TAC § 122.145(2) or conduct the appropriate opacity test specified in 30 TAC § 111.111(a)(7)(B) 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).

- C. Certification of opacity readers determining opacities under Method 9 (as outlined in 40 CFR Part 60, Appendix A) to comply with opacity monitoring requirements shall be accomplished by completing the Visible Emissions Evaluators Course, or approved agency equivalent, no more than 180 days before the opacity reading.
- D. Visible emissions during the cleaning of a firebox or the building of a new fire, soot blowing, equipment changes, ash removal, and rapping of precipitators may exceed the limits set forth in 30 TAC § 111.111 for a period aggregating not more than six minutes in any 60 consecutive minutes, nor more than six hours in any ten-day period as required in 30 TAC § 111.111(a)(1)(E). This exemption shall not apply to the emissions mass rate standard, as outlined in 30 TAC § 111.151(a).
- E. For emission units with contributions from uncombined water, the permit holder shall comply with the requirements of 30 TAC § 111.111(b).
- F. Emission limits on nonagricultural processes, except for the steam generators specified in 30 TAC § 111.153, shall comply with the following requirements:
  - (i) Emissions of PM from any source may not exceed the allowable rates as required in 30 TAC § 111.151(a) (relating to Allowable Emissions Limits):
  - (ii) Sources with an effective stack height ( $h_e$ ) less than the standard effective stack height ( $H_e$ ), must reduce the allowable emission level by multiplying it by  $[h_e/H_e]^2$  as required in 30 TAC § 111.151(b); and
  - (iii) Effective stack height shall be calculated by the equation specified in 30 TAC § 111.151(c).
- 4. For storage vessels maintaining working pressure as specified in 30 TAC Chapter 115, Subchapter B, Division 1: Storage of Volatile Organic Compounds, the permit holder shall comply with the requirements of 30 TAC § 115.112(a)(1).

- 5. For industrial wastewater specified in 30 TAC Chapter 115, Subchapter B, the permit holder shall comply with the Control Requirements of § 115.142 and § 115.142(1).
- 6. Permit holder shall comply with the following 30 TAC Chapter 115, Subchapter C requirements:
  - A. For the low vapor pressure VOC unloading operations specified in Division 1: Loading and Unloading of Volatile Organic Compounds, the permit holder shall comply with the following requirements:
    - (i) Title 30 TAC § 115.217(a)(1) (relating to Exemptions for transfer of VOC with a true vapor pressure less than 0.5 psia);
    - (ii) Title 30 TAC § 115.212(a)(2) (relating to Control Requirements);
    - (iii) Title 30 TAC § 115.214(a)(1)(A)(i) and (B) (relating to Inspection Requirements);
    - (iv) Title 30 TAC § 115.215(4) (relating to Approved Test Methods); and
    - (v) Title 30 TAC § 115.216(2) and (3)(B) (relating to Monitoring and Recordkeeping Requirements).
  - B. For the VOC unloading operations specified in Division 1: Loading and Unloading of Volatile Organic Compounds, the permit holder shall comply with the following requirements:
    - (i) Title 30 TAC § 115.212(a)(2), (3)(B)-(D) (relating to Control Requirements);
    - (ii) Title 30 TAC § 115.212(a)(3)(A)(i) or (ii) (relating to Control Requirements);
    - (iii) Title 30 TAC § 115.214(a)(1)(A)(i)-(iii), (B), (C) (relating to Inspection Requirements);
    - (iv) Title 30 TAC § 115.215(1)-(5),(8)-(10) (relating to Approved Test Methods); and
    - (v) Title 30 TAC § 115.216(1)-(3) (relating to Monitoring and Recordkeeping Requirements).

- 7. The permit holder shall comply with the following requirements for units subject to any subpart of 40 CFR Part 60, unless otherwise stated in the applicable subpart:
  - A. Title 40 CFR § 60.7 (relating to Notification and Recordkeeping);
  - B. Title 40 CFR § 60.8 (relating to Performance Tests);
  - C. Title 40 CFR § 60.9 (relating to Availability of Information);
  - D. Title 40 CFR § 60.11 (relating to Compliance with Standards and Maintenance Requirements);
  - E. Title 40 CFR § 60.12 (relating to Circumvention);
  - F. Title 40 CFR § 60.13 (relating to Monitoring Requirements);
  - G. Title 40 CFR § 60.14 (relating to Modification);
  - H. Title 40 CFR § 60.15 (relating to Reconstruction); and
  - I. Title 40 CFR § 60.19 (relating to General Notification and Reporting Requirements).
- 8. The permit holder shall comply with the following requirements for units subject to any subpart of 40 CFR Part 61, unless otherwise stated in the applicable subpart:
  - A. Title 40 CFR § 61.05 (relating to Prohibited Activities);
  - B. Title 40 CFR § 61.07 (relating to Application for Approval of Construction or Modification);
  - C. Title 40 CFR § 61.09 (relating to Notification of Startup);
  - D. Title 40 CFR § 61.10 (relating to Source Reporting and Request for Waiver of Compliance);
  - 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 § 61.16 (relating to Availability of Information); and
- J. Title 40 CFR § 61.19 (relating to Circumvention).
- 9. For facilities where total annual benzene quantity from waste is greater than or equal to 1 megagram per year and less than 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 § 61.355(a)(4)(i), (ii) (relating to Calculation Procedures);
  - B. Title 40 CFR § 61.356(a) (relating to Recordkeeping);
  - C. Title 40 CFR § 61.356(b), (b)(1) (relating to Recordkeeping); and
  - D. Title 40 CFR § 61.357(a), (c) (relating to Reporting Requirements).

#### **Additional Monitoring Requirements**

10. The permit holder shall comply with the periodic monitoring requirements as specified in the attached "Additional Monitoring Requirements" 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 owner or operator shall conduct all monitoring in continuous operation (or shall collect data at all required intervals) at all times that the pollutant-specific emissions unit is operating. The permit holder may elect to collect monitoring data on a more frequent basis and average the data, consistent with the averaging time specified in the Periodic Monitoring Summary, for purposes of determining whether a deviation has occurred. However, the additional data points must be collected on a regular basis. In no event shall data be collected and used in particular instances to avoid reporting deviations.

#### **New Source Review Authorization Requirements**

- 11. Permit holder shall comply with the requirements of New Source Review authorizations issued or claimed by the permit holder for the permitted area, including permits, permits by rule, standard permits, flexible permits, special permits, permits for existing facilities including Voluntary Emissions Reduction Permits and Electric Generating Facility Permits issued under 30 TAC Chapter 116, Subchapter I, or special exemptions referenced in the New Source Review Authorization References attachment. These requirements:
  - A. Are incorporated by reference into this permit as applicable requirements;

- B. Shall be located with this operating permit; and
- C. Are not eligible for a permit shield.
- 12. The permit holder shall comply with the general requirements of 30 TAC Chapter 106, Subchapter A or the general requirements, if any, in effect at the time of the claim of any PBR.
- 13. The permit holder shall comply with the following requirements of Air Quality Standard Permits:
  - A. Registration requirements listed in 30 TAC § 116.611;
  - B. General Conditions listed in 30 TAC § 116.615; and
  - C. Applicable requirements of 30 TAC § 116.617 for Pollution Control Projects based on the information contained in the registration application.

#### **Compliance Requirements**

- 14. The permit holder shall certify compliance with all permit terms and conditions using, at a minimum, but not limited to, the continuous or intermittent compliance method data from monitoring, recordkeeping, reporting, or testing required by the permit and any other credible evidence or information. The certification period may not exceed 12 months and the certification must be submitted within 30 days after the end of the period being certified.
- 15. Use of Emission Credits to comply with applicable requirements:
  - A. Unless otherwise prohibited, the permit holder may use emission credits to comply with the following applicable requirements listed elsewhere in this permit:
    - (i) Title 30 TAC Chapter 115;
    - (ii) Title 30 TAC Chapter 117; and
    - (iii) Offsets for Title 30 TAC Chapter 116.
  - B. The permit holder shall comply with the following requirements in order to use the emission credits to comply with the applicable requirements:
    - (i) The permit holder must notify the TCEQ according to 30 TAC § 101.306(c)(2);

- (ii) The emission credits to be used must meet all the geographic, timeliness, applicable pollutant type, and availability requirements listed in 30 TAC Chapter 101, Subchapter H, Division 1;
- (iii) The executive director has approved the use of the credit according to 30 TAC § 101.306(c)(2); and
- (iv) The permit holder keeps records of the use of credits towards compliance with the applicable requirements in accordance with 30 TAC § 101.302(g) and § 122.
- 16. Use of Discrete Emission Credits to comply with the applicable requirements:
  - A. Unless other wise 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; and
    - (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); and
    - (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 § 122.

#### **Risk Management Plan**

17. For processes subject to 40 CFR Part 68 and specified in 40 CFR § 68.10, the owner or operator shall comply with the requirements of the Accidental Release Prevention Provisions in 40 CFR Part 68. The owner or operator 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**

- 18. 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 shall be conducted in accordance with 40 CFR Part 82, Subpart F. Permit holders shall ensure that repairs or refrigerant removal are performed only by properly certified technicians using certified equipment. Records shall be maintained as required by 40 CFR Part 82, Subpart F.

#### **Permit Location**

19. 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)

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

#### **ATTACHMENTS**

**Applicable Requirements Summary** 

**Additional Monitoring Requirements** 

**Permit Shield** 

**New Source Review Authorization References** 

#### APPLICABLE REQUIREMENTS SUMMARY

### Unit Summary 15

#### **Applicable Requirements Summary**

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A "none"entry may be noted for some emission sources in this permit's "Applicable Requirements Summary" under the heading of "Monitoring and Testing "Record Requirements" Requirements" and/or keeping 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 Record keeping Terms and Conditions (§ 122.144), Reporting Terms and Conditions (§ 122.145), and Compliance Certification Terms and Conditions (§ 122.146) continue to apply.

## **Unit Summary**

Unit/Group/ Process ID No.	Unit Type	Group/Inclusiv e Units	SOP Index No.	Regulation	Requirement Driver
14-1-T330	Distillation Operation	N/A	60NNN-C	40 CFR Part 60, Subpart NNN	No changing attributes.
14-1-T340A	Distillation Operation	N/A	60NNN-C	40 CFR Part 60, Subpart NNN	No changing attributes.
14-1-T430	Distillation Operation	N/A	60NNN-C	40 CFR Part 60, Subpart NNN	No changing attributes.
14-1-T510	Distillation Operation	N/A	60NNN-E	40 CFR Part 60, Subpart NNN	No changing attributes.
7-1-T504	Distillation Operation	N/A	60NNN-E	40 CFR Part 60, Subpart NNN	No changing attributes.
7-1-T506	Distillation Operation	N/A	60NNN-C	40 CFR Part 60, Subpart NNN	No changing attributes.
7-1-T706	Distillation Operation	N/A	60NNN-E	40 CFR Part 60, Subpart NNN	No changing attributes.
7-1-T707	Distillation Operation	N/A	60NNN-E	40 CFR Part 60, Subpart NNN	No changing attributes.
7-1-T907	Distillation Operation	N/A	60NNN-C	40 CFR Part 60, Subpart NNN	No changing attributes.
7-1-T909	Distillation Operation	N/A	60NNN-C	40 CFR Part 60, Subpart NNN	No changing attributes.
7-2-T205	Distillation Operation	N/A	60NNN-E	40 CFR Part 60, Subpart NNN	No changing attributes.
7-2-T285	Distillation Operation	N/A	60NNN-E	40 CFR Part 60, Subpart NNN	No changing attributes.
GRPNNNR17 0	Distillation Operation	11-1-T140, 11-1-T151, 11-1-T152, 11-1-T1520,	60NNN-F	40 CFR Part 60, Subpart NNN	No changing attributes.

		11-1-T153A, 11-1-T154, 11-1-T180, 11-1-T210A, 11-1-T220, 11-1-T225, 11-1-T230, 11-1-T240, 11-1-T250, 11-1-T290, 7-2-T105A, 7-2-T106A, 7-2-T11, 7-2-T14, 7-2-T15A, 7-2-T280, 7-2-T9B			
GRPNNNS260	Distillation Operation	14-1-T215, 14-1-T220, 14-1-T230A, 14-1-T310, 14-1-T320	60NNN-D	40 CFR Part 60, Subpart NNN	No changing attributes.
GRPNNNS300	Distillation Operation	7-1-T505, 7-1-T702-2, 7-1-T703, 7-1-T704-1, 7-1-T705	60NNN-D	40 CFR Part 60, Subpart NNN	No changing attributes.
11-1-100	Emission Points/ Stationary Vents/ Process Vents	N/A	R5121-C	30 TAC Chapter 115, Vent Gas Controls	Vent Type = 30 TAC Chapter 115, Subchapter B, vent gas control rules apply and the vent type is not specifically classified under the rule.
11-1-100	Emission Points/ Stationary Vents/	N/A	R5121-D1	30 TAC Chapter 115, Vent Gas Controls	Vent Type = Vent Gas Stream is emitted from an Air Oxidation Synthetic Organic

	Process Vents				Chemical Manufacturing Process
11-1-100	Emission Points/ Stationary Vents/ Process Vents	N/A	R5121-D2	30 TAC Chapter 115, Vent Gas Controls	Vent Type = Vent Gas Streams originates from Synthetic Organic Chemical Manufacturing Industry (SOCMI) Reactor Process or Distillation Operation, as defined in 30 TAC § 115.120.
11-1-101	Emission Points/ Stationary Vents/ Process Vents	N/A	R5121-J	30 TAC Chapter 115, Vent Gas Controls	Vent Type = Vent Gas Streams originates from Synthetic Organic Chemical Manufacturing Industry (SOCMI) Reactor Process or Distillation Operation, as defined in 30 TAC § 115.120.
11-1-101	Emission Points/ Stationary Vents/ Process Vents	N/A	R5121-K	30 TAC Chapter 115, Vent Gas Controls	Vent Type = 30 TAC Chapter 115, Subchapter B, vent gas control rules apply and the vent type is not specifically classified under the rule.
11-1-2	Emission Points/ Stationary Vents/ Process Vents	N/A	R5121-J1	30 TAC Chapter 115, Vent Gas Controls	Vent Type = Vent Gas Stream is emitted from an Air Oxidation Synthetic Organic Chemical Manufacturing Process
11-1-2	Emission Points/ Stationary Vents/ Process Vents	N/A	R5121-J2	30 TAC Chapter 115, Vent Gas Controls	Vent Type = Vent Gas Streams originates from Synthetic Organic Chemical Manufacturing Industry (SOCMI) Reactor Process or Distillation Operation, as defined in 30 TAC § 115.120.
11-1-2	Emission Points/ Stationary Vents/ Process Vents	N/A	R5121-K	30 TAC Chapter 115, Vent Gas Controls	Vent Type = 30 TAC Chapter 115, Subchapter B, vent gas control rules apply and the vent type is not specifically classified under the rule.
14-1-69	Emission Points/ Stationary Vents/ Process Vents	N/A	R5121-B	30 TAC Chapter 115, Vent Gas Controls	No changing attributes.
14-1-75	Emission Points/ Stationary Vents/ Process Vents	N/A	R5121-M	30 TAC Chapter 115, Vent Gas Controls	Vent Type = Vent Gas Streams originates from Synthetic Organic Chemical Manufacturing Industry (SOCMI) Reactor Process or Distillation Operation, as

					defined in 30 TAC § 115.120.
14-1-75	Emission Points/ Stationary Vents/ Process Vents	N/A	R5121-N	30 TAC Chapter 115, Vent Gas Controls	Vent Type = 30 TAC Chapter 115, Subchapter B, vent gas control rules apply and the vent type is not specifically classified under the rule.
14-1-76	Emission Points/ Stationary Vents/ Process Vents	N/A	R5121-G	30 TAC Chapter 115, Vent Gas Controls	Vent Type = 30 TAC Chapter 115, Subchapter B, vent gas control rules apply and the vent type is not specifically classified under the rule.
14-1-76	Emission Points/ Stationary Vents/ Process Vents	N/A	R5121-O	30 TAC Chapter 115, Vent Gas Controls	Vent Type = Vent Gas Streams originates from Synthetic Organic Chemical Manufacturing Industry (SOCMI) Reactor Process or Distillation Operation, as defined in 30 TAC § 115.120.
7-1-29	Emission Points/ Stationary Vents/ Process Vents	N/A	R5121-G	30 TAC Chapter 115, Vent Gas Controls	Vent Type = 30 TAC Chapter 115, Subchapter B, vent gas control rules apply and the vent type is not specifically classified under the rule.
7-1-29	Emission Points/ Stationary Vents/ Process Vents	N/A	R5121-L	30 TAC Chapter 115, Vent Gas Controls	Vent Type = Vent Gas Streams originates from Synthetic Organic Chemical Manufacturing Industry (SOCMI) Reactor Process or Distillation Operation, as defined in 30 TAC § 115.120.
7-1-46	Emission Points/ Stationary Vents/ Process Vents	N/A	R5121-B	30 TAC Chapter 115, Vent Gas Controls	No changing attributes.
7-1-73	Emission Points/ Stationary Vents/ Process Vents	N/A	R5121-G	30 TAC Chapter 115, Vent Gas Controls	Vent Type = 30 TAC Chapter 115, Subchapter B, vent gas control rules apply and the vent type is not specifically classified under the rule.
7-1-73	Emission Points/ Stationary Vents/ Process Vents	N/A	R5121-O	30 TAC Chapter 115, Vent Gas Controls	Vent Type = Vent Gas Streams originates from Synthetic Organic Chemical Manufacturing Industry (SOCMI) Reactor Process or Distillation Operation, as defined in 30 TAC § 115.120.
7-1-8	Emission Points/ Stationary Vents/	N/A	R5121-M	30 TAC Chapter 115, Vent Gas Controls	Vent Type = Vent Gas Streams originates from Synthetic Organic Chemical

	Process Vents				Manufacturing Industry (SOCMI) Reactor Process or Distillation Operation, as defined in 30 TAC § 115.120.
7-1-8	Emission Points/ Stationary Vents/ Process Vents	N/A	R5121-N	30 TAC Chapter 115, Vent Gas Controls	Vent Type = 30 TAC Chapter 115, Subchapter B, vent gas control rules apply and the vent type is not specifically classified under the rule.
GRPR5LFLO W	Emission Points/ Stationary Vents/ Process Vents	14-1-58, 7-1-60, 7-1-62, 7-1-63, 7-2-285EPN, 7-2-5	R5121-L	30 TAC Chapter 115, Vent Gas Controls	No changing attributes.
GRPR5TRE1	Emission Points/ Stationary Vents/ Process Vents	14-1-56, 14-1-57, 14-1-60, 7-1-48, 7-1-61, 7-1-65	R5121-H	30 TAC Chapter 115, Vent Gas Controls	No changing attributes.
GRPR5VENT	Emission Points/ Stationary Vents/ Process Vents	11-1-36, 11-1-37, 11-1-38, 14-1-11, 14-1-13, 14-1-16, 14-1-25, 14-1-26, 14-1-27, 14-1-35, 14-1-36, 14-1-38, 14-1-39, 14-1-40, 14-1-41, 14-1-41, 14-1-44, 14-1-45, 14-1-47, 14-1-54,	R5121-G	30 TAC Chapter 115, Vent Gas Controls	No changing attributes.

