

# FEDERAL OPERATING PERMIT

A FEDERAL OPERATING PERMIT IS HEREBY ISSUED TO

Pinnacle Gas Treating LLC

AUTHORIZING THE OPERATION OF

Bethel Gas Treating Facility  
Crude Petroleum and Natural Gas

LOCATED AT

Anderson County, Texas

Latitude 31° 53' 27" Longitude 95° 56' 28"

Regulated Entity Number: RN100222223

This permit is issued in accordance with and subject to the Texas Clean Air Act (TCAA), Chapter 382 of the Texas Health and Safety Code and Title 30 Texas Administrative Code Chapter 122 (30 TAC Chapter 122), Federal Operating Permits. Under 30 TAC Chapter 122, this permit constitutes the permit holder's authority to operate the site and emission units listed in this permit. Operations of the site and emission units listed in this permit are subject to all additional rules or amended rules and orders of the Commission pursuant to the TCAA.

This permit does not relieve the permit holder from the responsibility of obtaining New Source Review authorization for new, modified, or existing facilities in accordance with 30 TAC Chapter 116, Control of Air Pollution by Permits for New Construction or Modification.

The site and emission units authorized by this permit shall be operated in accordance with 30 TAC Chapter 122, the general terms and conditions, special terms and conditions, and attachments contained herein.

This permit shall expire five years from the date of issuance. The renewal requirements specified in 30 TAC § 122.241 must be satisfied in order to renew the authorization to operate the site and emission units.

Permit No:   O960   Issuance Date: \_\_\_\_\_

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For the Commission

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## **General Terms and Conditions**

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

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

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

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

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

## **Special Terms and Conditions: Emission Limitations and Standards, Monitoring and Testing, and Recordkeeping and Reporting**

1. Permit holder shall comply with the following requirements:
  - A. Emission units (including groups and processes) in the Applicable Requirements Summary attachment shall meet the limitations, standards, equipment specifications, monitoring, recordkeeping, reporting, testing, and other requirements listed in the Applicable Requirements Summary attachment to assure compliance with the permit.
  - B. The textual description in the column titled "Textual Description" in the Applicable Requirements Summary attachment is not enforceable and is not deemed as a substitute for the actual regulatory language. The Textual Description is provided for information purposes only.

- C. A citation listed on the Applicable Requirements Summary attachment, which has a notation [G] listed before it, shall include the referenced section and subsection for all commission rules, or paragraphs for all federal and state regulations and all subordinate paragraphs, subparagraphs and clauses, subclauses, and items contained within the referenced citation as applicable requirements.
  - D. When a grouped citation, notated with a [G] in the Applicable Requirements Summary, contains multiple compliance options, the permit holder must keep records of when each compliance option was used.
2. The permit holder shall comply with the following sections of 30 TAC Chapter 101 (General Air Quality Rules):
- A. Title 30 TAC § 101.1 (relating to Definitions), insofar as the terms defined in this section are used to define the terms used in other applicable requirements
  - B. Title 30 TAC § 101.3 (relating to Circumvention)
  - C. Title 30 TAC § 101.8 (relating to Sampling), if such action has been requested by the TCEQ
  - D. Title 30 TAC § 101.9 (relating to Sampling Ports), if such action has been requested by the TCEQ
  - E. Title 30 TAC § 101.10 (relating to Emissions Inventory Requirements)
  - F. Title 30 TAC § 101.201 (relating to Emission Event Reporting and Recordkeeping Requirements)
  - G. Title 30 TAC § 101.211 (relating to Scheduled Maintenance, Start-up, and Shutdown Reporting and Recordkeeping Requirements)
  - H. Title 30 TAC § 101.221 (relating to Operational Requirements)
  - I. Title 30 TAC § 101.222 (relating to Demonstrations)
  - J. Title 30 TAC § 101.223 (relating to Actions to Reduce Excessive Emissions)
3. Permit holder shall comply with the following requirements of 30 TAC Chapter 111:
- A. Visible emissions from stationary vents with a flow rate of less than 100,000 actual cubic feet per minute and constructed after January 31, 1972 that are not listed in the Applicable Requirements Summary attachment for 30 TAC Chapter 111, Subchapter A, Division 1 , shall not

exceed 20% opacity averaged over a six-minute period. The permit holder shall comply with the following requirements for stationary vents at the site subject to this standard:

- (i) Title 30 TAC § 111.111(a)(1)(B) (relating to Requirements for Specified Sources)
- (ii) Title 30 TAC § 111.111(a)(1)(E)
- (iii) Title 30 TAC § 111.111(a)(1)(F)(i), (ii), (iii), or (iv)
- (iv) For emission units with vent emissions subject to 30 TAC § 111.111(a)(1)(B), complying with 30 TAC § 111.111(a)(1)(F)(ii), (iii), or (iv), and capable of producing visible emissions from, but not limited to, particulate matter, acid gases and NO<sub>x</sub>, the permit holder shall also comply with the following periodic monitoring requirements for the purpose of annual compliance certification under 30 TAC § 122.146. These periodic monitoring requirements do not apply to vents that are not capable of producing visible emissions such as vents that emit only colorless VOCs; vents from non-fuming liquids; vents that provide passive ventilation, such as plumbing vents; or vent emissions from any other source that does not obstruct the transmission of light. Vents, as specified in the “Applicable Requirements Summary” attachment, that are subject to the emission limitation of 30 TAC § 111.111(a)(1)(B) are not subject to the following periodic monitoring requirements:
  - (1) An observation of stationary vents from emission units in operation shall be conducted at least once during each calendar quarter unless the emission unit is not operating for the entire quarter.
  - (2) For stationary vents from a combustion source, if an alternative to the normally fired fuel is fired for a period greater than or equal to 24 consecutive hours, the permit holder shall conduct an observation of the stationary vent for each such period to determine if visible emissions are present. If such period is greater than 3 months, observations shall be conducted once during each quarter. Supplementing the normally fired fuel with natural gas or fuel gas to increase the net heating value to the minimum required value does not constitute creation of an alternative fuel.
  - (3) Records of all observations shall be maintained.
  - (4) Visible emissions observations of emission units operated during daylight hours shall be conducted no earlier than one

hour after sunrise and no later than one hour before sunset. Visible emissions observations of emission units operated only at night must be made with additional lighting and the temporary installation of contrasting backgrounds. Visible emissions observations shall be made during times when the activities described in 30 TAC § 111.111(a)(1)(E) are not taking place. Visible emissions shall be determined with each stationary vent in clear view of the observer. The observer shall be at least 15 feet, but not more than 0.25 mile, away from each stationary vent during the observation. For outdoor locations, the observer shall select a position where the sun is not directly in the observer's eyes. When condensed water vapor is present within the plume, as it emerges from the emissions outlet, observations must be made beyond the point in the plume at which condensed water vapor is no longer visible. When water vapor within the plume condenses and becomes visible at a distance from the emissions outlet, the observation shall be evaluated at the outlet prior to condensation of water vapor. A certified opacity reader is not required for visible emissions observations.

(5) Compliance Certification:

- (a) If visible emissions are not present during the observation, the RO may certify that the source is in compliance with the applicable opacity requirement in 30 TAC § 111.111(a)(1) and (a)(1)(B).
- (b) However, if visible emissions are present during the observation, the permit holder shall either list this occurrence as a deviation on the next deviation report as required under 30 TAC § 122.145(2) or conduct the appropriate opacity test specified in 30 TAC § 111.111(a)(1)(F) as soon as practicable, but no later than 24 hours after observing visible emissions to determine if the source is in compliance with the opacity requirements. If an opacity test is performed and the source is determined to be in compliance, the RO may certify that the source is in compliance with the applicable opacity requirement. However, if an opacity test is performed and the source is determined to be out of compliance, the permit holder shall list this occurrence as a deviation on the next deviation report as required under 30 TAC § 122.145(2). The opacity test must be performed by a certified opacity reader.

- (c) Some vents may be subject to multiple visible emission or monitoring requirements. All credible data must be considered when certifying compliance with this requirement even if the observation or monitoring was performed to demonstrate compliance with a different requirement.
- B. For visible emissions from a building, enclosed facility, or other structure; the permit holder shall comply with the following requirements:
  - (i) Title 30 TAC § 111.111(a)(7)(A) (relating to Requirements for Specified Sources)
  - (ii) Title 30 TAC § 111.111(a)(7)(B)(i) or (ii)
  - (iii) For a building containing an air emission source, enclosed facility, or other structure containing or associated with an air emission source subject to 30 TAC § 111.111(a)(7)(A), complying with 30 TAC § 111.111(a)(7)(B)(i) or (ii), and capable of producing visible emissions from, but not limited to, particulate matter, acid gases and NO<sub>x</sub>, the permit holder shall also comply with the following periodic monitoring requirements for the purpose of annual compliance certification under 30 TAC § 122.146:
    - (1) An observation of visible emissions from a building containing an air emission source, enclosed facility, or other structure containing or associated with an air emission source which is required to comply with 30 TAC § 111.111(a)(7)(A) shall be conducted at least once during each calendar quarter unless the air emission source or enclosed facility is not operating for the entire quarter.
    - (2) Records of all observations shall be maintained.
    - (3) Visible emissions observations of air emission sources or enclosed facilities operated during daylight hours shall be conducted no earlier than one hour after sunrise and no later than one hour before sunset. Visible emissions observations of air emission sources or enclosed facilities operated only at night must be made with additional lighting and the temporary installation of contrasting backgrounds. Visible emissions shall be determined with each emissions outlet in clear view of the observer. The observer shall be at least 15 feet, but not more than 0.25 mile, away from each emissions outlet during the observation. For outdoor locations, the observer shall select a position where the sun is not directly in the observer's eyes. When condensed water vapor is present within the plume, as it emerges from the emissions

outlet, observations must be made beyond the point in the plume at which condensed water vapor is no longer visible. When water vapor within the plume condenses and becomes visible at a distance from the emissions outlet, the observation shall be evaluated at the outlet prior to condensation of water vapor. A certified opacity reader is not required for visible emissions observations.

(4) Compliance Certification:

- (a) If visible emissions are not present during the observation, the RO may certify that the source is in compliance with the applicable opacity requirement in 30 TAC § 111.111(a)(7) and (a)(7)(A)
- (b) However, if visible emissions are present during the observation, the permit holder shall either list this occurrence as a deviation on the next deviation report as required under 30 TAC § 122.145(2) or conduct the appropriate opacity test specified in 30 TAC § 111.111(a)(7)(B) as soon as practicable, but no later than 24 hours after observing visible emissions to determine if the source is in compliance with the opacity requirements. If an opacity test is performed and the source is determined to be in compliance, the RO may certify that the source is in compliance with the applicable opacity requirement. However, if an opacity test is performed and the source is determined to be out of compliance, the permit holder shall list this occurrence as a deviation on the next deviation report as required under 30 TAC § 122.145(2). The opacity test must be performed by a certified opacity reader

C. For visible emissions from all other sources not specified in 30 TAC § 111.111(a)(1), (4), or (7); the permit holder shall comply with the following requirements:

- (i) Title 30 TAC § 111.111(a)(8)(A) (relating to Requirements for Specified Sources)
- (ii) Title 30 TAC § 111.111(a)(8)(B)(i) or (ii)
- (iii) For a source subject to 30 TAC § 111.111(a)(8)(A), complying with 30 TAC § 111.111(a)(8)(B)(i) or (ii), and capable of producing visible emissions from, but not limited to, particulate matter, acid gases and NO<sub>x</sub>, the permit holder shall also comply with the following

periodic monitoring requirements for the purpose of annual compliance certification under 30 TAC § 122.146:

- (1) An observation of visible emissions from a source which is required to comply with 30 TAC § 111.111(a)(8)(A) shall be conducted at least once during each calendar quarter unless the source is not operating for the entire quarter.
- (2) Records of all observations shall be maintained.
- (3) Visible emissions observations of sources operated during daylight hours shall be conducted no earlier than one hour after sunrise and no later than one hour before sunset. Visible emissions observations of sources operated only at night must be made with additional lighting and the temporary installation of contrasting backgrounds. Visible emissions shall be determined with each source in clear view of the observer. The observer shall be at least 15 feet, but not more than 0.25 mile, away from each source during the observation. For outdoor locations, the observer shall select a position where the sun is not directly in the observer's eyes. When condensed water vapor is present within the plume, as it emerges from the emissions outlet, observations must be made beyond the point in the plume at which condensed water vapor is no longer visible. When water vapor within the plume condenses and becomes visible at a distance from the emissions outlet, the observation shall be evaluated at the outlet prior to condensation of water vapor. A certified opacity reader is not required for visible emissions observations.
- (4) Compliance Certification:
  - (a) If visible emissions are not present during the observation, the RO may certify that the source is in compliance with the applicable opacity requirement in 30 TAC § 111.111(a)(8) and (a)(8)(A)
  - (b) However, if visible emissions are present during the observation, the permit holder shall either list this occurrence as a deviation on the next deviation report as required under 30 TAC § 122.145(2) or conduct the appropriate opacity test specified in 30 TAC § 111.111(a)(8)(B) as soon as practicable, but no later than 24 hours after observing visible emissions to determine if the source is in compliance with the opacity requirements. If an opacity test is performed and the source is determined to be in

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

- D. Certification of opacity readers determining opacities under Method 9 (as outlined in 40 CFR Part 60, Appendix A) to comply with opacity monitoring requirements shall be accomplished by completing the Visible Emissions Evaluators Course, or approved agency equivalent, no more than 180 days before the opacity reading.
  - E. Emission limits on nonagricultural processes, except for the steam generators specified in 30 TAC § 111.153, shall comply with the following requirements:
    - (i) Emissions of PM from any source may not exceed the allowable rates as required in 30 TAC § 111.151(a) (relating to Allowable Emissions Limits)
    - (ii) Sources with an effective stack height ( $h_e$ ) less than the standard effective stack height ( $H_e$ ), must reduce the allowable emission level by multiplying it by  $[h_e/H_e]^2$  as required in 30 TAC § 111.151(b)
    - (iii) Effective stack height shall be calculated by the equation specified in 30 TAC § 111.151(c)
4. The permit holder shall comply with the following requirements for units subject to any subpart of 40 CFR Part 60, unless otherwise stated in the applicable subpart:
- A. Title 40 CFR § 60.7 (relating to Notification and Recordkeeping)
  - B. Title 40 CFR § 60.8 (relating to Performance Tests)
  - C. Title 40 CFR § 60.11 (relating to Compliance with Standards and Maintenance Requirements)
  - D. Title 40 CFR § 60.12 (relating to Circumvention)
  - E. Title 40 CFR § 60.13 (relating to Monitoring Requirements)
  - F. Title 40 CFR § 60.14 (relating to Modification)
  - G. Title 40 CFR § 60.15 (relating to Reconstruction)

- H. Title 40 CFR § 60.19 (relating to General Notification and Reporting Requirements)

### **Additional Monitoring Requirements**

- 5. Unless otherwise specified, the permit holder shall comply with the compliance assurance monitoring requirements as specified in the attached “CAM Summary” upon issuance of the permit. In addition, the permit holder shall comply with the following:
  - A. The permit holder shall comply with the terms and conditions contained in 30 TAC § 122.147 (General Terms and Conditions for Compliance Assurance Monitoring).
  - B. The permit holder shall report, consistent with the averaging time identified in the “CAM Summary,” deviations as defined by the deviation limit in the “CAM Summary.” Any monitoring data below a minimum limit or above a maximum limit, that is collected in accordance with the requirements specified in 40 CFR § 64.7(c), shall be reported as a deviation. Deviations shall be reported according to 30 TAC § 122.145 (Reporting Terms and Conditions).
  - C. The permit holder may elect to collect monitoring data on a more frequent basis and average the data, consistent with the averaging time specified in the “CAM Summary,” for purposes of determining whether a deviation has occurred. However, the additional data points must be collected on a regular basis. In no event shall data be collected and used in particular instances in order to avoid reporting deviations. All monitoring data shall be collected in accordance with the requirements specified in 40 CFR § 64.7(c).
  - D. The permit holder shall operate the monitoring, identified in the attached “CAM Summary,” in accordance with the provisions of 40 CFR § 64.7.
  - E. The permit holder shall conduct a once a month visual, audible, and/or olfactory inspection of the capture system to detect leaking components for any capture system associated with the control device subject to CAM. If the results of the following inspections indicate that the capture system is not working properly, the permit holder shall promptly take necessary corrective actions.
  - F. The permit holder shall comply with the requirements of 40 CFR § 70.6(a)(3)(ii)(A) and 30 TAC § 122.144(1)(A)-(F) for documentation of all required inspections.