		14-1-61, 14-1-64, 14-1-70, 14-1-700CR/EP N, 14-1-78, 14-1-8, 14-1-86, 7-1-1, 7-1-11, 7-1-12, 7-1-15, 7-1-16, 7-1-17, 7-1-2, 7-1-21, 7-1-23, 7-1-24, 7-1-26, 7-1-27, 7-1-28, 7-1-31, 7-1-32, 7-1-33, 7-1-34, 7-1-36, 7-1-37, 7-1-38, 7-1-39, 7-1-40, 7-1-5, 7-1-58, 7-1-59, 7-1-6, 7-1-64, 7-1-75, 7-1-80, 7-1-9, 7-2-13, 7-2-25			
12-1-FL170B	Flares	N/A	R1111-A	30 TAC Chapter 111, Visible Emissions	No changing attributes.
12-1-FL171	Flares	N/A	R1111-A	30 TAC Chapter 111, Visible Emissions	No changing attributes.
12-1-FL270	Flares	N/A	R1111-A	30 TAC Chapter 111, Visible Emissions	No changing attributes.
PROAN-FUG	Fugitive Emission Units	11-1-FDIST, 11-1-FOXID, 7-2-FUG	R5352-A	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	No changing attributes.
PROAN-FUG	Fugitive Emission Units	11-1-FDIST, 11-1-FOXID,	60VV-B	40 CFR Part 60, Subpart VV	No changing attributes.

		7-2-FUG			
PROCAP-FUG	Fugitive Emission Units	14-1-FUGS, 7-1-FUGS	R5352-A	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	No changing attributes.
PROCAP-FUG	Fugitive Emission Units	14-1-FUGS, 7-1-FUGS	60VV-B	40 CFR Part 60, Subpart VV	No changing attributes.
PROCAP-FUG	Fugitive Emission Units	14-1-FUGS, 7-1-FUGS	61J-A	40 CFR Part 61, Subpart J	No changing attributes.
PROCAP-FUG	Fugitive Emission Units	14-1-FUGS, 7-1-FUGS	61V-A	40 CFR Part 61, Subpart V	No changing attributes.
11-1-RLDG	Loading/ Unloading Operations	N/A	R5211-B	30 TAC Chapter 115, Loading and Unloading of VOC	No changing attributes.
11-1-TLDG	Loading/ Unloading Operations	N/A	R5211-B	30 TAC Chapter 115, Loading and Unloading of VOC	No changing attributes.
14-1-KLOAD	Loading/ Unloading Operations	N/A	R5211-B	30 TAC Chapter 115, Loading and Unloading of VOC	No changing attributes.
14-1-LOAD2	Loading/ Unloading Operations	N/A	R5211-C	30 TAC Chapter 115, Loading and Unloading of VOC	No changing attributes.
14-1-LOAD2	Loading/ Unloading Operations	N/A	61BB-A	40 CFR Part 61, Subpart BB	No changing attributes.
14-1-LOAD3	Loading/ Unloading Operations	N/A	R5211-B	30 TAC Chapter 115, Loading and Unloading of VOC	No changing attributes.
7-1-BENZLD	Loading/ Unloading Operations	N/A	61BB-A	40 CFR Part 61, Subpart BB	No changing attributes.
7-1-KLOAD	Loading/ Unloading Operations	N/A	R5211-B	30 TAC Chapter 115, Loading and Unloading of VOC	No changing attributes.

7-1-RLDG	Loading/ Unloading Operations	N/A	R5211-B	30 TAC Chapter 115, Loading and Unloading of VOC	No changing attributes.
7-1-TLDG	Loading/ Unloading Operations	N/A	R5211-B	30 TAC Chapter 115, Loading and Unloading of VOC	No changing attributes.
7-2-RLDG	Loading/ Unloading Operations	N/A	R5211-B	30 TAC Chapter 115, Loading and Unloading of VOC	No changing attributes.
7-2-TLDG	Loading/ Unloading Operations	N/A	R5211-B	30 TAC Chapter 115, Loading and Unloading of VOC	No changing attributes.
11-1-BR170	Process Heaters/ Furnaces	N/A	R7ICI-N	30 TAC Chapter 117, Commercial	No changing attributes.
11-1-BR340	Process Heaters/ Furnaces	N/A	R7ICI-N	30 TAC Chapter 117, Commercial	No changing attributes.
GRP-CMBST	Process Heaters/ Furnaces	11-1-BR300, 11-1-BR310, 11-1-BR320, 11-1-BR330, 7-2-BR360, 7-2-BR370	R7ICI-N	30 TAC Chapter 117, Commercial	No changing attributes.
14-1-RLOOP	Reactor Attributes	N/A	60RRR-E	40 CFR Part 60, Subpart RRR	No changing attributes.
7-1-RLOOP	Reactor Attributes	N/A	60RRR-E	40 CFR Part 60, Subpart RRR	No changing attributes.
GRP-III	Reactor Attributes	11-1-R110A, 11-1-R120A, 11-1-R130A, 7-2-R110, 7-2-R120, 7-2-R130	60III-A	40 CFR Part 60, Subpart III	No changing attributes.
GRP-RRR	Reactor Attributes	11-1-R300, 11-1-R310,	60RRR-D	40 CFR Part 60, Subpart RRR	No changing attributes.

		11-1-R320A, 11-1-R330A, 11-1-R340, 7-2-R360, 7-2-R370			
14-1-D210A	Storage Tanks/ Vessels	N/A	R5112-B	30 TAC Chapter 115, Storage of VOCs	No changing attributes.
14-1-D210A	Storage Tanks/ Vessels	N/A	60Kb-G	40 CFR Part 60, Subpart Kb	No changing attributes.
14-1-D210A	Storage Tanks/ Vessels	N/A	61Y-A	40 CFR Part 61, Subpart Y	No changing attributes.
14-1-D210B	Storage Tanks/ Vessels	N/A	R5112-B	30 TAC Chapter 115, Storage of VOCs	No changing attributes.
14-1-D210B	Storage Tanks/ Vessels	N/A	61Y-B	40 CFR Part 61, Subpart Y	No changing attributes.
7-1-D745A1	Storage Tanks/ Vessels	N/A	R5112-B	30 TAC Chapter 115, Storage of VOCs	No changing attributes.
7-1-D745A1	Storage Tanks/ Vessels	N/A	60Kb-G	40 CFR Part 60, Subpart Kb	No changing attributes.
7-1-D745A1	Storage Tanks/ Vessels	N/A	61Y-A	40 CFR Part 61, Subpart Y	No changing attributes.
7-2-R30	Storage Tanks/ Vessels	N/A	R5112-G	30 TAC Chapter 115, Storage of VOCs	No changing attributes.
7-2-R30	Storage Tanks/ Vessels	N/A	60Kb-I	40 CFR Part 60, Subpart Kb	No changing attributes.
9-1-D193B	Storage Tanks/ Vessels	N/A	R5112-E	30 TAC Chapter 115, Storage of VOCs	No changing attributes.
9-1-D193B	Storage Tanks/ Vessels	N/A	60Kb-E	40 CFR Part 60, Subpart Kb	No changing attributes.
9-1-D60A	Storage Tanks/ Vessels	N/A	R5112-E	30 TAC Chapter 115, Storage of VOCs	No changing attributes.
9-1-D60A	Storage Tanks/ Vessels	N/A	60Kb-E	40 CFR Part 60, Subpart Kb	No changing attributes.
9-1-D60B	Storage Tanks/	N/A	R5112-E	30 TAC Chapter 115,	No changing attributes.

	Vessels			Storage of VOCs	
9-1-D60B	Storage Tanks/ Vessels	N/A	60Kb-E	40 CFR Part 60, Subpart Kb	No changing attributes.
9-1-D60C	Storage Tanks/ Vessels	N/A	R5112-E	30 TAC Chapter 115, Storage of VOCs	No changing attributes.
9-1-D60C	Storage Tanks/ Vessels	N/A	60Kb-E	40 CFR Part 60, Subpart Kb	No changing attributes.
GRP-DW	Wastewater Units	11-1-D403A, 12-2-1401, 12-2-1402, 12-2-1403, 12-2-1422, 12-2-1423, 12-2-1424, 14-1-D806A	R5140-C	30 TAC Chapter 115, Industrial Wastewater	No changing attributes.

## **Applicable Requirements Summary**

Unit/Group/	Droco	SOP	Pollutan	Emission Limit	ation/Standard or	Textual Description	Monitoring	Recordkeeping	Reporting
ss	FIOCE	Index	t		Specification	(See Special Term	And Testing	Requirements	Requirements
	1	No.				and Condition 1.B.)	Requirements	Requirements	Requirements
ID No.	Туре	140.		Name	Citation	and Condition 1.D.)	Requirements	(30 TAC § 122.144)	(30 TAC § 122.145)
14-1-T330	EP	60NNN-C	VOC/TOC	40 CFR Part 60, Subpart NNN	§ 60.660(c)(4) § 60.662(c)	Each affected facility with a total resource effectiveness (TRE) index value > 8.0 is exempt from this subpart except for § 60.662; § 60.664(d), (e), (f); and § 60.665(h) and (l).	\$ 60.664(f) [G]\$ 60.664(f)(1) \$ 60.664(f)(2) \$ 60.664(g)	[G]§ 60.665(h)	\$ 60.664(g)(1) \$ 60.665(l) \$ 60.665(l)(7)
14-1-T340A	EP	60NNN-C	VOC/TOC	40 CFR Part 60, Subpart NNN	§ 60.660(c)(4) § 60.662(c)	Each affected facility with a total resource effectiveness (TRE) index value > 8.0 is exempt from this subpart except for § 60.662; § 60.664(d), (e), (f); and § 60.665(h) and (l).	[G]§ 60.664(e) § 60.664(f) [G]§ 60.664(f)(1) § 60.664(f)(2) § 60.664(g) § 60.664(g)(1) § 60.664(g)(2)	[G]§ 60.665(h)	\$ 60.664(g)(1) \$ 60.665(l) \$ 60.665(l)(7)
14-1-T430	EP	60NNN-C	VOC/TOC	40 CFR Part 60, Subpart NNN	§ 60.660(c)(4) § 60.662(c)	Each affected facility with a total resource effectiveness (TRE) index value > 8.0 is exempt from this subpart except for § 60.662; § 60.664(d), (e), (f); and § 60.665(h) and (l).	\$ 60.664(f) [G]\$ 60.664(f)(1) \$ 60.664(f)(2) \$ 60.664(g)	[G]§ 60.665(h)	§ 60.664(g)(1) § 60.665(l) § 60.665(l)(7)
14-1-T510	EP	60NNN-E	VOC/TOC	40 CFR Part 60, Subpart NNN	§ 60.660(c)(6)		§ 60.664(h)	§ 60.665(i)	§ 60.665(I) § 60.665(I)(5) § 60.665(o)
7-1-T504	EP	60NNN-E	VOC/TOC	40 CFR Part 60, Subpart NNN	§ 60.660(c)(6)	Each affected facility operated with vent stream flow rate <0.008 scm/min (< 0.28 scf/min) is exempt from all provisions of this subpart except requirements in \$60.664(g); \$60.665(i), (I)(5), (o).	§ 60.665(I)(S)	§ 60.665(i)	§ 60.665(I) § 60.665(I)(5) § 60.665(o)
7-1-T506	EP	60NNN-C	VOC/TOC	40 CFR Part 60, Subpart NNN	§ 60.660(c)(4) § 60.662(c)	Each affected facility with a total resource effectiveness		[G]§ 60.665(h)	§ 60.664(g)(1) § 60.665(l)

						(TRE) index value > 8.0 is exempt from this subpart except for § 60.662; § 60.664(d), (e), (f); and § 60.665(h) and (l).	§ 60.664(f)(2) § 60.664(g)		§ 60.665(I)(7)
7-1-T706	EP	60NNN-E	VOC/TOC	40 CFR Part 60, Subpart NNN	§ 60.660(c)(6)	Each affected facility operated with vent stream flow rate <0.008 scm/min (< 0.28 scf/min) is exempt from all provisions of this subpart except requirements in \$60.664(g); \$60.665(i), (I)(5), (o).		§ 60.665(i)	§ 60.665(I) § 60.665(I)(5) § 60.665(o)
7-1-T707	EP	60NNN-E	VOC/TOC	40 CFR Part 60, Subpart NNN	§ 60.660(c)(6)	operated with vent stream flow rate <0.008 scm/min (< 0.28 scf/min) is exempt from all provisions of this subpart except requirements in \$60.664(g); §60.665(i), (l)(5), (o).	,	§ 60.665(i)	§ 60.665(I) § 60.665(I)(5) § 60.665(o)
7-1-T907	EP	60NNN-C	VOC/TOC	40 CFR Part 60, Subpart NNN	§ 60.660(c)(4) § 60.662(c)	Each affected facility with a total resource effectiveness (TRE) index value > 8.0 is exempt from this subpart except for § 60.662; § 60.664(d), (e), (f); and § 60.665(h) and (l).	\$ 60.664(f) [G]\$ 60.664(f)(1) \$ 60.664(f)(2) \$ 60.664(g) \$ 60.664(g)(1) \$ 60.664(g)(2)	[G]§ 60.665(h)	§ 60.664(g)(1) § 60.665(l) § 60.665(l)(7)
7-1-T909	EP	60NNN-C	VOC/TOC	40 CFR Part 60, Subpart NNN	§ 60.660(c)(4) § 60.662(c)	Each affected facility with a total resource effectiveness (TRE) index value > 8.0 is exempt from this subpart except for § 60.662; § 60.664(d), (e), (f); and § 60.665(h) and (l).	\$ 60.664(f) [G]\$ 60.664(f)(1) \$ 60.664(f)(2) \$ 60.664(g)	[G]§ 60.665(h)	§ 60.664(g)(1) § 60.665(l) § 60.665(l)(7)
7-2-T205	EP	60NNN-E	VOC/TOC	40 CFR Part 60, Subpart NNN	§ 60.660(c)(6)		- (/(/	§ 60.665(i)	§ 60.665(I) § 60.665(I)(5) § 60.665(o)
7-2-T285	EP	60NNN-E	VOC/TOC	40 CFR Part 60, Subpart NNN	§ 60.660(c)(6)	777 7: 7	,,,,	§ 60.665(i)	§ 60.665(I) § 60.665(I)(5) § 60.665(o)

						all provisions of this subpart except requirements in \$60.664(g); \$60.665(i), (l)(5), (o).			
GRPNNNR170	EP	60NNN-F	VOC/TOC	40 CFR Part 60, Subpart NNN	§ 60.662(a)	reduce TOC emissions by 98 weight- percent or to a concentration of 20ppmv, whichever is less stringent. Introduce the stream into the flame zone of a boiler/process heater.	§ 60.663(a)(1)(ii) § 60.663(a)(2) § 60.664(a) § 60.664(b) § 60.664(b)(1) § 60.664(b)(2) § 60.664(b)(3) [G]§ 60.664(b)(4)	§ 60.663(a)(1) § 60.663(a)(2) § 60.665(b) [G]§ 60.665(b)(1) § 60.665(c) § 60.665(c)(2) § 60.665(d)	\$ 60.665(a) \$ 60.665(b) [G]\$ 60.665(b)(1) \$ 60.665(c) \$ 60.665(c) \$ 60.665(k) \$ 60.665(l) \$ 60.665(l)(1) \$ 60.665(l)(2)
GRPNNNS260	EP	60NNN-D	VOC/TOC	40 CFR Part 60, Subpart NNN	§ 60.660(c)(4) § 60.662(c)	Each affected facility with a total resource effectiveness (TRE) index value > 8.0 is exempt from this subpart except for § 60.662; § 60.664(d), (e), (f); and § 60.665(h) and (l).	\$ 60.664(f) [G]\$ 60.664(f)(1) \$ 60.664(f)(2) \$ 60.664(g) \$ 60.664(g)(1) \$ 60.664(g)(2)	[G]§ 60.665(h)	§ 60.664(g)(1) § 60.665(l) § 60.665(l)(7)
GRPNNNS300	EP	60NNN-D	VOC/TOC	40 CFR Part 60, Subpart NNN	§ 60.660(c)(4) § 60.662(c)	Each affected facility with a total resource effectiveness (TRE) index value > 8.0 is exempt from this subpart except for § 60.662; § 60.664(d), (e), (f); and § 60.665(h) and (l).	\$ 60.664(f) [G]\$ 60.664(f)(1) \$ 60.664(f)(2) \$ 60.664(g) \$ 60.664(g)(1) \$ 60.664(g)(2)	[G]§ 60.665(h)	§ 60.664(g)(1) § 60.665(l) § 60.665(l)(7)
11-1-100	EP	R5121-C	VOC	30 TAC Chapter 115, Vent Gas Controls	§ 115.121 The permit holder shall comply with the applicable limitation, standard and/or equipment specification requirements of 30 TAC Chapter 115, Vent Gas Controls	The permit holder shall comply with the applicable requirements of 30 TAC Chapter 115, Vent Gas Controls	shall comply with the applicable monitoring and testing requirements of 30 TAC Chapter 115, Vent Gas Controls	The permit holder shall comply with the applicable recordkeeping requirements of 30 TAC Chapter 115, Vent Gas Controls	The permit holder shall comply with the applicable reporting requirements of 30 TAC Chapter 115, Vent Gas Controls
11-1-100	EP	R5121-D1	VOC	30 TAC Chapter 115, Vent Gas Controls	§ 115.121 The permit holder shall comply with the applicable limitation, standard and/or equipment specification requirements of 30 TAC Chapter 115,	The permit holder shall comply with the applicable requirements of 30 TAC Chapter 115, Vent Gas Controls	shall comply with the applicable monitoring	The permit holder shall comply with the applicable recordkeeping requirements of 30 TAC Chapter 115, Vent Gas Controls	The permit holder shall comply with the applicable reporting requirements of 30 TAC Chapter 115, Vent Gas Controls