## **New Source Review Authorization Requirements**

6. Permit holder shall comply with the requirements of New Source Review authorizations issued or claimed by the permit holder for the permitted area, including permits, permits by rule, standard permits, flexible permits, special permits, permits for existing facilities including Voluntary Emissions Reduction Permits and Electric Generating Facility Permits issued under 30 TAC Chapter 116, Subchapter I, or special exemptions referenced in the New Source Review Authorization References attachment. These requirements:
  - A. Are incorporated by reference into this permit as applicable requirements
  - B. Shall be located with this operating permit
  - C. Are not eligible for a permit shield
7. 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.
8. The permit holder shall maintain records to demonstrate compliance with any emission limitation or standard that is specified in a permit by rule (PBR) or Standard Permit listed in the New Source Review Authorizations attachment. The records shall yield reliable data from the relevant time period that are representative of the emission unit's compliance with the PBR or Standard Permit. These records may include, but are not limited to, production capacity and throughput, hours of operation, material safety data sheets (MSDS), chemical composition of raw materials, speciation of air contaminant data, engineering calculations, maintenance records, fugitive data, performance tests, capture/control device efficiencies, direct pollutant monitoring (CEMS, COMS, or PEMS), or control device parametric monitoring. These records shall be made readily accessible and available as required by 30 TAC § 122.144. Any monitoring or recordkeeping data indicating noncompliance with the PBR or Standard Permit shall be considered and reported as a deviation according to 30 TAC § 122.145 (Reporting Terms and Conditions).

## **Compliance Requirements**

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

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

**Permit Location**

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

## **Attachments**

**Applicable Requirements Summary**

**Additional Monitoring Requirements**

**New Source Review Authorization References**

### **Applicable Requirements Summary**

**Unit Summary ..... 14**

**Applicable Requirements Summary .....15**

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

### Unit Summary

Unit/Group/ Process ID No.	Unit Type	Group/Inclusive Units	SOP Index No.	Regulation	Requirement Driver
AUXHTR-1	BOILERS/STEAM GENERATORS/STEAM GENERATING UNITS	N/A	60Dc	40 CFR Part 60, Subpart Dc	No changing attributes.
FLARE-1	FLARES	N/A	R1111-1	30 TAC Chapter 111, Visible Emissions	No changing attributes.
FLARE-1	FLARES	N/A	60A-1	40 CFR Part 60, Subpart A	No changing attributes.
PROSRU	GAS SWEETENING/ SULFUR RECOVERY UNITS	N/A	R112	30 TAC Chapter 112, Sulfur Compounds	No changing attributes.
PROSRU	GAS SWEETENING/ SULFUR RECOVERY UNITS	N/A	60LLL	40 CFR Part 60, Subpart LLL	No changing attributes.

### Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
AUXHTR-1	EU	60Dc	SO <sub>2</sub>	40 CFR Part 60, Subpart Dc	§ 60.40c(a)	This subpart applies to each steam generating unit constructed, reconstructed, or modified after 6/9/89 and that has a maximum design heat input capacity of 2.9-29 megawatts (MW).	None	§ 60.48c(g)(1) § 60.48c(g)(2) § 60.48c(g)(3) § 60.48c(i)	[G]§ 60.48c(a) § 60.48c(j)
AUXHTR-1	EU	60Dc	PM	40 CFR Part 60, Subpart Dc	§ 60.40c(a)	This subpart applies to each steam generating unit constructed, reconstructed, or modified after 6/9/89 and that has a maximum design heat input capacity of 2.9-29 megawatts (MW).	None	§ 60.48c(g)(1) § 60.48c(g)(2) § 60.48c(g)(3) § 60.48c(i)	[G]§ 60.48c(a) § 60.48c(j)
AUXHTR-1	EU	60Dc	PM (OPACITY)	40 CFR Part 60, Subpart Dc	§ 60.40c(a)	This subpart applies to each steam generating unit constructed, reconstructed, or modified after 6/9/89 and that has a maximum design heat input capacity of 2.9-29 megawatts (MW).	None	§ 60.48c(g)(1) § 60.48c(g)(2) § 60.48c(g)(3) § 60.48c(i)	[G]§ 60.48c(a) § 60.48c(j)
FLARE-1	EU	R1111-1	OPACITY	30 TAC Chapter 111, Visible Emissions	§ 111.111(a)(4)(A)	Visible emissions from a process gas flare shall not be permitted for more than five minutes in any two-hour period, except for emission event emissions as provided in §101.222(b).	§ 111.111(a)(4)(A)(i) § 111.111(a)(4)(A)(ii)	§ 111.111(a)(4)(A)(ii)	None
FLARE-1	CD	60A-1	OPACITY	40 CFR Part 60, Subpart A	§ 60.18(b) § 60.18(c)(1) § 60.18(c)(2) § 60.18(c)(3)(ii) § 60.18(c)(5) § 60.18(c)(6) § 60.18(e)	Flares shall comply with paragraphs (c)-(f) of § 60.18.	§ 60.18(d) § 60.18(f)(1) § 60.18(f)(2) § 60.18(f)(3) § 60.18(f)(6)	None	None

## Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
PROSRU	EU	R112	SO <sub>2</sub>	30 TAC Chapter 112, Sulfur Compounds	§ 112.7(a)	No person may cause, suffer, allow, or permit emissions of SO <sub>2</sub> to exceed the emission limits specified for stack effluent flow rates < 4,000 scfm as determined by the specified equation.	§ 112.2(a) ** See CAM Summary	§ 112.2(c)	§ 112.2(b)
PROSRU	PRO	6oLLL	SO <sub>2</sub>	40 CFR Part 60, Subpart LLL	§ 60.642(b) § 60.642(a)	After demonstrating compliance with Paragraph (a), the owner or operator shall achieve a minimum SO <sub>2</sub> emission reduction efficiency, Z <sub>c</sub> , as determined from Table 2.	[G]§ 60.643(a)(1) § 60.643(a)(2) § 60.643(b) § 60.644(a) [G]§ 60.644(b) § 60.644(c) § 60.644(c)(1) § 60.644(c)(2) § 60.644(c)(3) § 60.644(c)(4) § 60.644(c)(4)(i) § 60.644(c)(4)(ii) § 60.644(c)(4)(iv) § 60.644(d) [G]§ 60.646(a) [G]§ 60.646(b) [G]§ 60.646(d) § 60.646(f) § 60.646(g) [G]§ 60.648 ** See CAM Summary	§ 60.647(a)	§ 60.647(b) § 60.647(b)(1) § 60.647(b)(2)

**Additional Monitoring Requirements**

**Compliance Assurance Monitoring Summary ..... 18**

## CAM Summary

<b>Unit/Group/Process Information</b>	
ID No.: PROSRU	
Control Device ID No.: INCIN-1	Control Device Type: Sulfur Recovery Unit with Incinerator
<b>Applicable Regulatory Requirement</b>	
Name: 30 TAC Chapter 112, Sulfur Compounds	SOP Index No.: R112
Pollutant: SO <sub>2</sub>	Main Standard: § 112.7(a)
<b>Monitoring Information</b>	
Indicator: Combustion Temperature/Exhaust Gas Temperature	
Minimum Frequency: Four times per Hour	
Averaging Period: One Hour	
Deviation Limit: Minimum Temperature = 1100 degrees Fahrenheit	
<p>CAM Text: The SRU Incinerator firebox exit temperature shall be continuously monitored and recorded. The SRU Incinerator shall be operated with not less than 3 percent O<sub>2</sub>.</p> <p>Each Monitoring device will be accurate within:                      -plus/minus 2.0 percent of reading; or                      -plus/minus 2.5 degrees Fahrenheit.</p> <p>Each monitoring device shall be calibrated at a frequency in accordance with the manufacturer's specifications, or at least annually.</p>	

## CAM Summary

<b>Unit/Group/Process Information</b>	
ID No.: PROSRU	
Control Device ID No.: INCIN-1	Control Device Type: Sulfur Recovery Unit with Incinerator
<b>Applicable Regulatory Requirement</b>	
Name: 30 TAC Chapter 112, Sulfur Compounds	SOP Index No.: R112
Pollutant: SO <sub>2</sub>	Main Standard: § 112.7(a)
<b>Monitoring Information</b>	
Indicator: SO <sub>2</sub>	
Minimum Frequency: Four times per hour	
Averaging Period: One hour	
Deviation Limit: Maximum SO <sub>2</sub> emission rate = 26.29 lb/hr	
<p>CAM Text: Use a continuous emissions monitoring system (CEMS) to measure and record sulfur dioxide in the exhaust stream of the control device. The CEMS shall be operated in accordance with the monitoring requirement of CFR 60.13 Appendix B. In addition, monitor O<sub>2</sub> with a CEMS operated in accordance with the above CEMS procedures.</p> <p>Any monitoring data collected, in accordance with 40 CFR 64.7(c), that is above the maximum limit shall be considered and reported as a deviation.</p> <p>The CEMS shall be operated in accordance with the Performance Specifications, Nos. 1 through 9, of 40 CFR Part 60, Appendix B.</p>	

## CAM Summary

<b>Unit/Group/Process Information</b>	
ID No.: PROSRU	
Control Device ID No.: INCIN-1	Control Device Type: Sulfur Recovery Unit with Incinerator
<b>Applicable Regulatory Requirement</b>	
Name: 40 CFR Part 60, Subpart LLL	SOP Index No.: 60LLL
Pollutant: SO <sub>2</sub>	Main Standard: § 60.642(b)
<b>Monitoring Information</b>	
Indicator: Combustion Temperature/Exhaust Gas Temperature	
Minimum Frequency: Four times per hour	
Averaging Period: One hour	
Deviation Limit: Minimum Temperature = 1100 degrees Fahrenheit	
<p>CAM Text: The SRU Incinerator firebox exit temperature shall be continuously monitored and recorded. The SRU Incinerator shall be operated with not less than 3 percent O<sub>2</sub>.</p> <p>Each monitoring device shall be accurate within:</p> <ul style="list-style-type: none"> <li>- plus/minus 2.0 percent of reading; or</li> <li>- plus/minus 2.5 degrees Fahrenheit</li> </ul> <p>Each monitoring device shall be calibrated at a frequency in accordance with the manufacturer's specifications, or at least annually.</p>	

## CAM Summary

<b>Unit/Group/Process Information</b>	
ID No.: PROSRU	
Control Device ID No.: INCIN-1	Control Device Type: Sulfur Recovery Unit with Incinerator
<b>Applicable Regulatory Requirement</b>	
Name: 40 CFR Part 60, Subpart LLL	SOP Index No.: 60LLL
Pollutant: SO <sub>2</sub>	Main Standard: § 60.642(b)
<b>Monitoring Information</b>	
Indicator: SO <sub>2</sub>	
Minimum Frequency: Four times per hour	
Averaging Period: One hour	
Deviation Limit: Maximum SO <sub>2</sub> emission rate = 26.29 lb/hr	
<p>CAM Text: Use a continuous emissions monitoring system (CEMS) to measure and record sulfur dioxide in the exhaust stream of the control device. The CEMS shall be operated in accordance with the monitoring requirement of CFR 60.13 Appendix B. In addition, monitor O<sub>2</sub> with a CEMS operated in accordance with the above CEMS procedures.</p> <p>Any monitoring data collected, in accordance with 40 CFR 64.7(c), that is above the maximum limit shall be considered and reported as a deviation.</p> <p>The CEMS shall be operated in accordance with the Performance Specifications, Nos. 1 through 9, of 40 CFR Part 60, Appendix B.</p>	

**New Source Review Authorization References**

**New Source Review Authorization References ..... 23**

**New Source Review Authorization References by Emission Unit..... 24**

## 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.

<b>Prevention of Significant Deterioration (PSD) Permits</b>	
PSD Permit No.: PSDTX872	Issuance Date: 10/28/2009
<b>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.</b>	
Authorization No.: 33486	Issuance Date: 10/28/2009
<b>Permits By Rule (30 TAC Chapter 106) for the Application Area</b>	
Number: 106.359	Version No./Date: 09/10/2013
Number: 106.492	Version No./Date: 09/04/2000
Number: 106.512	Version No./Date: 06/13/2001

### **New Source Review Authorization References by Emissions Unit**

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

<b>Unit/Group/Process ID No.</b>	<b>Emission Unit Name/Description</b>	<b>New Source Review Authorization</b>
AUXHTR-1	AUXILIARY BOILER NO. 1	33486, PSDTX872
FLARE-1	PROCESS GAS FLARE	106.492/09/04/2000
PROSRU	AMINE SWEETENING AND SULFUR RECOVERY PROCESS	33486, PSDTX872

**Appendix A**

**Acronym List ..... 26**

## Acronym List

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

ACFM .....	actual cubic feet per minute
AMOC.....	alternate means of control
ARP .....	Acid Rain Program
ASTM .....	American Society of Testing and Materials
B/PA.....	Beaumont/Port Arthur (nonattainment area)
CAM .....	Compliance Assurance Monitoring
CD .....	control device
COMS.....	continuous opacity monitoring system
CVS.....	closed-vent system
D/FW .....	Dallas/Fort Worth (nonattainment area)
DR .....	Designated Representative
ELP .....	El Paso (nonattainment area)
EP .....	emission point
EPA .....	U.S. Environmental Protection Agency
EU .....	emission unit
FCAA Amendments .....	Federal Clean Air Act Amendments
FOP .....	federal operating permit
GF.....	grandfathered
gr/100 scf.....	grains per 100 standard cubic feet
HAP.....	hazardous air pollutant
H/G/B.....	Houston/Galveston/Brazoria (nonattainment area)
H <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 particulate
TVP.....	true vapor pressure
U.S.C. ....	United States Code
VOC.....	volatile organic compound