					Vent Gas Controls				
11-1-100	EP	R5121-D2	voc	30 TAC Chapter 115, Vent Gas Controls	§ 115.121 The permit holder shall comply with the applicable limitation, standard and/or equipment specification requirements of 30 TAC Chapter 115, Vent Gas Controls	The permit holder shall comply with the applicable requirements of 30 TAC Chapter 115, Vent Gas Controls	shall comply with the applicable monitoring	The permit holder shall comply with the applicable recordkeeping requirements of 30 TAC Chapter 115, Vent Gas Controls	The permit holder shall comply with the applicable reporting requirements of 30 TAC Chapter 115, Vent Gas Controls
11-1-101	EP	R5121-J	VOC	30 TAC Chapter 115, Vent Gas Controls	§ 115.121 The permit holder shall comply with the applicable limitation, standard and/or equipment specification requirements of 30 TAC Chapter 115, Vent Gas Controls	The permit holder shall comply with the applicable requirements of 30 TAC Chapter 115, Vent Gas Controls	shall comply with the applicable monitoring	The permit holder shall comply with the applicable recordkeeping requirements of 30 TAC Chapter 115, Vent Gas Controls	The permit holder shall comply with the applicable reporting requirements of 30 TAC Chapter 115, Vent Gas Controls
11-1-101	EP	R5121-K	VOC	30 TAC Chapter 115, Vent Gas Controls	§ 115.121 The permit holder shall comply with the applicable limitation, standard and/or equipment specification requirements of 30 TAC Chapter 115, Vent Gas Controls	The permit holder shall comply with the applicable requirements of 30 TAC Chapter 115, Vent Gas Controls	shall comply with the applicable monitoring	The permit holder shall comply with the applicable recordkeeping requirements of 30 TAC Chapter 115, Vent Gas Controls	The permit holder shall comply with the applicable reporting requirements of 30 TAC Chapter 115, Vent Gas Controls
11-1-2	EP	R5121-J1	VOC	30 TAC Chapter 115, Vent Gas Controls	§ 115.121 The permit holder shall comply with the applicable limitation, standard and/or equipment specification requirements of 30 TAC Chapter 115, Vent Gas Controls	The permit holder shall comply with the applicable requirements of 30 TAC Chapter 115, Vent Gas Controls	shall comply with the applicable monitoring	The permit holder shall comply with the applicable recordkeeping requirements of 30 TAC Chapter 115, Vent Gas Controls	The permit holder shall comply with the applicable reporting requirements of 30 TAC Chapter 115, Vent Gas Controls
11-1-2	EP	R5121-J2	VOC	30 TAC Chapter 115, Vent Gas Controls	§ 115.121 The permit holder shall comply with the applicable limitation, standard and/or equipment	The permit holder shall comply with the applicable requirements of 30 TAC Chapter 115, Vent Gas Controls	shall comply with the applicable monitoring	The permit holder shall comply with the applicable recordkeeping requirements of 30 TAC Chapter 115,	The permit holder shall comply with the applicable reporting requirements of 30 TAC Chapter 115, Vent Gas Controls

					specification requirements of 30 TAC Chapter 115, Vent Gas Controls		Vent Gas Controls	Vent Gas Controls	
11-1-2	EP	R5121-K	VOC	30 TAC Chapter 115, Vent Gas Controls	§ 115.121 The permit holder shall comply with the applicable limitation, standard and/or equipment specification requirements of 30 TAC Chapter 115, Vent Gas Controls	The permit holder shall comply with the applicable requirements of 30 TAC Chapter 115, Vent Gas Controls	applicable monitoring and testing requirements of 30 TAC Chapter 115, Vent Gas Controls	The permit holder shall comply with the applicable recordkeeping requirements of 30 TAC Chapter 115, Vent Gas Controls	The permit holder shall comply with the applicable reporting requirements of 30 TAC Chapter 115, Vent Gas Controls
14-1-69	EP	R5121-B	VOC	30 TAC Chapter 115, Vent Gas Controls	§ 115.121 The permit holder shall comply with the applicable limitation, standard and/or equipment specification requirements of 30 TAC Chapter 115, Vent Gas Controls	The permit holder shall comply with the applicable requirements of 30 TAC Chapter 115, Vent Gas Controls	applicable monitoring	The permit holder shall comply with the applicable recordkeeping requirements of 30 TAC Chapter 115, Vent Gas Controls	The permit holder shall comply with the applicable reporting requirements of 30 TAC Chapter 115, Vent Gas Controls
14-1-75	EP	R5121-M	VOC	30 TAC Chapter 115, Vent Gas Controls	§ 115.121 The permit holder shall comply with the applicable limitation, standard and/or equipment specification requirements of 30 TAC Chapter 115, Vent Gas Controls	The permit holder shall comply with the applicable requirements of 30 TAC Chapter 115, Vent Gas Controls	shall comply with the applicable monitoring	The permit holder shall comply with the applicable recordkeeping requirements of 30 TAC Chapter 115, Vent Gas Controls	The permit holder shall comply with the applicable reporting requirements of 30 TAC Chapter 115, Vent Gas Controls
14-1-75	EP	R5121-N	VOC	30 TAC Chapter 115, Vent Gas Controls	§ 115.121 The permit holder shall comply with the applicable limitation, standard and/or equipment specification requirements of 30 TAC Chapter 115, Vent Gas Controls	The permit holder shall comply with the applicable requirements of 30 TAC Chapter 115, Vent Gas Controls	applicable monitoring	The permit holder shall comply with the applicable recordkeeping requirements of 30 TAC Chapter 115, Vent Gas Controls	The permit holder shall comply with the applicable reporting requirements of 30 TAC Chapter 115, Vent Gas Controls
14-1-76	EP	R5121-G	VOC	30 TAC Chapter 115, Vent Gas Controls	§ 115.121 The permit holder shall comply with the	The permit holder shall comply with the applicable requirements of 30 TAC	shall comply with the	The permit holder shall comply with the applicable	The permit holder shall comply with the applicable reporting

					applicable limitation, standard and/or equipment specification requirements of 30 TAC Chapter 115, Vent Gas Controls	Chapter 115, Vent Gas Controls	and testing requirements of 30 TAC Chapter 115, Vent Gas Controls	recordkeeping requirements of 30 TAC Chapter 115, Vent Gas Controls	requirements of 30 TAC Chapter 115, Vent Gas Controls
14-1-76	EP	R5121-O	voc	30 TAC Chapter 115, Vent Gas Controls	§ 115.121 The permit holder shall comply with the applicable limitation, standard and/or equipment specification requirements of 30 TAC Chapter 115, Vent Gas Controls	The permit holder shall comply with the applicable requirements of 30 TAC Chapter 115, Vent Gas Controls		The permit holder shall comply with the applicable recordkeeping requirements of 30 TAC Chapter 115, Vent Gas Controls	The permit holder shall comply with the applicable reporting requirements of 30 TAC Chapter 115, Vent Gas Controls
7-1-29	EP	R5121-G	VOC	30 TAC Chapter 115, Vent Gas Controls	§ 115.121 The permit holder shall comply with the applicable limitation, standard and/or equipment specification requirements of 30 TAC Chapter 115, Vent Gas Controls	The permit holder shall comply with the applicable requirements of 30 TAC Chapter 115, Vent Gas Controls	shall comply with the applicable monitoring and testing requirements of 30 TAC Chapter 115, Vent Gas Controls	The permit holder shall comply with the applicable recordkeeping requirements of 30 TAC Chapter 115, Vent Gas Controls	The permit holder shall comply with the applicable reporting requirements of 30 TAC Chapter 115, Vent Gas Controls
7-1-29	EP	R5121-L	VOC	30 TAC Chapter 115, Vent Gas Controls	§ 115.121 The permit holder shall comply with the applicable limitation, standard and/or equipment specification requirements of 30 TAC Chapter 115, Vent Gas Controls	The permit holder shall comply with the applicable requirements of 30 TAC Chapter 115, Vent Gas Controls	shall comply with the	The permit holder shall comply with the applicable recordkeeping requirements of 30 TAC Chapter 115, Vent Gas Controls	The permit holder shall comply with the applicable reporting requirements of 30 TAC Chapter 115, Vent Gas Controls
7-1-46	EP	R5121-B	VOC	30 TAC Chapter 115, Vent Gas Controls	§ 115.121 The permit holder shall comply with the applicable limitation, standard and/or equipment specification requirements of 30 TAC Chapter 115, Vent Gas Controls	The permit holder shall comply with the applicable requirements of 30 TAC Chapter 115, Vent Gas Controls		The permit holder shall comply with the applicable recordkeeping requirements of 30 TAC Chapter 115, Vent Gas Controls	The permit holder shall comply with the applicable reporting requirements of 30 TAC Chapter 115, Vent Gas Controls

7-1-73	EP	R5121-G	VOC	30 TAC Chapter 115, Vent Gas Controls	§ 115.121 The permit holder shall comply with the applicable limitation, standard and/or equipment specification requirements of 30 TAC Chapter 115, Vent Gas Controls	The permit holder shall comply with the applicable requirements of 30 TAC Chapter 115, Vent Gas Controls	applicable monitoring and testing requirements of 30 TAC Chapter 115, Vent Gas Controls	The permit holder shall comply with the applicable recordkeeping requirements of 30 TAC Chapter 115, Vent Gas Controls	The permit holder shall comply with the applicable reporting requirements of 30 TAC Chapter 115, Vent Gas Controls
7-1-73	EP	R5121-O	VOC	30 TAC Chapter 115, Vent Gas Controls	§ 115.121 The permit holder shall comply with the applicable limitation, standard and/or equipment specification requirements of 30 TAC Chapter 115, Vent Gas Controls	The permit holder shall comply with the applicable requirements of 30 TAC Chapter 115, Vent Gas Controls	shall comply with the applicable monitoring	The permit holder shall comply with the applicable recordkeeping requirements of 30 TAC Chapter 115, Vent Gas Controls	The permit holder shall comply with the applicable reporting requirements of 30 TAC Chapter 115, Vent Gas Controls
7-1-8	EP	R5121-M	VOC	30 TAC Chapter 115, Vent Gas Controls	§ 115.121 The permit holder shall comply with the applicable limitation, standard and/or equipment specification requirements of 30 TAC Chapter 115, Vent Gas Controls	The permit holder shall comply with the applicable requirements of 30 TAC Chapter 115, Vent Gas Controls	shall comply with the applicable monitoring	The permit holder shall comply with the applicable recordkeeping requirements of 30 TAC Chapter 115, Vent Gas Controls	The permit holder shall comply with the applicable reporting requirements of 30 TAC Chapter 115, Vent Gas Controls
7-1-8	EP	R5121-N	VOC	30 TAC Chapter 115, Vent Gas Controls	§ 115.121 The permit holder shall comply with the applicable limitation, standard and/or equipment specification requirements of 30 TAC Chapter 115, Vent Gas Controls	The permit holder shall comply with the applicable requirements of 30 TAC Chapter 115, Vent Gas Controls	applicable monitoring	The permit holder shall comply with the applicable recordkeeping requirements of 30 TAC Chapter 115, Vent Gas Controls	The permit holder shall comply with the applicable reporting requirements of 30 TAC Chapter 115, Vent Gas Controls
GRPR5LFLOW	EP	R5121-L	VOC	30 TAC Chapter 115, Vent Gas Controls	§ 115.121 The permit holder shall comply with the applicable limitation, standard and/or equipment specification	The permit holder shall comply with the applicable requirements of 30 TAC Chapter 115, Vent Gas Controls	shall comply with the	The permit holder shall comply with the applicable recordkeeping requirements of 30 TAC Chapter 115, Vent Gas Controls	The permit holder shall comply with the applicable reporting requirements of 30 TAC Chapter 115, Vent Gas Controls

					requirements of 30 TAC Chapter 115, Vent Gas Controls				
GRPR5TRE1	EP	R5121-H	VOC	30 TAC Chapter 115, Vent Gas Controls	§ 115.121 The permit holder shall comply with the applicable limitation, standard and/or equipment specification requirements of 30 TAC Chapter 115, Vent Gas Controls	The permit holder shall comply with the applicable requirements of 30 TAC Chapter 115, Vent Gas Controls	shall comply with the applicable monitoring	The permit holder shall comply with the applicable recordkeeping requirements of 30 TAC Chapter 115, Vent Gas Controls	The permit holder shall comply with the applicable reporting requirements of 30 TAC Chapter 115, Vent Gas Controls
GRPR5VENT	EP	R5121-G	VOC	30 TAC Chapter 115, Vent Gas Controls	§ 115.121 The permit holder shall comply with the applicable limitation, standard and/or equipment specification requirements of 30 TAC Chapter 115, Vent Gas Controls	The permit holder shall comply with the applicable requirements of 30 TAC Chapter 115, Vent Gas Controls	shall comply with the applicable monitoring and testing requirements of 30 TAC Chapter 115, Vent Gas Controls	The permit holder shall comply with the applicable recordkeeping requirements of 30 TAC Chapter 115, Vent Gas Controls	The permit holder shall comply with the applicable reporting requirements of 30 TAC Chapter 115, Vent Gas Controls
12-1-FL170B	EU	R1111-A	PM (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, except for upset emissions as provided in §101.11(a).		§ 111.111(a)(4)(A)(ii)	None
12-1-FL171	EU	R1111-A	PM (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, except for upset emissions as provided in §101.11(a).	§ 111.111(a)(4)(A)(ii)	§ 111.111(a)(4)(A)(ii)	None
12-1-FL270	EU	R1111-A	PM (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, except for upset emissions as provided in §101.11(a).	§ 111.111(a)(4)(A)(ii)	§ 111.111(a)(4)(A)(ii)	None
PROAN-FUG	EU	R5352-A	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.357(2) § 115.352(9)	Storage tank valves, pressure relief valves equipped with a rupture	None	None	None

		25050 4			2445 050(4)4)	disc/venting to a control device, components in continuous vacuum service, and valves not externally regulated are exempted.		0.445.050(3)	[0]0 445 054(Z)
PROAN-FUG	EU	R5352-A	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.352(1)(A) § 115.352(1) § 115.352(2) § 115.352(3) § 115.352(4) § 115.352(5) § 115.352(6) § 115.352(7) § 115.357(8)	No nonaccessible valves, rated 10, 000 psig or less and contacting a process fluid with a TVP >0.044 psia, shall be allowed to have a VOC leak, longer than 15 days after discovery, exceeding the specified VOC concentration.	§ 115.354(4) § 115.354(5) § 115.354(6) [G]§ 115.354(7) § 115.354(8) [G]§ 115.355	§ 115.352(7) [G]§ 115.356	[G]§ 115.354(7)
PROAN-FUG	EU	R5352-A	voc	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.352(1)(A) § 115.352(1) § 115.352(2) § 115.352(3) § 115.352(4) § 115.352(5) § 115.352(6) § 115.352(7) § 115.357(8)	No valves (unsafe to monitor), rated 10,000 psig or less and contacting a process fluid with a TVP >0.044 psia, shall be allowed to have a VOC leak, longer than 15 days after discovery, exceeding the specified VOC concentration.	§ 115.354(5) § 115.354(6) [G]§ 115.354(7) § 115.354(8) [G]§ 115.355 [G]§ 115.356	§ 115.352(7) [G]§ 115.356	[G]§ 115.354(7)
PROAN-FUG	EU	R5352-A	voc	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.352(1)(B) § 115.352(1) § 115.352(2) § 115.352(3) § 115.352(5) § 115.357(8)	No compressor seals, contacting a process fluid with a TVP >0.044 psia, not in hydrogen service or not equipped with a shaft seal, shall be allowed to have a VOC leak, for more than 15 days after discovery, exceeding the specified VOC concentration.	§ 115.354(6) [G]§ 115.355	[G]§ 115.356	None
PROAN-FUG	EU	R5352-A	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.352(1)(B) § 115.352(1) § 115.352(2) § 115.352(3) § 115.352(5)	No pump seal, equipped with a shaft seal system, shall be allowed to have a VOC leak, for more than 15 days after discovery, exceeding the specified VOC concentration.		[G]§ 115.356	None
PROAN-FUG	EU	R5352-A	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.352(1)(B) § 115.352(1) § 115.352(2) § 115.352(3) § 115.352(5)	No pump seals, contacting a process fluid with a TVP >0.044 psia and not equipped with a shaft seal system, shall be allowed to	§ 115.354(5) § 115.354(6) [G]§ 115.355	[G]§ 115.356	None