**Appendix B**

**Major NSR Summary Table..... 28**

## Major NSR Summary Table

Permit Number: 33486 and PSDTX872			Issuance Date: October 28, 2009				
Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates *		Monitoring and Testing Requirements	Recordkeeping Requirements	Reporting Requirements
			lb/hr	TPY**	Spec. Cond.	Spec. Cond.	Spec. Cond.
INCVENT-1	SRU Incinerator Stack	VOC	0.16	0.69	5, 7, 14, 17, 18, 21	22, 7, 5, 12, 13, 14	5, 13
		NOx	4.50	19.69			
		CO	11.62	50.89			
		COS	0.01	0.04			
		SO2	26.29	115.15			
		H2S	0.09	0.41			
		CS2	0.01	0.01			
FLARE-1	Process Gas Flare	PM10	0.77	3.37			
		VOC	0.77	3.38	19	19	
		NOx	0.15	0.67			
		CO	0.30	1.33			
		SO2	0.01	0.01			
TEGSTK-1A, 2A, and 3A	Glycol Heater No. 1	VOC	0.03	0.14			
		NOx	0.59	2.58			
		CO	0.49	2.16			
		SO2	0.01	0.02			
		PM10	0.04	0.20			
TEGSTK-1B	Glycol heater No.2	VOC	0.01	0.05			
		NOx	0.22	0.98			
		CO	0.19	0.82			
		SO2	0.01	.001			
		PM10	0.02	0.07			
AMSTK-1A	Amine Heater No. 1A	VOC	0.10	0.44	5, 6	5, 22	5, 22
		NOx	1.18	7.94			
		CO	1.52	6.67			
		SO2	0.01	0.05			
		PM10	0.14	0.60			
AMSTK-2A	Amine Heater No. 2A	VOC	0.10	0.44			
		NOx	1.18	7.94			
		CO	1.52	6.67			
		SO2	0.01	0.05			
		PM10	0.14	0.60			

## Major NSR Summary Table

Permit Number: 33486 and PSDTX872			Issuance Date: October 28, 2009				
Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates *		Monitoring and Testing Requirements	Recordkeeping Requirements	Reporting Requirements
			lb/hr	TPY**	Spec. Cond.	Spec. Cond.	Spec. Cond.
AMSTK-3A	Amine Heater No. 3A	VOC	0.10	0.44			
		NOx	1.18	7.94			
		CO	1.52	6.67			
		SO2	0.01	0.05			
		PM10	0.14	0.60			
AUXSTK-1	Auxiliary Boiler No. 1	VOC	0.20	0.87	5, 6	5, 22	5, 22
		NOx	3.63	15.89			
		CO	3.06	13.38			
		SO2	0.02	0.10			
		PM10	0.28	1.21			
GENSTK-1B	Electric Generator Engine No. 1B	VOC	0.98	4.28	3, 5, 23	3, 5, 10, 22, 23	3, 5, 9, 22, 23
		NOx	1.63	7.14			
		CO	9.78	42.85			
		SO2	0.01	0.03			
		PM10	0.11	0.48			
GENSTK-2	Electric Generator Engine No. 2	VOC	0.05	0.23	6, 23	23	9, 23
		NOx	4.02	17.59			
		CO	8.03	35.17			
		SO2	0.01	0.02			
		PM10	0.09	0.41			
GENSTK-3	Electric Generator Engine No. 3	VOC	0.05	0.23	23	23	9, 23
		NOx	4.02	17.59			
		CO	8.03	35.17			
		SO2	0.01	0.02			
		PM10	0.09	0.41			
GENSTK-4B	Electric Generator Engine No. 4B	VOC	0.98	4.28	3, 6, 21, 23	3, 10, 21, 22, 23	3, 9, 21, 22, 23
		NOx	1.63	7.14			
		CO	9.78	42.85			
		SO2	0.01	0.03			
		PM10	0.11	0.48			
EPTANK-2	Amine Tank	VOC	0.02	0.01			
EPTANK-3	Glycol Tank	VOC	0.01	0.01			

## Major NSR Summary Table

Permit Number: 33486 and PSDTX872			Issuance Date: October 28, 2009				
Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates *		Monitoring and Testing Requirements	Recordkeeping Requirements	Reporting Requirements
			lb/hr	TPY**	Spec. Cond.	Spec. Cond.	Spec. Cond.
EPTANK-4	Engine Oil Tank	VOC	0.01	0.01			
EPTANK-5	Engine Antifreeze Tank	VOC	0.02	0.01			
TRUCKFUG-1	Sulfur Truck Loading (4)	H2S	0.06	0.26		22	
		SO2	0.02	0.08			
FACFUG	Facility Fugitive Emissions (4)	VOC	0.36	1.56	20	20	20
		H2S	0.02	0.07			

Footnotes:

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

NO<sub>x</sub> – total oxides of nitrogen

SO<sub>2</sub> – Sulfur dioxide

PM<sub>10</sub> – particulate matter (PM) equal to or less than 10 microns in diameter. Where PM is not listed, it shall be assumed that no PM great than 10 microns is emitted

CO – carbon monoxide

COS – carbonyl sulfide

CS<sub>2</sub> – carbon disulfide

H<sub>2</sub>S – hydrogen sulfide

4. Fugitive emissions are an estimate only and should not be considered as a maximum allowable emission rate.

\* Emission rates are based on and the facilities are limited by the following maximum operating schedule:

\_\_\_\_ Hrs/Day \_\_\_\_ days/week \_\_\_\_ weeks/year 8760 hrs/year

\*\* Compliance with annual emission limits is based on a rolling 12-month period.



TEXAS COMMISSION ON ENVIRONMENTAL QUALITY  
AIR QUALITY PERMIT



A PERMIT IS HEREBY ISSUED TO  
**Pinnacle Gas Treating, Inc.**  
AUTHORIZING THE CONTINUED OPERATION OF  
**Bethel Gas Treating Facility**

LOCATED AT Tennessee Colony, Anderson County, Texas  
LATITUDE 31° 53' 27" LONGITUDE 095° 56' 28"