					§ 115.357(8)	have a VOC leak, for more than 15 days after discovery, exceeding the specified VOC concentration.			
PROAN-FUG	EU	R5352-A	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.352(1)(A) § 115.352(1) § 115.352(2) § 115.352(3) § 115.352(4) § 115.352(5) § 115.352(6) § 115.352(7)	No accessible valves, rated 10,000 psig or less and contacting a process fluid with a TVP of 0.044 psia or less, shall be allowed to have a VOC leak, longer than 15 days after discovery, exceeding the specified VOC concentration.	§ 115.354(6) [G]§ 115.355 [G]§ 115.356	§ 115.352(7) [G]§ 115.356	None
PROAN-FUG	EU	R5352-A	voc	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.352(1)(A) § 115.352(1) § 115.352(2) § 115.352(3) § 115.352(4) § 115.352(5) § 115.352(6) § 115.352(7) § 115.357(8)	No accessible valves, rated 10,000 psig or less and contacting a process fluid with a TVP >0.044 psia, shall be allowed to have a VOC leak, longer than 15 days after discovery, exceeding the specified VOC concentration.	§ 115.354(4) § 115.354(5) § 115.354(6) [G]§ 115.354(7) § 115.354(8) [G]§ 115.355	§ 115.352(7) [G]§ 115.356	[G]§ 115.354(7)
PROAN-FUG	EU	R5352-A	voc	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.352(1)(A)	No pressure relief valve (gaseous service), rated 10,000 psig or less, contacting a process fluid with a TVP >0.044 psia, shall be allowed to have a VOC leak, longer than 15	§ 115.354(4) § 115.354(5) § 115.354(6) [G]§ 115.354(7) § 115.354(8)	§ 115.352(7) [G]§ 115.356	[G]§ 115.354(7)
PROAN-FUG	EU	R5352-A	voc	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.352(1)(A) § 115.352(1) § 115.352(2) § 115.352(3) § 115.352(5) § 115.352(7) § 115.352(8)	No flanges, contacting a process fluid with a TVP of 0.044 psia or less, shall be allowed to have a VOC leak, for more than 15 days after discovery, exceeding the specified VOC concentration.	§ 115.354(3) § 115.354(6) [G]§ 115.355 [G]§ 115.356	§ 115.352(7) [G]§ 115.356	None
PROAN-FUG	EU	R5352-A	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.352(1)(A) § 115.352(1) § 115.352(2) § 115.352(3) § 115.352(5)	No flanges, contacting a process fluid with a TVP >0.044 psia, shall be allowed to have a VOC leak, for more than 15 days after	§ 115.354(3) § 115.354(5) § 115.354(6)	§ 115.352(7) [G]§ 115.356	None

					§ 115.352(7) § 115.352(8) § 115.357(8)	discovery, exceeding the specified VOC concentration.	[G]§ 115.356		
PROAN-FUG	EU	60VV-B	VOC	40 CFR Part 60, Subpart VV	§ 60.482-1(d)	Equipment that is in vacuum service is excluded from the requirements of \$60.482-2 to \$60.482-10, if it is identified as required in \$60.486(e)(5).		§ 60.486(e) § 60.486(e)(1) § 60.486(e)(5)	None
PROAN-FUG	EU	60VV-B	voc	40 CFR Part 60, Subpart VV	[G]§ 60.482-2 § 60.482-1(a) § 60.482-1(b) [G]§ 60.482-9	Pumps in light liquid service shall comply with the requirements outlined in § 60.482-2(a)-(f).	§ 60.485(a)	[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)	§ 60.487(a) [G]§ 60.487(b) [G]§ 60.487(c) § 60.487(e)
PROAN-FUG	EU	60VV-B	voc	40 CFR Part 60, Subpart VV	§ 60.482-4(a) § 60.482-1(a) § 60.482-1(b) § 60.482-4(b)(1) [G]§ 60.482-9	releases, each pressure relief device in gas/vapor service shall be operated	[G]§ 60.485(c) [G]§ 60.485(d)	[G]\$ 60.486(a) \$ 60.486(e) \$ 60.486(e)(1) \$ 60.486(e)(3) [G]\$ 60.486(e)(4) \$ 60.486(j)	§ 60.487(a) [G]§ 60.487(b) [G]§ 60.487(c) § 60.487(e)
PROAN-FUG	EU	60VV-B	VOC	40 CFR Part 60, Subpart VV	[G]§ 60.482-7 § 60.482-1(a) § 60.482-1(b) [G]§ 60.482-9 [G]§ 60.483-1 [G]§ 60.483-2	Valves in gas/vapor service and in light liquid service shall comply with the requirements outlined in § 60.482-7(a)-(h).	[G]§ 60.483-1 [G]§ 60.483-2	[G]\$ 60.486(a) [G]\$ 60.486(b) [G]\$ 60.486(c) \$ 60.486(e) \$ 60.486(e)(1) [G]\$ 60.486(e)(4) [G]\$ 60.486(f) [G]\$ 60.486(f) [G]\$ 60.486(g) \$ 60.486(j)	§ 60.487(a) [G]§ 60.487(b) [G]§ 60.487(c) § 60.487(d) § 60.487(e)
PROAN-FUG	EU	60VV-B	VOC	40 CFR Part 60, Subpart VV	[G]§ 60.482-8 § 60.482-1(a) § 60.482-1(b) [G]§ 60.482-9	Pumps in heavy liquid service shall comply with the requirements of \$60.482-8(a)-(d).		[G]\$ 60.486(a) [G]\$ 60.486(b) [G]\$ 60.486(c) \$ 60.486(e) \$ 60.486(e)(1) \$ 60.486(j)	§ 60.487(a) [G]§ 60.487(b) [G]§ 60.487(c) § 60.487(e)
PROAN-FUG	EU	60VV-B	VOC	40 CFR Part 60, Subpart VV	[G]§ 60.482-8 § 60.482-1(a) § 60.482-1(b) [G]§ 60.482-9	service shall comply with	[G]\$ 60.482-8 \$ 60.485(a) [G]\$ 60.485(b) [G]\$ 60.485(d)	[G]§ 60.486(a) [G]§ 60.486(b) [G]§ 60.486(c) § 60.486(e)	§ 60.487(a) [G]§ 60.487(b) [G]§ 60.487(c) § 60.487(e)

						(d).	[G]§ 60.485(e) § 60.485(f)	§ 60.486(e)(1) § 60.486(j)	
PROAN-FUG	EU	60VV-B	VOC	40 CFR Part 60, Subpart VV	[G]\$ 60.482-8 \$ 60.482-1(a) \$ 60.482-1(b) [G]\$ 60.482-9	Pressure relief devices in light- liquid service or in heavy liquid service shall comply with the requirements of \$60.482-8(a)-(d).	[G]§ 60.485(d)	[G]\$ 60.486(a) [G]\$ 60.486(b) [G]\$ 60.486(c) \$ 60.486(e) \$ 60.486(e)(1) \$ 60.486(j)	§ 60.487(a) [G]§ 60.487(b) [G]§ 60.487(c) § 60.487(e)
PROAN-FUG	EU	60VV-B	VOC	40 CFR Part 60, Subpart VV	[G]§ 60.482-8 § 60.482-1(a) § 60.482-1(b) [G]§ 60.482-9			[G]\$ 60.486(a) [G]\$ 60.486(b) [G]\$ 60.486(c) \$ 60.486(e) \$ 60.486(e)(1) \$ 60.486(j)	§ 60.487(a) [G]§ 60.487(b) [G]§ 60.487(c) § 60.487(e)
PROCAP-FUG	EU	R5352-A	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.357(2) § 115.352(9)	Storage tank valves, pressure relief valves equipped with a rupture disc/venting to a control device, components in continuous vacuum service, and valves not externally regulated are exempted.		None	None
PROCAP-FUG	EU	R5352-A	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.352(1)(A) § 115.352(1) § 115.352(2) § 115.352(3) § 115.352(4) § 115.352(5) § 115.352(6) § 115.352(7) § 115.357(8)	No nonaccessible valves, rated 10, 000 psig or less and contacting a process fluid with a TVP >0.044 psia, shall be allowed to have a VOC leak, longer than 15 days after discovery, exceeding the specified VOC concentration.	§ 115.354(4) § 115.354(5) § 115.354(6) [G]§ 115.354(7) § 115.354(8) [G]§ 115.355	§ 115.352(7) [G]§ 115.356	[G]§ 115.354(7)
PROCAP-FUG	EU	R5352-A	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.352(1)(A) § 115.352(1) § 115.352(2) § 115.352(3) § 115.352(4) § 115.352(5) § 115.352(6) § 115.352(7) § 115.357(8)		§ 115.354(5) § 115.354(6) [G]§ 115.354(7) § 115.354(8) [G]§ 115.355	§ 115.352(7) [G]§ 115.356	[G]§ 115.354(7)
PROCAP-FUG	EU	R5352-A	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.352(1)(B) § 115.352(1) § 115.352(2) § 115.352(3)	No pump seal, equipped with a shaft seal system, shall be allowed to have a VOC leak, for more than 15	[G]§ 115.355 [G]§ 115.356	[G]§ 115.356	None

					§ 115.352(5)	days after discovery, exceeding the specified VOC concentration.			
PROCAP-FUG	EU	R5352-A	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.352(2) § 115.352(3) § 115.352(5) § 115.357(8)	No pump seals, contacting a process fluid with a TVP >0.044 psia and not equipped with a shaft seal system, shall be allowed to have a VOC leak, for more than 15 days after discovery, exceeding the specified VOC concentration.	§ 115.354(5) § 115.354(6) [G]§ 115.355	[G]§ 115.356	None
PROCAP-FUG	EU	R5352-A	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.352(1)(A) § 115.352(1) § 115.352(2) § 115.352(3) § 115.352(4) § 115.352(5) § 115.352(6) § 115.352(7) § 115.357(8)	exceeding the specified VOC concentration.	§ 115.354(4) § 115.354(5) § 115.354(6) [G]§ 115.354(7) § 115.354(8) [G]§ 115.355 [G]§ 115.356	§ 115.352(7) [G]§ 115.356	[G]§ 115.354(7)
PROCAP-FUG	EU	R5352-A	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.352(1)(A) § 115.352(1) § 115.352(2) § 115.352(3) § 115.352(4) § 115.352(5) § 115.352(6) § 115.352(7) § 115.357(8)	10,000 psig or less, contacting a process fluid with a TVP >0.044 psia, shall be allowed to have a VOC leak, longer than 15	§ 115.354(4) § 115.354(5) § 115.354(6) [G]§ 115.354(7) § 115.354(8)	§ 115.352(7) [G]§ 115.356	[G]§ 115.354(7)
PROCAP-FUG	EU	R5352-A	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.352(1)(A) § 115.352(1) § 115.352(2) § 115.352(3) § 115.352(5) § 115.352(7) § 115.352(8)	No flanges, contacting a process fluid with a TVP of 0.044 psia or less, shall be allowed to have a VOC leak, for more than 15 days after discovery, exceeding the specified VOC concentration.	§ 115.354(3) § 115.354(6) [G]§ 115.355 [G]§ 115.356 § 115.357(1)	§ 115.352(7) [G]§ 115.356	None
PROCAP-FUG	EU	R5352-A	VOC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	§ 115.352(1)(A) § 115.352(1) § 115.352(2) § 115.352(3) § 115.352(5) § 115.352(7) § 115.352(8)	No flanges, contacting a process fluid with a TVP >0.044 psia, shall be allowed to have a VOC leak, for more than 15 days after discovery, exceeding the specified VOC	§ 115.354(3) § 115.354(5) § 115.354(6) [G]§ 115.355	§ 115.352(7) [G]§ 115.356	None

					§ 115.357(8)	concentration.			
PROCAP-FUG	EU	60VV-B	VOC	40 CFR Part 60, Subpart VV	§ 60.482-1(d)	Equipment that is in vacuum service is excluded from the requirements of \$60.482-2 to \$60.482-10, if it is identified as required in \$60.486(e)(5).		§ 60.486(e) § 60.486(e)(1) § 60.486(e)(5)	None
PROCAP-FUG	EU	60VV-B	VOC	40 CFR Part 60, Subpart VV	[G]§ 60.482-2 § 60.482-1(a) § 60.482-1(b) [G]§ 60.482-9	Pumps in light liquid service shall comply with the requirements outlined in § 60.482-2(a)-(f).	§ 60.485(a)	[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)	§ 60.487(a) [G]§ 60.487(b) [G]§ 60.487(c) § 60.487(e)
PROCAP-FUG	EU	60VV-B	VOC	40 CFR Part 60, Subpart VV	§ 60.482-4(a) § 60.482-1(a) § 60.482-1(b) § 60.482-4(b)(1) [G]§ 60.482-9	releases, each pressure relief device in gas/vapor service shall be operated	[G]§ 60.485(c) [G]§ 60.485(d)	[G]\$ 60.486(a) \$ 60.486(e) \$ 60.486(e)(1) \$ 60.486(e)(3) [G]\$ 60.486(e)(4) \$ 60.486(j)	§ 60.487(a) [G]§ 60.487(b) [G]§ 60.487(c) § 60.487(e)
PROCAP-FUG	EU	60VV-B	voc	40 CFR Part 60, Subpart VV	[G]§ 60.482-7 § 60.482-1(a) § 60.482-1(b) [G]§ 60.482-9 [G]§ 60.483-1 [G]§ 60.483-2	Valves in gas/vapor service and in light liquid service shall comply with the requirements outlined in § 60.482-7(a)-(h).	[G]§ 60.483-1 [G]§ 60.483-2	[G]\$ 60.486(a) [G]\$ 60.486(b) [G]\$ 60.486(c) \$ 60.486(e) \$ 60.486(e)(1) [G]\$ 60.486(e)(4) [G]\$ 60.486(f) [G]\$ 60.486(g) \$ 60.486(j)	\$ 60.487(a) [G]\$ 60.487(b) [G]\$ 60.487(c) \$ 60.487(d) \$ 60.487(e)
PROCAP-FUG	EU	60VV-B	VOC	40 CFR Part 60, Subpart VV	[G]§ 60.482-8 § 60.482-1(a) § 60.482-1(b) [G]§ 60.482-9	Valves in heavy liquid service shall comply with the requirements of \$60.482-8(a)-(d).		[G]\$ 60.486(a) [G]\$ 60.486(b) [G]\$ 60.486(c) \$ 60.486(e) \$ 60.486(e)(1) \$ 60.486(j)	§ 60.487(a) [G]§ 60.487(b) [G]§ 60.487(c) § 60.487(e)
PROCAP-FUG	EU	60VV-B	voc	40 CFR Part 60, Subpart VV	[G]§ 60.482-8 § 60.482-1(a) § 60.482-1(b) [G]§ 60.482-9	Pressure relief devices in light- liquid service or in heavy liquid service shall comply with the requirements of §60.482-8(a)-	[G]§ 60.482-8 § 60.485(a) [G]§ 60.485(b) [G]§ 60.485(d)	[G]\$ 60.486(a) [G]\$ 60.486(b) [G]\$ 60.486(c) \$ 60.486(e) \$ 60.486(e)(1) \$ 60.486(j)	§ 60.487(a) [G]§ 60.487(b) [G]§ 60.487(c) § 60.487(e)

						(d).			
PROCAP-FUG	EU	60VV-B	VOC	40 CFR Part 60, Subpart VV	[G]§ 60.482-8 § 60.482-1(a) § 60.482-1(b) [G]§ 60.482-9	Flanges and other connectors shall comply with the requirements of \$60.482-8(a)-(d).	§ 60.485(a)	[G]\$ 60.486(a) [G]\$ 60.486(b) [G]\$ 60.486(c) \$ 60.486(e) \$ 60.486(e)(1) \$ 60.486(j)	§ 60.487(a) [G]§ 60.487(b) [G]§ 60.487(c) § 60.487(e)
PROCAP-FUG	EU	61J-A	BENZENE	40 CFR Part 61, Subpart J	§ 61.110(c)(2)	Any equipment in benzene service located at a plant that is designed to produce or use less than 1,000 megagrams (1,102 tons) of benzene per year are exempt from §61.112.	None	§ 61.110(c)(1) § 61.246(i) § 61.246(i)(1)	None
PROCAP-FUG	EU	61V-A	VHAP	40 CFR Part 61, Subpart V	§ 61.242-1(e)	Equipment that is in vacuum service is excluded from the requirements of §61.242-2 to §61.242-11, if it is identified as required in §61.246(e)(5).		[G]§ 61.246(e)	None
PROCAP-FUG	EU	61V-A	VHAP	40 CFR Part 61, Subpart V	[G]§ 61.242-2 § 61.242-1(a) § 61.242-1(b) § 61.242-1(d) [G]§ 61.242-10	Comply with standards for pumps. §61.242-2(a)-(g)	[G]§ 61.242-2 [G]§ 61.245(b) [G]§ 61.245(c) [G]§ 61.245(d)	[G]§ 61.246(a) [G]§ 61.246(b) [G]§ 61.246(c) [G]§ 61.246(e) [G]§ 61.246(h) [G]§ 61.246(i) § 61.246(j)	[G]§ 61.247(a) [G]§ 61.247(b) § 61.247(c) [G]§ 61.247(e)
PROCAP-FUG	EU	61V-A	VHAP	40 CFR Part 61, Subpart V	§ 61.242-11(f)(1) § 61.242-1(a) § 61.242-1(b) § 61.242-1(d) [G]§ 61.242-10 § 61.242-11(f)(3) § 61.242-11(f)(4) § 61.242-11(g)	Closed-vent systems shall be designed and operated with no detectable emission, as indicated by instrument reading < 500 ppm above background and by visual inspections, as specified as §61.245(c).	§ 61.242-11(f)(2) [G]§ 61.245(b) [G]§ 61.245(c) [G]§ 61.245(d)	[G]§ 61.246(a) [G]§ 61.246(d) [G]§ 61.246(e) [G]§ 61.246(i) § 61.246(j)	[G]§ 61.247(a) [G]§ 61.247(b) § 61.247(c) [G]§ 61.247(e)
PROCAP-FUG	EU	61V-A	VHAP	40 CFR Part 61, Subpart V	§ 61.242-11(b) § 61.242-1(a) § 61.242-1(b) § 61.242-1(d) § 61.242-11(e) § 61.242-11(g)	Vapor recovery systems (for example, condensers and adsorbers) shall be designed and operated to recover the organic vapors vented to them with an efficiency of 95 percent or greater.	[G]§ 61.245(d)	[G]§ 61.246(a) [G]§ 61.246(d) [G]§ 61.246(e) [G]§ 61.246(i) § 61.246(j)	[G]§ 61.247(a) [G]§ 61.247(b) § 61.247(c) [G]§ 61.247(e)
PROCAP-FUG	EU	61V-A	VHAP	40 CFR Part 61, Subpart V	[G]§ 61.242-3 § 61.242-1(a) § 61.242-1(b) § 61.242-1(d)	Comply with standards for compressors. §61.242-3(a)-(i)	[G]§ 61.242-3 [G]§ 61.245(b) [G]§ 61.245(c) [G]§ 61.245(d)	[G]§ 61.246(a) [G]§ 61.246(b) [G]§ 61.246(c) [G]§ 61.246(e)	[G]§ 61.247(a) [G]§ 61.247(b) § 61.247(c) [G]§ 61.247(e)