1. Facilities covered by this permit shall be constructed and operated as specified in the application for the permit. All representations regarding construction plans and operation procedures contained in the permit application shall be conditions upon which the permit is issued. Variations from these representations shall be unlawful unless the permit holder first makes application to the Texas Commission on Environmental Quality (commission) Executive Director to amend this permit in that regard and such amendment is approved. [Title 30 Texas Administrative Code § 116.116 (30 TAC § 116.116)]
2. **Voiding of Permit.** A permit or permit amendment is automatically void if the holder fails to begin construction within 18 months of the date of issuance, discontinues construction for more than 18 months prior to completion, or fails to complete construction within a reasonable time. Upon request, the executive director may grant an 18-month extension. Before the extension is granted the permit may be subject to revision based on best available control technology, lowest achievable emission rate, and netting or offsets as applicable. One additional extension of up to 18 months may be granted if the permit holder demonstrates that emissions from the facility will comply with all rules and regulations of the commission, the intent of the Texas Clean Air Act (TCAA), including protection of the public's health and physical property; and (b)(1) the permit holder is a party to litigation not of the permit holder's initiation regarding the issuance of the permit; or (b)(2) the permit holder has spent, or committed to spend, at least 10 percent of the estimated total cost of the project up to a maximum of \$5 million. A permit holder granted an extension under subsection (b)(1) of this section may receive one subsequent extension if the permit holder meets the conditions of subsection (b)(2) of this section. [30 TAC § 116.120(a), (b) and (c)]
3. **Construction Progress.** Start of construction, construction interruptions exceeding 45 days, and completion of construction shall be reported to the appropriate regional office of the commission not later than 15 working days after occurrence of the event. [30 TAC § 116.115(b)(2)(A)]
4. **Start-up Notification.** The appropriate air program regional office shall be notified prior to the commencement of operations of the facilities authorized by the permit in such a manner that a representative of the commission may be present. The permit holder shall provide a separate notification for the commencement of operations for each unit of phased construction, which may involve a series of units commencing operations at different times. Prior to operation of the facilities authorized by the permit, the permit holder shall identify to the Office of Permitting, Remediation, and Registration the source or sources of allowances to be utilized for compliance with Chapter 101, Subchapter H, Division 3 of this title (relating to Mass Emissions Cap and Trade Program). [30 TAC § 116.115(b)(2)(B)]
5. **Sampling Requirements.** If sampling is required, the permit holder shall contact the commission's Office of Compliance and Enforcement prior to sampling to obtain the proper data forms and procedures. All sampling and testing procedures must be approved by the executive director and coordinated with the regional representatives of the commission. The permit holder is also responsible for providing sampling facilities and conducting the sampling operations or contracting with an independent sampling consultant. [30 TAC § 116.115(b)(2)(C)]
6. **Equivalency of Methods.** The permit holder must demonstrate or otherwise justify the equivalency of emission control methods, sampling or other emission testing methods, and monitoring methods proposed as alternatives to methods indicated in the conditions of the permit. Alternative methods shall be applied for in writing and must be reviewed and approved by the executive director prior to their use in fulfilling any requirements of the permit. [30 TAC § 116.115(b)(2)(D)]
7. **Recordkeeping.** The permit holder shall maintain a copy of the permit along with records containing the information and data sufficient to demonstrate compliance with the permit, including production records and operating hours; keep all required records in a file at the plant site. If, however, the facility normally operates unattended, records shall be maintained at the nearest staffed location within Texas specified in the application; make the records available at the request of personnel from the commission or any air pollution control program having jurisdiction; comply with any additional recordkeeping requirements specified in special conditions attached to the permit; and retain information in the file for at least two years following the date that the information or data is obtained. [30 TAC § 116.115(b)(2)(E)]
8. **Maximum Allowable Emission Rates.** The total emissions of air contaminants from any of the sources of emissions must not exceed the values stated on the table attached to the permit entitled "Emission Sources--Maximum Allowable Emission Rates." [30 TAC § 116.115(b)(2)(F)]
9. **Maintenance of Emission Control.** The permitted facilities shall not be operated unless all air pollution emission capture and abatement equipment is maintained in good working order and operating properly during normal facility operations. The permit holder shall provide notification for upsets and maintenance in accordance with §§ 101.201, 101.211, and 101.221 of this title (relating to Emissions Event Reporting and Recordkeeping Requirements; Scheduled Maintenance, Startup, and Shutdown Reporting and Recordkeeping Requirements; and Operational Requirements). [30 TAC § 116.115(b)(2)(G)]
10. **Compliance with Rules.** Acceptance of a permit by an applicant constitutes an acknowledgment and agreement that the permit holder will comply with all rules, regulations, and orders of the commission issued in conformity with the TCAA and the conditions precedent to the granting of the permit. If more than one state or federal rule or regulation or permit condition is applicable, the most stringent limit or condition shall govern and be the standard by which compliance shall be demonstrated. Acceptance includes consent to the entrance of commission employees and agents into the permitted premises at reasonable times to investigate conditions relating to the emission or concentration of air contaminants, including compliance with the permit. [30 TAC § 116.115(b)(2)(H)]
11. This permit may be appealed pursuant to 30 TAC § 50.139.
12. This permit may not be transferred, assigned, or conveyed by the holder except as provided by rule. [30 TAC § 116.110(e)]
13. There may be additional special conditions attached to a permit upon issuance or modification of the permit. Such conditions in a permit may be more restrictive than the requirements of Title 30 of the Texas Administrative Code. [30 TAC § 116.115(c)]
14. Emissions from this facility must not cause or contribute to a condition of "air pollution" as defined in TCAA § 382.003(3) or violate TCAA § 382.085, as codified in the Texas Health and Safety Code. If the executive director determines that such a condition or violation occurs, the holder shall implement additional abatement measures as necessary to control or prevent the condition or violation.

PERMIT 33486

Date: October 31, 2007

  
For the Commission

Bryan W. Shaw, Ph.D., *Chairman*  
Buddy Garcia, *Commissioner*  
Carlos Rubinstein, *Commissioner*  
Mark R. Vickery, P.G., *Executive Director*



TEXAS COMMISSION ON ENVIRONMENTAL QUALITY  
*Protecting Texas by Reducing and Preventing Pollution*

October 28, 2009

MR MARIO REYES  
OPERATIONS MANAGER  
PINNACLE GAS TREATING LLC  
PO BOX 1330  
HOUSTON TX 77251-1330

Re: Permit Amendment Application  
Permit Numbers: 33486 and PSDTX872  
Bethel Gas Treating Facility  
Tennessee Colony, Anderson County  
Regulated Entity Number: RN100222223  
Customer Reference Number: CN603242611  
Account Number: AA-0096-B

Dear Mr. Reyes:

This is in response to your letter received June 8, 2009 and your Form PI-1 (General Application for Air Preconstruction Permits and Amendments) concerning the proposed amendment to Permit Number 33486. We understand that you propose to revise the carbon dioxide emission factor for Electric Generator Engine No. 5 (Emission Point Number [EPN] GENSTK-5), which has been renamed Electric Generator Engine No. 4B (EPN GENSTK-4B), remove the three Process Heaters (EPNs PHSTK-1B, PHSTK-2B, and PHSTK-3B) that were never constructed and Electric Generator Engine No. 1, which is no longer in service and incorporate, and void Permit by Rule 87200 authorizing Electric Generator Engine No. 6 (EPN GENSTK-6), which has been renamed Electric Generator Engine No. 1B (EPN GENSTK-1B).

As indicated in Title 30, Texas Administrative Code §§ 116.116(b) and 116.160 [30 TAC §§ 116.116(b) and 116.160], and based on our review, Permit Number 33486 is hereby amended. This information will be incorporated into the existing permit file. Enclosed are revised special conditions pages and a maximum allowable emission rates table to replace those currently attached to your permit. We appreciate your careful review of the special conditions of the permit and assuring that all requirements are consistently met.

No planned maintenance, startup, and shutdown emissions have been reviewed or represented in this application and none are authorized by this permit.

Mr. Mario Reyes  
Page 2  
October 28, 2009

Re: Permit Numbers 33486 and PSDTX872

As of July 1, 2008, all analytical data generated by a mobile or stationary laboratory in support of compliance with air permits must be obtained from a NELAC (National Environmental Laboratory Accreditation Conference) accredited laboratory under the Texas Laboratory Accreditation Program or meet one of several exemptions. Specific information concerning which laboratories must be accredited and which are exempt may be found in 30 TAC §§ 25.4 and 25.6.

For additional information regarding the laboratory accreditation program and a list of accredited laboratories and their fields of accreditation, please see the following Web site:

[http://www.tceq.state.tx.us/compliance/compliance\\_support/qa/env\\_lab\\_accreditation.html](http://www.tceq.state.tx.us/compliance/compliance_support/qa/env_lab_accreditation.html)

For questions regarding the accreditation program, you may contact the Texas Laboratory Accreditation Program at (512) 239-3754 or by e-mail at [labprgms@tceq.state.tx.us](mailto:labprgms@tceq.state.tx.us).

You may file a **motion to overturn** with the Chief Clerk. A motion to overturn is a request for the commission to review the executive director's decision. Any motion must explain why the commission should review the executive director's decision. According to 30 TAC § 50.139, an action by the executive director is not affected by a motion to overturn filed under this section unless expressly ordered by the commission.

A motion to overturn must be received by the Chief Clerk within 23 days after the date of this letter. An original and 11 copies of a motion must be filed with the Chief Clerk in person, or by mail to the Chief Clerk's address on the attached mailing list. On the same day the motion is transmitted to the Chief Clerk, please provide copies to the applicant, the executive director's attorney, and the Public Interest Counsel at the addresses listed on the attached mailing list. If a motion to overturn is not acted on by the commission within 45 days after the date of this letter, then the motion shall be deemed overruled.

You may also request **judicial review** of the executive director's approval. According to Texas Health and Safety Code § 382.032, a person affected by the executive director's approval must file a petition appealing the executive director's approval in Travis County district court within 30 days after the effective date of the approval. Even if you request judicial review, you still must exhaust your administrative remedies, which includes filing a motion to overturn in accordance with the previous paragraphs.

Mr. Mario Reyes  
Page 3  
October 28, 2009

Re: Permit Numbers 33486 and PSDTX872

Your cooperation in this matter is appreciated. If you need further information or have any questions, please contact Ms. Jane Mueller at (512) 239-0650 or write to the Texas Commission on Environmental Quality, Office of Permitting and Registration, Air Permits Division, MC-163, P.O. Box 13087, Austin, Texas 78711-3087.