					[G]§ 61.242-10			[G]§ 61.246(h) [G]§ 61.246(i) § 61.246(j)	
PROCAP-FUG	EU	61V-A	VHAP	40 CFR Part 61, Subpart V	[G]§ 61.242-4 § 61.242-1(a) § 61.242-1(b) § 61.242-1(d) [G]§ 61.242-10	Comply with standards for pressure relief devices in gas/vapor service. §61.242-4(a)-(c)	[G]§ 61.242-4 [G]§ 61.245(b) [G]§ 61.245(c) [G]§ 61.245(d)	[G]§ 61.246(a) [G]§ 61.246(e) [G]§ 61.246(i) § 61.246(j)	[G]§ 61.247(a) [G]§ 61.247(b) § 61.247(c) [G]§ 61.247(e)
PROCAP-FUG	EU	61V-A	VHAP	40 CFR Part 61, Subpart V	[G]§ 61.242-7 § 61.242-1(a) § 61.242-1(b) § 61.242-1(d) [G]§ 61.242-10 [G]§ 61.243-1 [G]§ 61.243-2	Comply with standards for valves. §61.242-7(a)-(h)	[G]§ 61.242-7 [G]§ 61.243-1 [G]§ 61.245(b) [G]§ 61.245(c) [G]§ 61.245(d)	[G]§ 61.246(a) [G]§ 61.246(b) [G]§ 61.246(c) [G]§ 61.246(e) [G]§ 61.246(f) [G]§ 61.246(g) [G]§ 61.246(i) § 61.246(j)	[G]§ 61.247(a) [G]§ 61.247(b) § 61.247(c) § 61.247(d) [G]§ 61.247(e)
PROCAP-FUG	EU	61V-A	VHAP	40 CFR Part 61, Subpart V	[G]§ 61.242-8 § 61.242-1(a) § 61.242-1(b) § 61.242-1(d) [G]§ 61.242-10	Comply with standards for pressure relief devices in liquid service. § 61.242-8(a)-(d)	[G]§ 61.242-8 [G]§ 61.245(b) [G]§ 61.245(c) [G]§ 61.245(d)	[G]§ 61.246(a) [G]§ 61.246(b) [G]§ 61.246(c) [G]§ 61.246(e) [G]§ 61.246(i) § 61.246(j)	[G]§ 61.247(a) [G]§ 61.247(b) § 61.247(c) [G]§ 61.247(e)
PROCAP-FUG	EU	61V-A	VHAP	40 CFR Part 61, Subpart V	§ 61.242-9 § 61.242-1(a) § 61.242-1(b) § 61.242-1(d)	Each product accumulator vessel shall be equipped with a closed-vent system to capture and transport any leakage from the vessel to a control device as in §61.242-11, except in §61.242-1(c).	[G]§ 61.245(d)	[G]§ 61.246(a) [G]§ 61.246(e) [G]§ 61.246(i) § 61.246(j)	[G]§ 61.247(a) [G]§ 61.247(b) § 61.247(c) [G]§ 61.247(e)
PROCAP-FUG	EU	61V-A	VHAP	40 CFR Part 61, Subpart V	[G]§ 61.242-8 § 61.242-1(a) § 61.242-1(b) § 61.242-1(d) [G]§ 61.242-10	Comply with standards for flanges and other connectors. § 61.242-8(a)-(d)	[G]§ 61.245(b)	[G]§ 61.246(a) [G]§ 61.246(b) [G]§ 61.246(c) [G]§ 61.246(e) [G]§ 61.246(i) § 61.246(j)	[G]§ 61.247(a) [G]§ 61.247(b) § 61.247(c) [G]§ 61.247(e)
11-1-RLDG	EU	R5211-B	VOC	30 TAC Chapter 115, Loading and Unloading of VOC	§ 115.217(a)(1) [G]§ 115.212(a)(7) § 115.214(a)(1)(B)	land-based operations). All	§ 115.214(a)(1)(A) § 115.214(a)(1)(A)(i) § 115.215(4)	§ 115.216 § 115.216(2) § 115.216(3)(B)	None

						specified.			
11-1-TLDG	EU	R5211-B	VOC	30 TAC Chapter 115, Loading and Unloading of VOC	§ 115.217(a)(1) [G]§ 115.212(a)(7) § 115.214(a)(1)(B)	land-based operations). All	§ 115.214(a)(1)(A) § 115.214(a)(1)(A)(i) § 115.215(4)	§ 115.216 § 115.216(2) § 115.216(3)(B)	None
14-1-KLOAD	EU	R5211-B	VOC	30 TAC Chapter 115, Loading and Unloading of VOC	§ 115.217(a)(1) [G]§ 115.212(a)(7) § 115.214(a)(1)(B)	land-based operations). All land-based loading and unloading of VOC with a true vapor pressure less than 0.5 psia is exempt from the requirements of this division, except as specified.	§ 115.215(4)	§ 115.216 § 115.216(2) § 115.216(3)(B)	None
14-1-LOAD2	EU	R5211-C	VOC	30 TAC Chapter 115, Loading and Unloading of VOC	§ 115.212(a)(1) § 115.212(a)(1)(A) § 115.212(a)(3)(A) § 115.212(a)(3)(A)(i) § 115.212(a)(3)(B) [G]§ 115.212(a)(3)(C) § 115.212(a)(3)(E) § 115.214(a)(1)(B)	At operations other than gasoline terminals, gasoline bulk plants, and marine terminals, vapors of VOC with a true vapor pressure of 0.5 psia or greater, must be controlled by one of the following methods.	[G]§ 115.212(a)(3)(C) § 115.214(a)(1)(A) § 115.214(a)(1)(A)(i) § 115.214(a)(1)(A)(ii) § 115.214(a)(1)(A)(iii)	§ 115.216 § 115.216(1) § 115.216(1)(C) § 115.216(2) [G]§ 115.216(3)(A) § 115.216(3)(B)	None
14-1-LOAD2	EU	61BB-A	BENZENE	40 CFR Part 61, Subpart BB	§ 61.300(d)	Any affected facility as per § 61.300(a), whose annual benzene loading is < 1.3 million liters of 70 weight-percent or more benzene is exempt from this subpart, except for § 61.305(i).		[G]§ 61.305(i)	[G]§ 61.305(i)
14-1-LOAD3	EU	R5211-B	VOC	30 TAC Chapter 115, Loading and Unloading of VOC	§ 115.217(a)(1) [G]§ 115.212(a)(7) § 115.214(a)(1)(B)	land-based operations). All land-based loading and unloading of VOC with a true vapor pressure less than 0.5 psia is exempt from the requirements of this division, except as specified.	§ 115.215(4)	§ 115.216 § 115.216(2) § 115.216(3)(B)	None
7-1-BENZLD	EU	61BB-A	BENZENE	40 CFR Part 61, Subpart BB	§ 61.300(d)	Any affected facility as per § 61.300(a), whose annual benzene loading is < 1.3	None	[G]§ 61.305(i)	[G]§ 61.305(i)

						million liters of 70 weight- percent or more benzene is exempt from this subpart, except for § 61.305(i).			
7-1-KLOAD	EU	R5211-B	VOC	30 TAC Chapter 115, Loading and Unloading of VOC	§ 115.217(a)(1) [G]§ 115.212(a)(7) § 115.214(a)(1)(B)	land-based operations). All	§ 115.214(a)(1)(A) § 115.214(a)(1)(A)(i) § 115.215(4)	§ 115.216 § 115.216(2) § 115.216(3)(B)	None
7-1-RLDG	EU	R5211-B	VOC	30 TAC Chapter 115, Loading and Unloading of VOC	§ 115.217(a)(1) [G]§ 115.212(a)(7) § 115.214(a)(1)(B)	Vapor pressure (at land-based operations). All land-based loading and unloading of VOC with a true vapor pressure less than 0.5 psia is exempt from the requirements of this division, except as specified.	§ 115.214(a)(1)(A) § 115.214(a)(1)(A)(i) § 115.215(4)	§ 115.216 § 115.216(2) § 115.216(3)(B)	None
7-1-TLDG	EU	R5211-B	VOC	30 TAC Chapter 115, Loading and Unloading of VOC	§ 115.217(a)(1) [G]§ 115.212(a)(7) § 115.214(a)(1)(B)	land-based operations). All	§ 115.214(a)(1)(A) § 115.214(a)(1)(A)(i) § 115.215(4)	§ 115.216 § 115.216(2) § 115.216(3)(B)	None
7-2-RLDG	EU	R5211-B	VOC	30 TAC Chapter 115, Loading and Unloading of VOC	§ 115.217(a)(1) [G]§ 115.212(a)(7) § 115.214(a)(1)(B)	Vapor pressure (at land-based operations). All	§ 115.214(a)(1)(A) § 115.214(a)(1)(A)(i) § 115.215(4)	§ 115.216 § 115.216(2) § 115.216(3)(B)	None
7-2-TLDG	EU	R5211-B	VOC	30 TAC Chapter 115, Loading and Unloading of VOC	§ 115.217(a)(1) [G]§ 115.212(a)(7) § 115.214(a)(1)(B)		§ 115.215(4)	§ 115.216 § 115.216(2) § 115.216(3)(B)	None

						division, except as specified.			
11-1-BR170	EU	R7ICI-N	NOX	30 TAC Chapter 117, Commercial	§ 117.201 The permit holder shall comply with the applicable limitation, standard and/or equipment specification requirements of 30 TAC Chapter 117, Commercial, Institutional, and Industrial Sources	The permit holder shall comply with the applicable requirements of 30 TAC Chapter 117, Commercial, Institutional, and Industrial Sources	The permit holder shall comply with the applicable monitoring and testing requirements of 30 TAC Chapter 117, Commercial, Institutional, and Industrial Sources	The permit holder shall comply with the applicable recordkeeping requirements of 30 TAC Chapter 117, Commercial, Institutional, and Industrial Sources	The permit holder shall comply with the applicable reporting requirements of 30 TAC Chapter 117, Commercial, Institutional, and Industrial Sources
11-1-BR340	EU	R7ICI-N	NOX	30 TAC Chapter 117, Commercial	§ 117.201 The permit holder shall comply with the applicable limitation, standard and/or equipment specification requirements of 30 TAC Chapter 117, Commercial, Institutional, and Industrial Sources	The permit holder shall comply with the applicable requirements of 30 TAC Chapter 117, Commercial, Institutional, and Industrial Sources		The permit holder shall comply with the applicable recordkeeping requirements of 30 TAC Chapter 117, Commercial, Institutional, and Industrial Sources	The permit holder shall comply with the applicable reporting requirements of 30 TAC Chapter 117, Commercial, Institutional, and Industrial Sources
GRP-CMBST	EU	R7ICI-N	NOX	30 TAC Chapter 117, Commercial	§ 117.201 The permit holder shall comply with the applicable limitation, standard and/or equipment specification requirements of 30 TAC Chapter 117, Commercial, Institutional, and Industrial Sources	The permit holder shall comply with the applicable requirements of 30 TAC Chapter 117, Commercial, Institutional, and Industrial Sources	The permit holder shall comply with the applicable monitoring and testing requirements of 30 TAC Chapter 117, Commercial, Institutional, and Industrial Sources	The permit holder shall comply with the applicable recordkeeping requirements of 30 TAC Chapter 117, Commercial, Institutional, and Industrial Sources	The permit holder shall comply with the applicable reporting requirements of 30 TAC Chapter 117, Commercial, Institutional, and Industrial Sources
14-1-RLOOP	EP	60RRR-E	VOC/TOC	40 CFR Part 60, Subpart RRR	§ 60.702(c)	For each vent stream, maintain a TRE index value greater than 1.0 without use of a VOC emission control device.	§ 60.703(d)(1) § 60.703(d)(1)(i)	§ 60.703(d)(1)(i) § 60.705(b) § 60.705(b)(4)(i) § 60.705(b)(4)(v) § 60.705(f) [G]§ 60.705(f)(1) [G]§ 60.705(g)	§ 60.704(f)(1) § 60.705(a) § 60.705(b) § 60.705(b)(4)(i) § 60.705(b)(4)(v) § 60.705(f) [G]§ 60.705(f)(1) § 60.705(k) § 60.705(l)

							§ 60.704(f)(1) § 60.704(f)(2)		§ 60.705(I)(1) § 60.705(I)(6)
7-1-RLOOP	EP	60RRR-E	VOC/TOC	40 CFR Part 60, Subpart RRR	§ 60.702(c)	For each vent stream, maintain a TRE index value greater than 1.0 without use of a VOC emission control device.	§ 60.703(d)(1)(i)	§ 60.703(d)(1)(i) § 60.705(b) § 60.705(b)(4)(i) § 60.705(b)(4)(v) § 60.705(f) [G]§ 60.705(f)(1) [G]§ 60.705(g)	\$ 60.704(f)(1) \$ 60.705(a) \$ 60.705(b) \$ 60.705(b)(4)(i) \$ 60.705(b)(4)(v) \$ 60.705(f) [G]§ 60.705(f)(1) \$ 60.705(k) \$ 60.705(l) \$ 60.705(l)(1) \$ 60.705(l)(6)
GRP-III	EP	60III-A	VOC/ТОС	40 CFR Part 60, Subpart III	§ 60.612(a)	reduce emissions of TOC by 98 wt%, or TOC concentration of 20 ppmv, dry basis corrected to 3 % O2 (use less stringent). If boiler/process heater used to comply, insert vent stream in flame zone.	§ 60.613(a)(1)(ii) § 60.613(a)(2) § 60.614(a) § 60.614(b) § 60.614(b)(1) § 60.614(b)(2) § 60.614(b)(3) [G]§ 60.614(b)(4)	§ 60.613(a)(1) § 60.613(a)(2) § 60.615(b) [G]§ 60.615(b)(1) § 60.615(c)(2) § 60.615(d) § 60.615(g)	\$ 60.615(a) \$ 60.615(b) [G]\$ 60.615(b)(1) \$ 60.615(c)(2) \$ 60.615(g) \$ 60.615(i) \$ 60.615(j) \$ 60.615(j)(1) \$ 60.615(j)(2)
GRP-RRR	EP	60RRR-D	voc/тос	40 CFR Part 60, Subpart RRR	§ 60.702(a)	For each vent stream, reduce TOC by 98%w or to a TOC concentration of 20 ppmv, on a dry basis corrected to 3% oxygen, whichever is less stringent. If a boiler or process heater is used, introduce vent stream as specified.	§ 60.703(a)(1) § 60.703(a)(1)(ii) § 60.703(a)(2) § 60.703(a)(2)(i) § 60.704(a) § 60.704(b)	§ 60.703(a)(1) § 60.703(a)(2) § 60.705(b) [G]§ 60.705(b)(1) § 60.705(c) § 60.705(c)(2) § 60.705(d)(1) § 60.705(s)	\$ 60.705(a) \$ 60.705(b) [G]\$ 60.705(b)(1) \$ 60.705(c) \$ 60.705(c)(2) \$ 60.705(k) \$ 60.705(l) \$ 60.705(l)(1) \$ 60.705(l)(2) \$ 60.705(s)
14-1-D210A	EU	R5112-B	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.112(a)(1) § 115.112(a)(3)	Tanks shall not store VOC unless the required pressure is maintained, or they are equipped with the appropriate control device specified in Table I(a) or Table II(a).	[G]§ 115.115(a) § 115.116(a)(4) § 115.116(a)(5) ** See Periodic	§ 115.116(a)(4) § 115.116(a)(5)	None
14-1-D210A	EU	60Kb-G	VOC	40 CFR Part 60, Subpart Kb	[G]§ 60.112b(a)(3)	Storage vessels specified in §60.112b(a) and equipped with a closed vent system/control device are to meet the specifications of §60.112b(a)(3)(i)-(ii).	§ 60.113b(c)(2) § 60.116b(a) § 60.116b(b)	§ 60.115b [G]§ 60.115b(c) § 60.116b(a) § 60.116b(b)	[G]§ 60.113b(c)(1) § 60.115b