This action is taken under authority delegated by the Executive Director of the Texas Commission on Environmental Quality.

Sincerely,



*SH*  
Steve Hagle, P.E., Director  
Air Permits Division  
Office of Permitting and Registration  
Texas Commission on Environmental Quality

SH/JM/kp

Enclosures

cc: Air Section Manager, Region 5 - Tyler

Project Number: 147952

## SPECIAL CONDITIONS

Permit Numbers 33486 and PSDTX872

### EMISSION STANDARDS, FUEL SPECIFICATIONS, AND WORK PRACTICES

1. This permit authorizes emissions only from those points listed in the attached table entitled "Emission Sources - Maximum Allowable Emission Rates," and the facilities covered by this permit are authorized to emit only the air contaminants on that table subject to the emission rates limits and other conditions specified in this permit. **(07/02)**
2. Non-fugitive emissions from relief valves, safety valves, or rupture discs of gases containing volatile organic compounds (VOC) at a concentration of greater than 1 percent are not authorized by this permit. Any releases directly to atmosphere from relief valves, safety valves, or rupture discs of gases containing VOC at a concentration greater than one weight percent are not consistent with good practice for minimizing emissions.

Except for those emissions authorized and listed on the maximum allowable emission rates table (MAERT), all emissions from relief valves, safety valves, and rupture discs must be documented and reported as required by Title 30 Texas Administrative Code §§ 101.6 or 101.7 (30 TAC §§ 101.6 or 101.7) and must satisfy all the requirements in 30 TAC § 101.11 to be exempted. **(07/02)**

### INITIAL DEMONSTRATION OF COMPLIANCE (04/08)

3. The permit holder shall perform stack sampling and other testing as required to establish the actual pattern and quantities of air contaminants being emitted into the atmosphere from the Electric Generator Engine No. 4B (EPN GENSTK-4B) to demonstrate compliance with the MAERT. Testing for Electric Generator Engine No. 4B (EPN GENSTK-4B) shall be considered representative for Electric Generator Engine No. 1B (EPN GENSTK-1B). If Electric Generator Engine No. 4B is found to be in noncompliance with emission limitations then Electric Generator Engine No. 1B (EPN GENSTK-1B) shall be stack tested within thirty days to determine compliance with the MAERT. **This requirement has been met. (10/09)**

The permit holder is responsible for providing sampling and testing facilities and conducting the sampling and testing operations at his expense. Sampling shall be conducted in accordance with the appropriate procedures of the Texas Commission on Environmental Quality (TCEQ) Sampling Procedures Manual and the U.S. Environmental Protection Agency (EPA) Reference Methods.

## SPECIAL CONDITIONS

Permit Numbers 33486 and PSDTX872

Page 2

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

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

The purpose of the pretest meeting is to review the necessary sampling and testing procedures, to provide the proper data forms for recording pertinent data, and to review the format procedures for the test reports. The TCEQ Regional Director or the TCEQ Office of Compliance and Enforcement (OCE), Compliance Support Division must approve any deviation from specified sampling procedures.

- B. Air contaminants emitted from EPN GENSTK-4B to be tested for include (but are not limited to): EPN GENSTK-4B: NO<sub>x</sub>, CO, and VOC. **(04/08)**
- C. Sampling shall occur within 60 days after achieving the maximum normal load, but no later than 180 days after initial start-up of the facilities and at such other times as may be required by the TCEQ Executive Director. Requests for additional time to perform sampling shall be submitted to the appropriate regional office. **This requirement has been met. (10/09)**
- D. The facilities being sampled shall operate at the maximum normal load during stack emission testing. These conditions/parameters and any other primary operating parameters that affect the emission rate shall be monitored and recorded during the stack test. Any additional parameters shall be determined at the pretest meeting and shall be stated in the sampling report. Permit conditions and parameter limits may be waived during stack testing performed under this condition if the proposed condition/parameter range is identified in the test notice specified in paragraph A and

## SPECIAL CONDITIONS

Permit Numbers 33486 and PSDTX872

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accepted by the TCEQ Regional Office. Permit allowable emissions and emission control requirements are not waived and still apply during stack testing periods.

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

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

One copy to the appropriate TCEQ Regional Office.

One copy to the TCEQ OCE, Compliance Support Division, Austin.

4. Sampling ports and platform(s) shall be incorporated into the design of EPNs GENSTK-4B, INCVENT-1, GENSTK-2 and AUXSTK-1, according to the specifications set forth in the attachment entitled "Chapter 2, Stack Sampling Facilities" of the TCEQ Sampling Procedures Manual. Alternate sampling facility designs must be submitted for approval to the TCEQ Regional Manager or the TCEQ Office of Compliance and Enforcement, Compliance Support Division. **(10/09)**
5. The holder of this permit shall perform stack sampling and other testing as required to establish the actual pattern and quantities of air contaminants being emitted into the atmosphere from the Electric Generator Engine No. 1 (EPN GENSTK-1), Amine Heater Stack 1A (EPN AMSTK-1A), Auxiliary Boiler No. 1 (EPN AUXSTK-1) and the SRU Incinerator Stack (EPN INCVENT-1). Testing for Electric Generator Engine No. 1 shall be considered representative for all three (EPN GENSTK-1, GENSTK-2 and GENSTK-3). Testing for the Amine Heater Stack 1B shall be considered representative for all three Amine Heaters (EPNs AMSTK-1B, 2B, and 3B). If a source (EPNs GENSTK-1, AMSTK-1A, and AUXSTK-1) is found to be in noncompliance with emission limitations, then the other associated sources shall be stack tested to determine compliance with the MAERT. The holder of this permit is responsible for providing sampling and testing facilities and conducting the sampling and testing operations at his expense. **This requirement has been met. (10/07)**

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Initial testing outlined above was conducted on Electric Generator Engine No. 1 (EPN GENSTK-1). Since completing the initial testing Electric Generator Engine No. 1 has been removed from service. Further compliance testing as outlined under Special Condition No. 6 shall be conducted on Electric Generator Engine No. 2 (EPN GENSTK-2) and be considered representative for Electric Generator Engine No. 3 (EPN GENSTK-3). **(10/09)**

- A. The appropriate TCEQ Regional Office in the region where the source is located shall be contacted as soon as testing is scheduled, but not less than 45 days prior to sampling to schedule a pretest meeting.

The notice shall include:

- (1) Date for pretest meeting.
- (2) Date sampling will occur.
- (3) Name of firm conducting sampling.
- (4) Type of sampling equipment to be used.
- (5) Method or procedure to be used in sampling.

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

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

Requests to waive testing for any pollutant specified in B of this condition shall be submitted to the TCEQ Office of Permitting and Registration, Air Permits Division. Test waivers and alternate or equivalent procedure proposals for New Source Performance Standards testing which must have EPA approval shall be submitted to the TCEQ Compliance Support Division in Austin.