							[G]§ 60.485(b)		
14-1-D210A	EU	61Y-A	BENZENE	40 CFR Part 61, Subpart Y	[G]§ 61.271(c) § 61.242-11(f)(1) § 61.242-11(f)(3) § 61.242-11(f)(4) § 61.242-11(g) [G]§ 61.271(d)	vessel shall equip the vessel with a closed vent system and control device meeting the requirements as specified in §61.271(c)(1)-(4).	§ 61.242-11(f)(2) [G]§ 61.245(c) § 61.272(c)(2)	§ 61.276(a) § 61.276(b) [G]§ 61.276(c)	[G]§ 61.272(c)(1) § 61.274(a) [G]§ 61.275(e)
14-1-D210B	EU	R5112-B	voc	30 TAC Chapter 115, Storage of VOCs	§ 115.112(a)(1) § 115.112(a)(3)	Tanks shall not store VOC unless the required pressure is maintained, or they are equipped with the appropriate control device specified in Table I(a) or Table II(a).	§ 115.116(a)(4) § 115.116(a)(5) ** See Periodic	§ 115.116(a)(4) § 115.116(a)(5)	None
14-1-D210B	EU	61Y-B	BENZENE	40 CFR Part 61, Subpart Y	§ 61.270(b)	Except for Paragraph (b) in §61.276, storage vessels with a design storage capacity less than 38 cubic meters (10,000 gallons) are exempt from the provisions of this subpart.		§ 61.276(b)	None
7-1-D745A1	EU	R5112-B	voc	30 TAC Chapter 115, Storage of VOCs	§ 115.112(a)(1) § 115.112(a)(3)	Tanks shall not store VOC unless the required pressure is maintained, or they are equipped with the appropriate control device specified in Table I(a) or Table II(a).	§ 115.116(a)(4) § 115.116(a)(5) ** See Periodic	§ 115.116(a)(4) § 115.116(a)(5)	None
7-1-D745A1	EU	60Kb-G	voc	40 CFR Part 60, Subpart Kb	[G]§ 60.112b(a)(3)	Storage vessels specified in \$60.112b(a) and equipped with a closed vent system/control device are to meet the specifications of \$60.112b(a)(3)(i)-(ii).	§ 60.113b(c)(2) § 60.116b(a) § 60.116b(b)	§ 60.115b [G]§ 60.115b(c) § 60.116b(a) § 60.116b(b)	[G]§ 60.113b(c)(1) § 60.115b
7-1-D745A1	EU	61Y-A	BENZENE	40 CFR Part 61, Subpart Y	[G]§ 61.271(c) § 61.242-11(f)(1) § 61.242-11(f)(3) § 61.242-11(f)(4) § 61.242-11(g) [G]§ 61.271(d)	The owner or operator of each affected storage vessel shall equip the vessel with a closed vent system and control device meeting the requirements as specified in §61.271(c)(1)-(4).	§ 61.242-11(f)(2) [G]§ 61.245(c)	§ 61.276(a) § 61.276(b) [G]§ 61.276(c)	[G]§ 61.272(c)(1) § 61.274(a) [G]§ 61.275(e)
7-2-R30	EU	R5112-G	VOC	30 TAC Chapter 115, Storage of	§ 115.112(a)(1) § 115.112(a)(3)	Tanks shall not store VOC unless the required	[G]§ 115.115(a) § 115.116(a)(3)	§ 115.116(a)(3) § 115.116(a)(3)(B)	None

				VOCs		pressure is maintained, or they are equipped with the appropriate control device specified in Table I(a) or Table II(a).	§ 115.116(a)(4) § 115.116(a)(5)	§ 115.116(a)(4) § 115.116(a)(5)	
7-2-R30	EU	60Kb-I	voc	40 CFR Part 60, Subpart Kb	§ 60.110b(a)	Except for \$60.110b(b), this subpart applies to vessels with a capacity greater than or equal to 75 cubic meters (19,800 gal) used to store VOLs for which construction/reconstruction/ m odification began after 7/23/84.	§ 60.116b(b) § 60.116b(c) § 60.116b(d)	§ 60.116b(a) § 60.116b(b) § 60.116b(c)	§ 60.116b(d)
9-1-D193B	EU	R5112-E	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.112(a)(1) § 115.112(a)(2)(A) § 115.112(a)(2)(B) § 115.112(a)(2)(C) § 115.112(a)(2)(D) § 115.112(a)(2)(E)	pressure is maintained, or they are equipped with the appropriate control device specified in Table I(a) or Table II(a).	[G]§ 115.115(a) § 115.116(a)(4) § 115.116(a)(5)	§ 115.116(a)(2) § 115.116(a)(4) § 115.116(a)(5)	§ 115.114(a)(1)
9-1-D193B	EU	60Kb-E	VOC	40 CFR Part 60, Subpart Kb	\$ 60.112b(a)(1) \$ 60.112b(a)(1)(i) \$ 60.112b(a)(1)(ii)(C) \$ 60.112b(a)(1)(iii) \$ 60.112b(a)(1)(iv) \$ 60.112b(a)(1)(ix) \$ 60.112b(a)(1)(v) \$ 60.112b(a)(1)(vi) \$ 60.112b(a)(1)(vii) \$ 60.112b(a)(1)(viii)	Storage vessels specified in §60.112b(a) and equipped with a fixed roof in combination with an internal floating roof shall meet the specifications listed in §60.112b(a)(1)(i)-(ix).	§ 60.113b(a)(2) § 60.113b(a)(4) § 60.113b(a)(5)	§ 60.115b § 60.115b(a)(2) § 60.116b(a) § 60.116b(b) § 60.116b(c)	§ 60.113b(a)(2) § 60.113b(a)(5) § 60.115b § 60.115b(a)(1) § 60.115b(a)(3)
9-1-D60A	EU	R5112-E	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.112(a)(1) § 115.112(a)(2)(A) § 115.112(a)(2)(B) § 115.112(a)(2)(C) § 115.112(a)(2)(D) § 115.112(a)(2)(E)	pressure is maintained, or they are equipped with the appropriate control device specified in Table I(a) or Table II(a).	[G]§ 115.115(a) § 115.116(a)(4) § 115.116(a)(5)	§ 115.116(a)(2) § 115.116(a)(4) § 115.116(a)(5)	§ 115.114(a)(1)
9-1-D60A	EU	60Kb-E	VOC	40 CFR Part 60, Subpart Kb	\$ 60.112b(a)(1) \$ 60.112b(a)(1)(i) \$ 60.112b(a)(1)(ii)(B) \$ 60.112b(a)(1)(iii) \$ 60.112b(a)(1)(iv) \$ 60.112b(a)(1)(ix) \$ 60.112b(a)(1)(v) \$ 60.112b(a)(1)(vi)	Storage vessels specified in §60.112b(a) and equipped with a fixed roof in combination with an internal floating roof shall meet the specifications listed in §60.112b(a)(1)(i)-(ix).	[G]§ 60.113b(a)(3) § 60.113b(a)(4) § 60.113b(a)(5)	§ 60.115b § 60.115b(a)(2) § 60.116b(a) § 60.116b(b) § 60.116b(c)	§ 60.113b(a)(5) § 60.115b § 60.115b(a)(1) § 60.115b(a)(4)

					§ 60.112b(a)(1)(vii) § 60.112b(a)(1)(viii)		[G]§ 60.116b(e)(3)		
9-1-D60B	EU	R5112-E	voc	30 TAC Chapter 115, Storage of VOCs	§ 115.112(a)(1) § 115.112(a)(2)(A) § 115.112(a)(2)(B) § 115.112(a)(2)(C) § 115.112(a)(2)(D) § 115.112(a)(2)(E)	Tanks shall not store VOC unless the required pressure is maintained, or they are equipped with the appropriate control device specified in Table I(a) or Table II(a).	[G]§ 115.115(a) § 115.116(a)(4)	§ 115.116(a)(2) § 115.116(a)(4) § 115.116(a)(5)	§ 115.114(a)(1)
9-1-D60B	EU	60Kb-E	VOC	40 CFR Part 60, Subpart Kb	\$ 60.112b(a)(1) \$ 60.112b(a)(1)(i) \$ 60.112b(a)(1)(ii)(B) \$ 60.112b(a)(1)(ii) \$ 60.112b(a)(1)(iv) \$ 60.112b(a)(1)(ix) \$ 60.112b(a)(1)(v) \$ 60.112b(a)(1)(vi) \$ 60.112b(a)(1)(vii) \$ 60.112b(a)(1)(viii)	Storage vessels specified in §60.112b(a) and equipped with a fixed roof in combination with an internal floating roof shall meet the specifications listed in §60.112b(a)(1)(i)-(ix).	[G]§ 60.113b(a)(3) § 60.113b(a)(4) § 60.113b(a)(5)	§ 60.115b § 60.115b(a)(2) § 60.116b(a) § 60.116b(b) § 60.116b(c)	§ 60.113b(a)(5) § 60.115b § 60.115b(a)(1) § 60.115b(a)(4)
9-1-D60C	EU	R5112-E	VOC	30 TAC Chapter 115, Storage of VOCs	§ 115.112(a)(1) § 115.112(a)(2)(A) § 115.112(a)(2)(B) § 115.112(a)(2)(C) § 115.112(a)(2)(D) § 115.112(a)(2)(E)	pressure is maintained, or they are equipped with the appropriate control device specified in Table I(a) or Table II(a).	[G]§ 115.115(a) § 115.116(a)(4) § 115.116(a)(5)	§ 115.116(a)(2) § 115.116(a)(4) § 115.116(a)(5)	§ 115.114(a)(1)
9-1-D60C	EU	60Kb-E	VOC	40 CFR Part 60, Subpart Kb	\$ 60.112b(a)(1) \$ 60.112b(a)(1)(i) \$ 60.112b(a)(1)(ii)(B) \$ 60.112b(a)(1)(iii) \$ 60.112b(a)(1)(iv) \$ 60.112b(a)(1)(ix) \$ 60.112b(a)(1)(v) \$ 60.112b(a)(1)(vii) \$ 60.112b(a)(1)(viii) \$ 60.112b(a)(1)(viii)	Storage vessels specified in \$60.112b(a) and equipped with a fixed roof in combination with an internal floating roof shall meet the specifications listed in \$60.112b(a)(1)(i)-(ix).	[G]§ 60.113b(a)(3) § 60.113b(a)(4) § 60.113b(a)(5) § 60.116b(a)	§ 60.115b § 60.115b(a)(2) § 60.116b(a) § 60.116b(b) § 60.116b(c)	§ 60.113b(a)(5) § 60.115b § 60.115b(a)(1) § 60.115b(a)(4)
GRP-DW	EU	R5140-C	VOC	30 TAC Chapter 115, Industrial Wastewater	\$ 115.142(1) \$ 115.142 \$ 115.142(1)(A) \$ 115.142(1)(B) \$ 115.142(1)(C) \$ 115.142(1)(E) \$ 115.142(1)(G) \$ 115.142(1)(H) [G]§ 115.148	The wastewater component shall meet the specified control requirements.		§ 115.144(3)(H) § 115.146(1) § 115.146(2) § 115.146(3) § 115.146(4)	None

# ADDITIONAL MONITORING REQUIREMENTS

**Periodic Monitoring Summary** 

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### **Periodic Monitoring Summary**

UNIT/GROUP/PROCESS INFORMATION				
ID No.: 14-1-D210A	Applicable Form: OP-UA03			
APPLICABLE REGULATORY REQUIREMENT				
Name: 30 TAC Chapter 115, Storage of VOCs	SOP Index No.: R5112-B			
Pollutant: VOC	Main Standard: § 115.112(a)(1)			
MONITORING INFORMATION				
Indicator: VOC Concentration				
Minimum Frequency: monthly				
Averaging Period: n/a*				
Deviation Limit: VOC concentration greater than 500	ppmv			

Periodic Monitoring Text:

Measure and record the VOC concentration using a portable analyzer to monitor VOC concentration at the outlet of the control device. The monitoring device shall meet the requirements of part 60, appendix A, method 21, sections 2, 3, 4.1, 4.2, and 4.4. However, the words "leak definition" in method 21 shall be the outlet concentration. The monitoring instrumentation shall be maintained and operated in accordance with manufacturer's specifications or other written procedures. Any monitoring data above the deviation limit shall be considered and reported as a deviation.

<sup>\*</sup>The permit holder may elect to collect monitoring data on a more frequent basis and calculate the average as specified by the minimum frequency, for purposes of determining whether a deviation has occurred. However, the additional data points must be collected on a regular basis and shall not be collected and used in particular instances to avoid reporting deviations.

### **Periodic Monitoring Summary**

UNIT/GROUP/PROCESS INFORMATION					
ID No.: 14-1-D210B	Applicable Form: OP-UA03				
APPLICABLE REGULATORY REQUIREMENT					
Name: 30 TAC Chapter 115, Storage of VOCs	SOP Index No.: R5112-B				
Pollutant: VOC	Main Standard: § 115.112(a)(1)				
MONITORING INFORMATION					
Indicator: VOC Concentration					
Minimum Frequency: monthly					
Averaging Period: n/a*					
Deviation Limit: VOC concentration greater than 500	ppmv				

Periodic Monitoring Text:

Measure and record the VOC concentration using a portable analyzer to monitor VOC concentration at the outlet of the control device. The monitoring device shall meet the requirements of part 60, Appendix A, Method 21, Sections 2, 3, 4.1, 4.2, and 4.4. However, the words "leak definition" in method 21 shall be the outlet concentration. The monitoring instrumentation shall be maintained and operated in accordance with manufacturer's specifications or other written procedures. Any monitoring data above the deviation limit shall be considered and reported as a deviation.

<sup>\*</sup>The permit holder may elect to collect monitoring data on a more frequent basis and calculate the average as specified by the minimum frequency, for purposes of determining whether a deviation has occurred. However, the additional data points must be collected on a regular basis and shall not be collected and used in particular instances to avoid reporting deviations.

### **Periodic Monitoring Summary**

UNIT/GROUP/PROCESS INFORMATION					
ID No.: 7-1-D745A1	Applicable Form: OP-UA03				
APPLICABLE REGULATORY REQUIREMENT					
Name: 30 TAC Chapter 115, Storage of VOCs	SOP Index No.: R5112-B				
Pollutant: VOC	Main Standard: § 115.112(a)(1)				
MONITORING INFORMATION					
Indicator: VOC Concentration	Indicator: VOC Concentration				
Minimum Frequency: monthly					
Averaging Period: n/a*					
Deviation Limit: VOC concentration greater than 500	) ppmv				

Periodic Monitoring Text:

Measure and record the VOC concentration using a portable analyzer to monitor VOC concentration at the outlet of the control device. The monitoring device shall meet the requirements of part 60, Appendix A, Method 21, Sections 2, 3, 4.1, 4.2, and 4.4. However, the words "leak definition" in method 21 shall be the outlet concentration. The monitoring instrumentation shall be maintained and operated in accordance with manufacturer's specifications or other written procedures. Any monitoring data above the deviation limit shall be considered and reported as a deviation.

<sup>\*</sup>The permit holder may elect to collect monitoring data on a more frequent basis and calculate the average as specified by the minimum frequency, for purposes of determining whether a deviation has occurred. However, the additional data points must be collected on a regular basis and shall not be collected and used in particular instances to avoid reporting deviations.

# **PERMIT SHIELD**

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# **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/P	rocess	Regulation	Basis of Determination
ID No.	Unit Type	Group/Inclusive Units		
14-1-K520	Distillation Operations	N/A	40 CFR Part 60,	Kettles designed and operated as batch
			Subpart NNN	operation.
14-1-K530	Distillation Operations	N/A	40 CFR Part 60,	Kettles designed and operated as batch
			Subpart NNN	operation.
14-1-T1140	Distillation Operations	N/A	40 CFR Part 60,	Distillation tower venting back into the
			Subpart NNN	process.
7-1-K500A	Distillation Operations	N/A	40 CFR Part 60,	Kettles designed and operated as batch
			Subpart NNN	operation.
7-1-K500D	Distillation Operations	N/A	40 CFR Part 60,	kettles designed and operated as batch
			Subpart NNN	operation.
7-1-T700A	Distillation Operations	N/A	40 CFR Part 60,	Distillation tower venting back into the
			Subpart NNN	process.
GRP-DRYER	Dryer/Kiln/Oven	14-1-DR601, 7-1-DR400	40 CFR Part 60,	Ammonium sulfate dryer not modified after
	Attributes		Subpart PP	February 4, 1980.
12-1-FL170B	Flares	N/A	40 CFR Part 60,	Flare is not used to comply with NSPS or
			Subpart A	NESHAP regulations.
12-1-FL171	Flares	N/A	40 CFR Part 60,	Flare is not used to comply with NSPS or
			Subpart A	NESHAP regulations.
12-1-FL241	Flares	N/A	30 TAC Chapter 111,	Flare used only for upset/emergency
			Visible Emissions	conditions.
12-1-FL241	Flares	N/A	40 CFR Part 60,	Flare is not used to comply with NSPS or
			Subpart A	NESHAP regulations.
12-1-FL270	Flares	N/A	40 CFR Part 60,	Flare is not used to comply with NSPS or
			Subpart A	NESHAP regulations.
11-1-FNH3	Fugitive Emission	N/A	30 TAC Chapter 115,	Fugitive components in ammonia service
	Units		Pet. Refinery &	contain less than 10% VOC
<u> </u>				

			Petrochemicals	
11-1-FNH3	Fugitive Emission	N/A	40 CFR Part 60,	Ammonia fugitive source exempt from
	Units		Subpart VV	NSPS fugitive monitoring
11-1-CT1100	Cooling Tower	N/A	40 CFR Part 63,	Cooling tower has not used chromium
			Subpart Q	based water treatment since 1984
11-1-D252A	Storage Tanks/	N/A	40 CFR Part 60,	NSPS Kb only applies to vessels used to
	Vessels		Subpart Kb	store VOC but does not apply to process
				tanks.
11-1-D252B	Storage Tanks/	N/A	40 CFR Part 60,	NSPS Kb only applies to vessels used to
	Vessels		Subpart Kb	store VOC but does not apply to process
				tanks.
11-1-D252C	Storage Tanks/	N/A	40 CFR Part 60,	NSPS Kb only applies to vessels used to
	Vessels		Subpart Kb	store VOC but does not apply to process
				tanks.
11-1-R10	Storage Tanks/	N/A	40 CFR Part 60,	NSPS Kb only applies to vessels used to
	Vessels		Subpart Kb	store VOC but does not apply to process
				tanks.
11-1-R170	Incinerator	N/A	30 TAC Chapter 111,	Source does not incinerate hazardous or
			Incineration	solid waste. Gaseous process vents only.
11-1-R180	Incinerator	N/A	30 TAC Chapter 111,	Source does not incinerate hazardous or
1111			Incineration	solid waste. Gaseous process vents only.
11-1-R350A	Incinerator	N/A	30 TAC Chapter 111,	Source does not incinerate hazardous or
			Incineration	solid waste. Gaseous process vents only.
12-1-CT20	Cooling Tower	N/A	40 CFR Part 63,	Cooling tower has not used chromium
10.1 OT00	0 !!	N1/A	Subpart Q	based water treatment since 1984
12-1-CT30	Cooling Tower	N/A	40 CFR Part 63,	Cooling tower has not uded chromium
4 4 4 77	E . i . i	N1/A	Subpart Q	based water treatment since 1984
14-1-77	Emission Points/	N/A	30 TAC Chapter 115,	Vent does not emit VOC
	Stationary Vents/		Vent Gas Controls	
14-1-ASLD	Process Vents	N/A	30 TAC Chapter 115,	Source does not load VOCS
174-T-WOLD	Loading/Unloading Operations	IN/A	Loading and Unloading of VOC	
14-1-CT30	Cooling Tower	N/A	40 CFR Part 63.	Cooling tower has not used chromium
14-1-0130	Cooling rower	IWA	Subpart Q	based water treatment since 1984
			[ουυματί Ο	paseu water treatment since 1964

14-1-D1400	Storage Tanks/ Vessels	N/A	40 CFR Part 60, Subpart Kb	NSPS Kb only applies to vessels used to store VOC but does not apply to process tanks.
14-1-HW310	Wastewater Units	N/A	30 TAC Chapter 115, Industrial Wastewater	The wastewater stream is less than 1000 ppmw.
14-1-HW410	Wastewater Units	N/A	30 TAC Chapter 115, Industrial Wastewater	The wastewater stream is less than 1000 ppmw.
14-1-HW430	Wastewater Units	N/A	30 TAC Chapter 115, Industrial Wastewater	The wastewater stream is less than 1000 ppmw.
14-1-HW600	Wastewater Units	N/A	30 TAC Chapter 115, Industrial Wastewater	The wastewater stream is less than 1000 ppmw.
14-1-HW720	Wastewater Units	N/A	30 TAC Chapter 115, Industrial Wastewater	The wastewater stream is less than 1000 ppmw.
7-1-30	Emission Points/ Stationary Vents/ Process Vents	N/A	30 TAC Chapter 115, Vent Gas Controls	Vent does not emit VOC
7-1-ASLD	Loading/Unloading Operations	N/A	30 TAC Chapter 115, Loading and Unloading of VOC	Source does not load VOCS
7-1-CT700	Cooling Tower	N/A	40 CFR Part 63, Subpart Q	Cooling tower has not used chromium based water treatment since 1984
7-1-D755A	Wastewater Units	N/A	30 TAC Chapter 115, Industrial Wastewater	The wastewater stream consists of maintenance wastewater only.
7-1-HW400	Wastewater Units	N/A	30 TAC Chapter 115, Industrial Wastewater	The wastewater stream is less than 1000 ppmw
7-1-HW500	Wastewater Units	N/A	30 TAC Chapter 115, Industrial Wastewater	The wastewater stream is less than 1000 ppmw
7-1-HW504	Wastewater Units	N/A	30 TAC Chapter 115, Industrial Wastewater	Need to verify wastewater stream is less than 1000 ppmw.
7-1-HW505	Wastewater Units	N/A	30 TAC Chapter 115, Industrial Wastewater	The wastewater stream is less than 1000 ppmw.
7-1-HW705	Wastewater Units	N/A	30 TAC Chapter 115, Industrial Wastewater	The wastewater stream is less than 1000 ppmw.
7-1-HW803	Wastewater Units	N/A	30 TAC Chapter 115, Industrial Wastewater	The wastewater stream is less than 1000 ppmw.

7-2-R20	Storage Tanks/ Vessels	N/A	40 CFR Part 60, Subpart Kb	NSPS Kb only applies to vessels used to store VOC but does not apply to process tanks.
9-1-D193	Storage Tanks/ Vessels	N/A	30 TAC Chapter 115, Storage of VOCs	This tank is not subject to the storage requirements of 30 TAC Chapter 115 because the tank remains empty unless it is used during an emergency condition where the plant must be evacuated to avoid unsafe conditions.
GRPTANK1	Storage Tanks/ Vessels	7-1-D517, 7-1-D570, 7-2-D113, 7-2-D2A, 7-2-D56, 7-2-D841	30 TAC Chapter 115, Storage of VOCs	Tank is exempt from rule based on vapor pressure <1.5 psia and fixed roof.
GRPTANK1	Storage Tanks/ Vessels	7-1-D517, 7-1-D570, 7-2-D113, 7-2-D2A, 7-2-D56, 7-2-D841	40 CFR Part 60, Subpart Kb	Capacity of vessel is less than 10,600 gallons.
GRPTANK3	Storage Tanks/ Vessels	11-1-D136, 11-1-D1521, 11-1-D167, 11-1-D180, 11-1-D181A, 11-1-D181B, 11-1-D182, 11-1-D185, 11-1-D295, 11-1-D600, 11-1-D9, 11-1-HW240, 14-1-D100, 14-1-D110, 14-1-D1105, 14-1-D1202, 14-1-D132, 14-1-D200, 14-1-D400, 14-1-D500, 14-1-D523, 14-1-D606, 14-1-D910, 14-1-D920, 14-1-D950, 7-1-D300, 7-1-D506, 7-1-D518, 7-1-D523A, 7-1-D525A2, 7-1-D529, 7-1-D534, 7-1-D610, 7-1-D60, 7-1-D650, 7-1-D700C, 7-1-D701A, 7-1-D703A, 7-1-D7024,	40 CFR Part 60, Subpart Kb	NSPS Kb only applies to vessels used to store VOC but does not apply to process tanks.

		7-1-D725A2, 7-1-D734, 7-1-D744, 7-1-D906, 7-2-D10, 7-2-D100A, 7-2-D106A, 7-2-D106E, 7-2-D107A, 7-2-D108, 7-2-D109, 7-2-D110, 7-2-D28, 7-2-D304B, 7-2-D52, 7-2-D67, 7-2-D7A, 7-2-D8		
GRPTANK4	Storage Tanks/ Vessels	11-1-D110A, 11-1-D120A, 11-1-D130A, 11-1-D131A, 11-1-D140, 11-1-D141, 11-1-D150A, 11-1-D1520, 11-1-D153A, 14-1-D204, 14-1-D260, 14-1-D602B, 14-1-D630B, 14-1-D711, 7-1-D400, 7-1-D508, 7-1-D708-1, 7-2-D189	40 CFR Part 60, Subpart Kb	NSPS Kb only applies to vessels used to store VOC but does not apply to process tanks.
GRPTANK5	Storage Tanks/ Vessels	14-1-CR600A, 14-1-CR600B, 14-1-D205, 14-1-D601	40 CFR Part 60, Subpart Kb	NSPS Kb only applies to vessels used to store VOC but does not apply to process tanks.
GRPTANK6	Storage Tanks/ Vessels	14-1-CR710, 14-1-D121, 14-1-D301B, 14-1-D343B, 14-1-D700, 14-1-D710, 7-1-CR400A, 7-1-D509, 7-1-D511, 7-1-D540, 7-1-D600, 7-1-D709, 7-1-D711	40 CFR Part 60, Subpart Kb	NSPS Kb only applies to vessels used to store VOC but does not apply to process tanks.
11-1-BR170	Process Heaters/ Furnaces	N/A	30 TAC Chapter 112, Sulfur Compounds	Burner is not liquid fuel-fired.
11-1-BR340	Process Heaters/ Furnaces	N/A	30 TAC Chapter 112, Sulfur Compounds	Gas fired combustion only
GRP-CMBST	Process Heaters/ Furnaces	11-1-BR300, 11-1-BR310, 11-1-BR320, 11-1-BR330, 7-2-BR360, 7-2-BR370	30 TAC Chapter 112, Sulfur Compounds	Gas fired combustion only.
11-1-D289	Storage Tanks/ Vessels	N/A	30 TAC Chapter 115, Storage of VOCs	Tank is exempt from rule based on vapor pressure < 1.5 psia and fixed roof.

14-1-D210B	Storage Tanks/ Vessels	N/A	40 CFR Part 60, Subpart Kb	Capacity of vessel is less than 10,600 gallons.
14-1-D430	Storage Tanks/ Vessels	N/A	30 TAC Chapter 115, Storage of VOCs	Tank is exempt from rule based on vapor pressure < 1.5 psia and fixed roof.
14-1-D602A	Storage Tanks/ Vessels	N/A	30 TAC Chapter 115, Storage of VOCs	Tank is exempt from rule based on vapor pressure < 1.5 psia and fixed roof.
GRPTANK1	Storage Tanks/ Vessels	11-1-D114, 11-1-D116, 11-1-D28, 11-1-D400	30 TAC Chapter 115, Storage of VOCs	Tank is exempt from rule based on vapor pressure <1.5 psia and fixed roof.
GRPTANK1	Storage Tanks/ Vessels	11-1-D114, 11-1-D116, 11-1-D28, 11-1-D400	40 CFR Part 60, Subpart Kb	Capacity of vessel is less than 10,600 gallons.
GRPTANK2	Storage Tanks/ Vessels	11-1-D157A, 11-1-D157B, 11-1-D157C, 11-1-D242A, 11-1-D242B, 11-1-D252D, 11-1-D405, 14-1-D301, 7-1-CR500A, 7-1-D504A, 7-1-D504B, 7-1-D513A1, 7-1-D526P, 7-1-D526Q, 7-1-D745C, 7-1-D745D, 7-2-D21A, 7-2-D21B, 7-2-D30B, 7-2-D33A, 7-2-D33B, 7-2-D34A, 7-2-D34B, 7-2-D61, 7-2-D62	30 TAC Chapter 115, Storage of VOCs	Tank is exempt from rule based on vapor pressure<1.5 psia and fixed roof.
GRPTANK7	Storage Tanks/ Vessels	11-1-D156A, 11-1-D243, 12-1-D244A, 12-1-D244B, 14-1-D300A, 14-1-D300B, 14-1-D300C, 14-1-D344A, 14-1-D344B, 14-1-D344C, 14-1-D344D, 14-1-D701A, 14-1-D701B, 7-1-D526L, 7-1-D526M, 7-1-D713B, 7-1-D713C, 7-1-D745B-1, 7-2-D17, 7-2-D30C, 7-2-D713A, 9-1-D900	30 TAC Chapter 115, Storage of VOCs	Tank is exempt from rule based on vapor pressure <1.5 psia and fixed roof.
7-1-D755D	Wastewater Units	N/A	30 TAC Chapter 115, Industrial Wastewater	The wastewater stream is less than 1000 ppmw.
7-1-D909	Wastewater Units	N/A	30 TAC Chapter 115, Industrial Wastewater	The wastewater stream is less than 1000 ppmw.

# **NEW SOURCE REVIEW AUTHORIZATION REFERENCES**

New Source Review Authorization References	73	
New Source Review Authorization References by Emission Unit	74	

### **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.

PSD Permits	NA Permits			
PSD Permit No.:	NA Permit No.:			
PSD Permit No.:	NA Permit No.:			
PSD Permit No.:	NA Permit No.:			
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.: 1445A	Authorization No.: 1733A			
Authorization No.: 1773A	Authorization No.: 31333			
Authorization No.: 43336	Authorization No.: 48435			
Authorization No.:	Authorization No.:			
Permits By Rule (30 TAC Chapter 106) for the Application Area				
Number: 106.262	Version No./Date: 12/24/1998			
Number: 106.472	Version No./Date: 09/04/2000			
Number: 106.478	Version No./Date: 03/14/1997			
Number: 106.478	Version No./Date: 09/04/2000			
Number: 106.492	Version No./Date: 03/14/1997			
Number:	Version No./Date:			
Number:	Version No./Date:			
Municipal Solid Waste and Industrial Hazardous Waste Permits With an Air Addendum				
Permit No.:	Permit No.:			
Permit No.:	Permit No.:			
Permit No.:	Permit No.:			

# **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
011-1-D402A	Waste Caustic Storage Tank	1733A
11-1-100	Flare, R180 Emission Point	1733A
11-1-101	Incinerator, R350A Emission Point	1733A
11-1-2	Incinerator, R170 Emission Point	1733A
11-1-36	Emission Point - D252A	1733A
11-1-37	Emission Point - D252B	1733A
11-1-38	Emission Point - D252C	1733A
11-1-BR170	Flue Gas Heater for R-170	1733A
11-1-BR300	R-300 Methane Burner	1733A
11-1-BR310	B-310 Methane Burner	1733A
11-1-BR320	R-320 Methane Burner	1733A
11-1-BR330	R-330 Methane Burner	1733A
11-1-BR340	R-340 Methane Burner	1733A
11-1-CT1100	Cyclohexanone 2 Cooling Tower	1733A
11-1-D110A	Reactor Vent Gas Knock-out Drum	1733A
11-1-D114	Concentrated Cobalt Octuate Tank	1733A
11-1-D116	Dilute Cobalt Octuate Tank	1733A
11-1-D120A	Second Reactor Product Separator	1733A
11-1-D130A	Third Reactor Product Separator	1733A
11-1-D131A	Oxidation Reactor Separator Drum	1733A
11-1-D136	Vent Condensible Drum	1733A
11-1-D140	Reactor Product Wash Separator	1733A
11-1-D141	Reactor Product Wash Separator	1733A
11-1-D150A	De-watering Drum for Cyclohexane Recovery	1733A
11-1-D1520	T154/1520 Cross-exchange Receiver	1733A
11-1-D1521	T-1520 O.H. Condenser Receiver	1733A
11-1-D153A	Oxidation Feed Drum	1773A

11-1-D156A	Crude Anone Storage Tank	1733A
11-1-D157A	Sales Heavies Storage	1733A
11-1-D157B	Off-spec Anolon Storage	1733A
11-1-D157C	D'Anone Storage Tank	1733A
11-1-D167	Washoil and Bring Back Drum	1733A
11-1-D180	Acid Water Flash Drum	1733A
11-1-D181A	Caustic Water Flash Drum	1733A
11-1-D181B	Caustic Water Flash Drum	1733A
11-1-D182	Acid Water Stripper O. H. Drum	1733A
11-1-D185	Caustic and Acid Water O. H. Receiver	1733A
11-1-D242A	Cyclohexanone Check Tank	1733A
11-1-D242B	Cyclohexanone Check Tank	1733A
11-1-D243	Cyclohexanone Storage Tank	1733A
11-1-D252A	Dehydrogenation Feed Storage Tank	1733A
11-1-D252B	Dehydrogenation Feed Storage Tank	1733A
11-1-D252C	Dehydrogenation Feed Storage Tank	1733A
11-1-D252D	Off-spec Anolon Storage	1733A
11-1-D289	Heavies Cracking Feed Tank	1733A
11-1-D28	Co-products Storage Drum	1733A
11-1-D295	Extraction Drum	1733A
11-1-D400	Organic Waste and Lights Storage Tank	1733A
11-1-D403A	P. H. Contol Drum	1733A
11-1-D405	Lights (EP-316) Storage	1733A
11-1-D600	EV-600 Lidquid-vapor Separator (Old D103)	1733A
11-1-D9	KO Drum for High Pressure Vent Gas	1733A
11-1-FDIST	Distillation Fugitives	1733A
11-1-FNH3	Ammonia Fugitives	1733A
11-1-FOXID	Oxidation Area Fugitives	1733A
11-1-HW240	Ejector Water Seal Leg Drum	1733A
11-1-R10	Cyclohexane Surge Drum	1733A
11-1-R110A	Cyclohexane Reactor	1733A
11-1-R120A	Cyclohexane Reactor	1733A
11-1-R130A	Cyclohexane Reactor	1733A
11-1-R170	Catalytic reactore	1733A

Francisco Chalanad Flavo	1733A
	1733A
	1733A
	1733A
	1733A
•	1733A
	1733A
Vacuum Cyclohexan Recovery Tower	1733A
Cyclohexan Stripping Tower	1733A
Second Cyclohexane Recovery Tower	1733A
Acid Water Stripper (Old T104)	1733A
Cyclohexanone Finishing Tower	1733A
Cyclohexanone Finishing	1733A
2-Methyl Cyclohexanone Purge Tower	1733A
Foreruns Tower	1733A
First Cyclohexanol Tower	1733A
Second Cyclohexanol Tower	1733A
Heavies Cracking Stripping Tower	1733A
Truck Loading	1733A
Burner Cooling Tower	1733A
	1733A
	1733A
	1733A
Burner Gas Flare 1	1733A
Burner Gas Flare 2	1733A
Ammonia Flare	1733A
	Second Cyclohexane Recovery Tower Acid Water Stripper (Old T104) Cyclohexanone Finishing Tower Cyclohexanone Finishing 2-Methyl Cyclohexanone Purge Tower Foreruns Tower First Cyclohexanol Tower Second Cyclohexanol Tower Heavies Cracking Stripping Tower Truck Loading Burner Cooling Tower Kettle Cooling Tower North Finished Anone Tank (Old XA-D272B) South Finished Anone Tank (Old XA-D272A) Burner Gas Flare 1 Burner Gas Flare 2

12-2-1422	HAZ Waste Drum	1733A	
12-2-1423	HAZ Waste Drum	1733A	
12-2-1424	F1521 Filter Vat Drum	1733A	
14-1-11	Emission Point - D600	1733A	
14-1-13	Emission Point - D602B	1733A	
14-1-16	Emission Point - D711	1733A	
14-1-25	Emission Point - D121	1733A	
14-1-26	Emission Point - D132	1733A	
14-1-27	Emission Point - D205	1733A	
14-1-35	Emission Point - D343B	1733A	
14-1-36	Emission Point - D400	1733A	
14-1-38	Emission Point - D500	1733A	
14-1-39	Emission Point - D523	1733A	
14-1-40	Emission Point - D601	1733A	
14-1-41	Emission Point - D606	1733A	
14-1-44	Emission Point - D630B	1733A	
14-1-45	Emission Point - D700	1733A	
14-1-47	Emission Point - D710	1733A	
14-1-54	Emission Point - D140	1733A	
14-1-56	Emission Point - T330	1733A	
14-1-57	Emission Point - T340A	1733A	
14-1-58	Emission Point - T510	1733A	
14-1-60	Emission Point - T430	1733A	
14-1-61	Emission Point - K520	1733A	
14-1-64	Emission Point - EV720	1733A	
14-1-69	Emission Point - S601	1733A	
14-1-700CR/EPN	Emission Point - CR 700/710/720	1733A	
14-1-70	Emission Point - K530	1733A	
14-1-75	Emission Point - S260	1733A	
14-1-76	Emission Point - S625	1733A	
14-1-77	Emission Point - T203	1733A	
14-1-78	Emission Point - T1160	1733A	
14-1-86	Emission Point - TRAIL	1733A	
14-1-8	Emission Point - D204	1733A	

14-1-ASLD	Ammonia Sulfate Loading	1733A	
14-1-CR600A	R.A. Salt Crystallizer	1733A	
14-1-CR600B	R.A. Salt Crystallizer	1733A	
14-1-CR710	Oxime Salt Crystallizer	1733A	
14-1-CT30	Cooling Tower 30	1733A	
14-1-D100	Oxime Loop Separator	1733A	
14-1-D1105	Oxime Drum	1733A	
14-1-D110	Anone Loop Separator	1733A	
14-1-D1202	Rearrangement Circulation Drum	1733A	
14-1-D121	Rearrangement Feed Tank	1733A	
14-1-D132	T-1130 O. H. Storage Tank	1733A	
14-1-D1400	Extraction Tower Dump and Wash Water	1733A	
14-1-D200	E-200 and 201 Surge Drum	1733A	
14-1-D204	Lactam Separatino Drum	1733A	
14-1-D205	Crude Lactam Tank	1733A	
14-1-D210A	Benzene Storage Tank	1733A	
14-1-D210B	Benzene Storage Tank	1733A	
14-1-D260	S260 Scrubber Recirculation Drum	1733A	
14-1-D300A	Ext. Lactam Storage Drum	1733A	
14-1-D300B	Ext. Lactam Storage Drum	1733A	
14-1-D300C	Ext. Lactam Storage Drum	1733A	
14-1-D301B	Dist Jet H₂0 Drum	1733A	
14-1-D301	Recycle Drum	1733A	
14-1-D343B	Product Check Tank	1733A	
14-1-D344A	Product Storage Tank	1733A	
14-1-D344B	Product Storage Tank	1733A	
14-1-D344C	Product Storage Tank	1733A	
14-1-D344D	Product Storage Tank	1733A	
14-1-D400	Foreruns Receiver Drum	1733A	
14-1-D430	Lights Throwaway Drum	1733A	
14-1-D500	T-510 Bottoms Tank	1733A	
14-1-D523	Kettle O .H. Surge Drum	1733A	
14-1-D601	Crystallizer Overflow Tank	1733A	
14-1-D602A	Anti-caking Storage Tank	1733A	

14-1-D602B	Slurry Drum	1733A
14-1-D606	Mother Liquer Drum	1733A
14-1-D630B	CR600 O. H. Collection Drum	1733A
14-1-D700	Conc. As Storage	1733A
14-1-D701A	Oxime Salt Storage Drum	1733A
14-1-D701B	Oxime Salt Storage Drum	1733A
14-1-D710	Mother Liquer Storage Tank	1733A
14-1-D711	Slurry Thickner	1733A
14-1-D806A	Deepwell Feed DRum	1733A
14-1-D910	First Rearrangement Circulation Drum	106.472 / 09/04/2000
14-1-D920	Second Rearrangement Surge Drum	106.472 / 09/04/2000
14-1-D950	Rearrangement Vent knockout Drum	106.472 / 09/04/2000
14-1-DR601	Salt Combination Dryer/Cooler	1733A
14-1-FUGS	Caprolactam 2 Fugitiver	1733A
14-1-HW310	Hot Well	1733A
14-1-HW410	Hot Well	1733A
14-1-HW430	Hot Well	1733A
14-1-HW600	Hot Well	1733A
14-1-HW720	Hot Well	1733A
14-1-K520	K-520 Agitator Kettle	1733A
14-1-K530	Heavies Kettle	1733A
14-1-KLOAD	Kettle Drum Loading	1733A
14-1-LOAD2	Benzene Loading	1733A
14-1-LOAD3	Molten Caprolactam Loading	1733A
14-1-RLOOP	Rearrangement Loop Reactors	1733A
14-1-T1140	Anone Stripping Tower (Originally T140)	1733A
14-1-T215	Benzene Extraction Bottoms Stripper	1733A
14-1-T220	Benzene Distillation Tower	1733A
14-1-T230A	Benzene Stripper Tower	1733A
14-1-T310	Drying Tower	1733A
14-1-T320	Pre-Distillation Tower	1733A
14-1-T330	Forerun Tower	1733A
14-1-T340A	Finishing Tower	1733A
14-1-T430	Lights Tower	1733A

14-1-T510	<b>Bottoms Tower</b>	1733A	
7-1-11	Wash Water Tank D504A EPN	1733A	
7-1-12	Wash Water Tank D504A EPN	1733A	
7-1-15	Neutralization Drum D508 EPN	1733A	
7-1-16	Neutralization Drum D509 EPN	1733A	
7-1-17	Neutralization Crude Drum D509 EPN	1733A	
7-1-1	Neutralization Standpipe 500 SYS.	1733A	
7-1-21	Overhead Drum D523A EPN	1733A	
7-1-23	Check Tank D525A2 EPN	1733A	
7-1-24	Check Tank D525B EPN	1733A	
7-1-26	Kettles O. H. Tank D529 EPN	1733A	
7-1-27	Bottoms Drum D534 EPN	1733A	
7-1-28	Check Tank D540 EPN	1733A	
7-1-29	Process Drum D701 EPN	1733A	
7-1-2	Neutralization Standpipe 700 SYS.	1733A	
7-1-30	Oleum Tand Vent Scrubber	1733A	
7-1-31	Process Drum D705 EPN	1733A	
7-1-32	Neutralization Drum D708 EPN	1733A	
7-1-33	Neutralization Drum D709 EPN	1733A	
7-1-34	Neutralization Drum D711 EPN	1733A	
7-1-36	Overhead Drum D723 EPN	1733A	
7-1-37	Bottoms Drum D724 EPN	1733A	
7-1-38	Check Tank D725A2 EPN	1733A	
7-1-39	Check Tank D725B EPN	1733A	
7-1-40	Overhead Drum D734 EPN	1733A	
7-1-46	A. S. Dryer Scrubber EPN	1733A	
7-1-48	Tower 909 EPN	1733A	
7-1-58	Kettle 500A EPN	1733A	
7-1-59	Kettle 500D EPN	1733A	
7-1-5	CR500B EPN	1733A	
7-1-60	Tower 504 EPN	1733A	
7-1-61	Tower 506 EPN	1733A	
7-1-62	Tower 706 EPN	1733A	
7-1-63	Tower 707 EPN	1733A	
7-1-64	Tower 820 EPN	1733A	
7-1-65	Tower 907 EPN	1733A	

7-1-6	CR500C EPN	1733A
7-1-73	S500 Scrubber EPN	1733A
7-1-75	Kettle Dump Activities EPN	1733A
7-1-80	Oxime Surge Drum D600 EPN	106.472 / 09/04/2000
7-1-8	Benzene Scrubber EPN	1733A
7-1-9	Slurry Drum D400 EPN	1733A
7-1-ASLD	Ammonium Sulfate Loading	1733A
7-1-BENZLD	Benzene Loading	1733A
7-1-CR400A	Salt Crystallizer	1733A
7-1-CR500A	Ammonium Sulfate Crystallizer	1733A
7-1-CT700	Cooling Tower	1733A
7-1-D300	Recycle Drum	1733A
7-1-D400	Slurry Thickner Drum	1733A
7-1-D504A	Off-spec Extract Storage	1733A
7-1-D504B	Off-spec Extract Storage	1733A
7-1-D506	500 Rearrangement Circulation Drum	1733A
7-1-D508	Crude Separator Drum	1733A
7-1-D509	Mother Liquor Drums	1733A
7-1-D511	Crude Storage Drum	1733A
7-1-D513A1	Caprolactam Extract Storage Drum	1733A
7-1-D517	Kettle Dump Drum	1733A
7-1-D518	T-505 Feed Drum	1733A
7-1-D523A	T-909 Feed Drum	1733A
7-1-D525A2	Finished Check Tank	106.478 / 09/04/2000
7-1-D526L	Lactam Finished Product Storage Drum	1733A
7-1-D526M	Lactam Finished Product Storage Drum	1733A
7-1-D526P	Lactam Finished Product Storage Drum	1733A
7-1-D526Q	Lactam Finished Product Storage Drum	1733A
7-1-D529	Kettle Overhead Drum	1733A
7-1-D534	Kettle Feed Drum	1733A
7-1-D540	Jet Water Storage	1733A
7-1-D570	A. S. Anti-caking Drum	1733A
7-1-D600	Oxime Surge Drum	106.472 / 09/04/2000
7-1-D610	First Rearrangement Circulation Drum	106.472 / 09/04/2000

7-1-D620	Second Rearrangement Surge Drum	106.472 / 09/04/2000
7-1-D650	Rearrangement Vent Knockout Drum	106.472 / 09/04/2000
7-1-D700C	Separator Drum for 700 LPI	1733A
7-1-D701A	Cyclohexanone Feed Drum to Oximation	1733A
7-1-D702	T-800 O. H. Drum - Feed to T-810 Oxime Redrying Surge	1733A
7-1-D705	Oxime Feed Drum for 500/700/900 RR	1733A
7-1-D706A	Rearrangement Cirulcation Drum	1733A
7-1-D708-1	Crude Separator Drum	1733A
7-1-D709	Mother Liquor Drum	1733A
7-1-D711	Crude Feed Drum to T-701	1733A
7-1-D713B	Extract Storage Drum	1733A
7-1-D713C	Extract Storage Drum	1733A
7-1-D723A	T909 Feed Drum	1733A
7-1-D724	T-707 Feed Drum	1733A
7-1-D725A2	Finished Check Tank	106.478 / 09/04/2000
7-1-D734	Heavies Tower Overhead Drum	1733A
7-1-D744	T-505 Overhead Receiver	1733A
7-1-D745A1	Benzene Feed Drum	1733A
7-1-D745B-1	Poly Wash Water Storage Drum	1733A
7-1-D745C	Excess Liquid Storage Drums	1733A
7-1-D745D	Excess Liquid Storage Drums	1733A
7-1-D755A	Carbon Sump	1733A
7-1-D755D	D&T Salt Dump	1733A
7-1-D906	900 Rearrangement Surge	1733A
7-1-D909	T-909 Jet Water & Light Impurities	1733A
7-1-DR400	A. S. Fluidized Bed Dryer	1733A
7-1-FUGS	Caprolactam 1 Fugitives	1733A
7-1-HW400	Hot Well	1733A
7-1-HW500	Crystallizer B/C Hot Well	1733A
7-1-HW504	Hot Well Dist.	1733A
7-1-HW505	Hot Well Dist.	1733A
7-1-HW705	Hot Well Dist.	1733A
7-1-HW803	Hot Well for Oxime Drying System	1733A
7-1-K500A	Distillation Kettle	1733A

7-1-K500D	Distillation Kettle	1733A
7-1-K500D 7-1-KLOAD	Kettle Drum Loading	1733A
7-1-RLDG	Rail Loading	1733A
7-1-RLOOP	Rearrangement Loop Reactors	1733A 1733A
7-1-T504	Drying Recycle Tower	1733A
7-1-T505	Benzene Distillation Tower	1733A
7-1-T506	Finishing Tower	1733A
7-1-T700A	Cyclohexanone Stripper	1733A
7-1-T702-2	Benzene Stripper Tower	1733A
7-1-T703	Extraction Tower Bottoms, Stripper	1733A
7-1-T704-1	Drying Tower	1733A
7-1-T705	Forerun Tower	1733A
7-1-T706	Finishing Tower	1733A
7-1-T707	Heavies Tower	1733A
7-1-T907	Heavies, Heavies Tower	1733A
7-1-T909	Forerun, Forerun Tower	1733A
7-1-TLDG	Truck Loading	1733A
7-2-13	Dehydro Product Drum D28 EPN	1733A
7-2-25	Dehydro Feed Drum, D189 EPN	1733A
7-2-285EPN	T285 Emission Point (No emission point in permit)	1733A
7-2-5	T205 Emission Point	1733A
7-2-BR360	R-360 Burner	1733A
7-2-BR370	R-370 Burner (Old BR3)	1733A
7-2-D100A	Vent Gas Separator	1733A
7-2-D106A	Vent Gas Separator Drum	1733A
7-2-D106E	Vent Gas Heat Recovery Condensate Drum	1733A
7-2-D107A	Acid Water Separator Drum	1733A
7-2-D108	Vent Gas Separator for 3 <sup>rd</sup> Reactor	1733A
7-2-D109	Caustic Water Separator Drum	1733A
7-2-D10	Caustic Water Separator Drum	1733A
7-2-D110	Dilute Caustic Water Separator Drum	1733A
7-2-D113	Wash Oil Storage Tank	1733A
7-2-D17	Anolon Storage Drum	1733A
7-2-D17 7-2-D189	Dehydro Feed Drum	1733A
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7-2-D21A	BCE Storage Drum	1733A	
7-2-D21B	BCE Storage Drum	1733A	
7-2-D28	Dehydro Product Drum	1733A	
7-2-D2A	Dilute Catalyst Drum	1733A	
7-2-D304B	Dilute Caustic Water Flash Drum	1733A	
7-2-D30B	Finished ANOL Drum	1733A	
7-2-D30C	Finished ANOL	1733A	
7-2-D33A	Anone Storage	1733A	
7-2-D33B	Anone Storage	1733A	
7-2-D34A	Anone Storage	1733A	
7-2-D34B	Anone Storage	1733A	
7-2-D52	Hexane Water Separator Drum	1733A	
7-2-D56	Concentrated Catalyst Storage Tank	1733A	
7-2-D61	Anone Storage	1733A	
7-2-D62	Anone Storage	1733A	
7-2-D67	Low Pressure Vent Gas KO Drum	1733A	
7-2-D713A	Caustic Water	1733A	
7-2-D7A	Third Reactor Acid Water Drum	1733A	
7-2-D841	Acid Water Storage Tank	1733A	
7-2-D8	C'ANE Feed Tank	1733A	
7-2-FUG	Cyclohexanone 1 Fugitives	1733A	
7-2-R110	First Oxidation Reactor	1733A	
7-2-R120	Second Oxidation Reactor	1733A	
7-2-R130	Third Oxidation Reactor	1733A	
7-2-R20	Cyclohexane Storage Tank	1733A	
7-2-R30	Reprocess Storage Tank	1733A	
7-2-R360	Dehydro Recator (Old R3)	1733A	
7-2-R370	Dehydro Reactor (Old R103)	1733A	
7-2-RLDG	Anone 1 Rail Loading	1733A	
7-2-T105A	First Effect Cyclohexane Recovery Tower	1733A	
7-2-T106A	Second Effect C'ANE Recovery Tower	1733A	
7-2-T11	Final Cyclohexane Recovery Tower	1733A	
7-2-T14	Third Effect C'ANE Recovery Tower	1733A	

7-2-T15A	Acid Water Tower	1733A
7-2-T200	Foreruns Tower (Old T11A)	1733A
7-2-T205	Cyclohexanol Tower (Old T12)	1733A
7-2-T280	Lights Purge Tower (Old T9)	1733A
7-2-T285	BCE Purge Tower (Old T10)	1733A
7-2-T9B	Nitrogen/Water Flash Tower	1733A
7-2-TLDG	Anone 1 Truck Loading	1733A
9-1-D193B	Process Clearing Drum	1733A
9-1-D193	<b>Emergency Containment Drum (Quench Drum)</b>	1733A
9-1-D60A	Cyclohexane and Anolon Storage Drums	1733A
9-1-D60B	Cyclohexane Storage Drum	1733A
9-1-D60C	Cyclohexane Storage Drum	1733A
9-1-D900	900 BLK. A/W Storage Drum	1733A

## **APPENDIX A**

Acronym List 95

## **ACRONYM LIST**

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

30 TAC Chapter 112	Title 30 Texas Administrative Code Chapter 112
40 CFR Part 60, Appendix A	Title 40 Code of Federal Regulations Part 60, Appendix A
ACFM	actual cubic feet per minute
AMOC	alternate means of control
ARP	Acid Rain Program
ASTM	American Society of Testing and Materials
B/PA	
	Beaumont/Port Arthur (nonattainment area)
CAM	Compliance Assurance Monitoring
CD	control device
COMS	continuous opacity monitoring system
CVS	closed-vent system
D/FW	Dallas/Fort Worth (nonattainment area)
DR	Designated Representative
EIP	El Paso (nonattainment area)
EP	emission point
EPA	U.S. Environmental Protection Agency
EU	emission unit
FCAA Amendments	Federal Clean Air Act Amendments
FOP	federal operating permit
GF	grandfathered
gr/100 scf	grains per 100 standard cubic feet
HAP	hazardous air pollutant
H/G	Houston/Galveston (nonattainment area)
H <sub>2</sub> S	hydrogen sulfide
ID No.	identification number
lb/hr	pound(s) per hour
MMBtu/hr	Million British thermal units per hour
MRRT	monitoring, recordkeeping, reporting, and testing
NA	nonattainment
N/A	
	not applicable
NADB	National Allowance Data Base
NO <sub>x</sub>	nitrogen oxides
NSPS	New Source Performance Standard (40 CFR Part 60)
NSR	New Source Review
ORIS	Office of Regulatory Information Systems
Pb_	lead
PBR	Permit By Rule
PM	particulate matter
ppmv	parts per million by volume
PSD	prevention of significant deterioration
RO	Responsible Official
SO <sub>2</sub>	sulfur dioxide
TCEQ	Texas Commission on Environmental Quality
TSP	total suspended particulaté

TVP U.S.C. VOC

true vapor pressure United States Code volatile organic compound