- B. Air contaminants emitted from the sources listed above to be tested for include (but are not limited to):

EPN INCVENT-1: SO<sub>2</sub>, H<sub>2</sub>S, NO<sub>x</sub>, O<sub>2</sub>, and CO  
EPN GENSTK-1: NO<sub>x</sub>, CO, and VOC  
EPN AUXSTK-1: NO<sub>x</sub>, CO, and VOC  
EPN AMSTK-1A: NO<sub>x</sub>, CO, and VOC

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- C. Sampling shall occur within 90 days after initial start-up of the facilities and at such other times as may be required by the Executive Director of the TCEQ. Requests for additional time to perform sampling shall be submitted to the TCEQ Regional Office. Additional time to comply with the applicable requirements of 40 CFR Part 60 and 40 CFR Part 61 requires EPA approval, and requests shall be submitted to the TCEQ Compliance Support Division in Austin.
- D. The plant shall operate at the maximum available production rates during stack emission testing. Primary operating parameters that enable determination of production rate shall be monitored and recorded during the stack test. These parameters are to be determined at the pretest meeting. If the plant is unable to operate at maximum rates during testing, then, future production rates may be limited to the rates established during testing. Additional stack testing may be required when higher production rates are achieved.
- E. One copy of the final sampling report shall be forwarded to the TCEQ within 60 days after sampling is completed. Sampling reports shall comply with the attached provisions of Chapter 14 of the TCEQ Sampling Procedures Manual. The reports shall be distributed as follows: **(04/08)**

One copy to the TCEQ Tyler Regional Office

- 6. Stack sampling for EPNs GENSTK-2, GENSTK-4B, AMSTK-1A, and AUXSTK-1 shall be repeated every five years after the initial sampling in conformity with A, B, and D of Special Condition No. 3. Testing for Electric Generator No. 2 shall be considered representative for Electric Generator No. 3 (EPN GENSTK-3). Testing for Electric Generator No. 4B shall be considered representative for Electric Generator No. 1B (EPN GENSTK-1B). Testing for the Amine Heater Stack 1B shall be considered representative for all three Amine Heaters (EPNs AMSTK-1B, 2B, and 3B). If a source (EPNs GENSTK-2, GENSTK-4B, AMSTK-1A, and AUXSTK-1) is found to be in noncompliance with emission limitations, then the other associated sources shall be stack tested within 30 days to determine compliance with the MAERT.

Air contaminants emitted from the sources listed above to be tested include (but are not limited to):

EPN GENSTK-2: NO<sub>x</sub>, CO, and VOC

EPN AUXSTK-1: NO<sub>x</sub>, CO, and VOC

EPN AMSTK-1A: NO<sub>x</sub>, CO, and VOC

EPN GENSTK-4B: NO<sub>x</sub>, CO, and VOC **(10/09)**

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### CONTINUOUS DEMONSTRATION OF COMPLIANCE

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

Each monitor shall be quality-assured at least quarterly using Cylinder Gas Audits (CGA) in accordance with 40 CFR Part 60, Appendix F, Procedure 1, § 5.1.2. An equivalent quality-assurance method approved by the TCEQ may also be used. Successive quarterly audits shall occur no closer than two months.

All CGA exceedances of  $\pm 15$  percent accuracy indicate that the CEMS is out of control.

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- C. The monitoring data shall be reduced to hourly average concentrations at least once every month, using a minimum of four equally-spaced data points from each one-hour period. The individual average concentrations shall be reduced to units of the permit allowable emission rates in pounds per hour at least once every month as follows:

The measured hourly average concentration from the CEMS shall be multiplied by the measured concentration during the latest stack test performed in accordance with Special Condition No. 6 to determine the hourly emission rate.

- D. All monitoring data and quality-assurance data shall be maintained by the source. The data from the CEMS may, at the discretion of the TCEQ, be used to determine compliance with the conditions of this permit.
- E. Quality-assured (or valid) data must be generated when the SRU Incinerator Stack (EPN INCVENT-1) is operating except during the performance of a daily zero and span check. Loss of valid data due to periods of monitor break down, out-of-control operation (producing inaccurate data), repair, maintenance, or calibration may be exempted provided it does not exceed 5 percent of the time (in minutes) that the SRU Incinerator Stack (EPN INCVENT-1) operated over the previous rolling 12-month period. The measurements missed shall be estimated using engineering judgement and the methods used recorded. Options to increase system reliability to an acceptable value, including a redundant CEMS, may be required by the TCEQ Regional Manager.
- F. The CEM requirements (7A-E) are only required when the incinerator is in operation.  
**(7/02)**

## OPERATIONAL WORK PARAMETERS AND DESIGN

8. Fuel for these facilities shall be fuel gas containing no more than 0.25 grain of hydrogen sulfide (H<sub>2</sub>S) per 100 standard cubic foot.
9. Emission rates of nitrogen oxides (NO<sub>x</sub>), carbon monoxide (CO), and VOC from the Electric Generator Nos. 2 and 3 (EPNs GENSTK-2 and GENSTK-3), shall be reported on a dry basis in brake-specific units of gram per horsepower-hour (g/hp-hr) and in units of pounds per hour and are limited as follows:

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<u>Air Contaminant</u>	<u>Emission Rate Limit</u>
NO <sub>x</sub>	1.5 grams/hp-hr
CO	3.0 grams/hp-hr
VOC	1.0 grams/hp-hr

Emission rates of nitrogen oxides (NO<sub>x</sub>), carbon dioxide (CO<sub>2</sub>), and VOC from the Electric Generator No. 1B and 4B (EPNs GENSTK-1B and GENSTK-4B), shall be reported on a dry basis in brake-specific units of gram per horsepower-hour (g/hp-hr) and in units of pounds per hour and are limited as follows: **(10/09)**

<u>Air Contaminant</u>	<u>Emission Rate Limit</u>
NO <sub>x</sub>	0.5 grams/hp-hr
CO	3.0 grams/hp-hr
VOC	0.3 grams/hp-hr

10. Electric Generator Engine No. 1B and Electric Generator No. 4B shall be equipped with an automatic air-fuel ratio (AFR) controller which maintains AFR in the range required to meet the emission limits of Special Condition No. 9. **(10/09)**

Records shall be created and maintained by the owner or operator for a period of at least two years, made available, upon request, to the commission and any local air pollution control agency having jurisdiction, and shall include the following:

- A. Documentation for the AFR controller, manufacturer's, or supplier's recommended maintenance that has been performed, including replacement of the oxygen sensor as necessary for oxygen sensor-based controllers. The oxygen sensor shall be replaced at least quarterly in the absence of a specific written recommendation.
- B. Documentation on proper operation of the engine by recorded measurements of NO<sub>x</sub> and carbon monoxide (CO) emissions as soon as practicable, but no later than seven days following each occurrence of engine maintenance which may reasonably be expected to increase emissions, changes of fuel quality in engines without oxygen sensor-based AFR controllers which may reasonably be expected to increase emissions, oxygen sensor replacement, or catalyst cleaning or catalyst replacement. Stain tube indicators specifically designed to measure NO<sub>x</sub> and CO concentrations shall be acceptable for this documentation, provided a hot air probe or equivalent device is used to prevent error due to high stack temperature, and three sets of concentration measurements are made and averaged. Portable NO<sub>x</sub> and CO analyzers shall also be acceptable for this documentation.

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- C. Documentation within 60 days following the initial stack testing required by Special Condition No. 3 and biennially thereafter, for emissions of NO<sub>x</sub> and CO, measured in accordance with EPA Reference Method 7E or 20 for NO<sub>x</sub> and Method 10 for CO. Exhaust flow rate may be determined from measured fuel flow rate and EPA Method 19. California Air Resources Board Method A-100 (adopted June 29, 1983) is an acceptable alternate to EPA test methods. Modifications to these methods will be subject to the prior approval of the Source and Mobile Monitoring Division of the commission. Emissions shall be measured and recorded in the as-found operating condition; however, compliance determinations shall not be established during start-up, shutdown, or under breakdown conditions. An owner or operator may submit to the appropriate regional office a report of a valid emissions test performed in Texas, on the same engine, conducted no more than 12 months prior to the most recent start of construction date, in lieu of performing an emissions test within 60 days following engine start-up at the new site. Any such engine shall be sampled no less frequently than biennially (or every 15,000 hours of elapsed run time, as recorded by an elapsed run time meter) and upon request of the executive director. Following the initial compliance test, in lieu of performing stack sampling on a biennial calendar basis, an owner or operator may elect to install and operate an elapsed operating time meter and shall test the engine within 15,000 hours of engine operation after the previous emission test. The owner or operator who elects to test on an operating hour schedule shall submit in writing, to the appropriate TCEQ Regional Office, biennially after initial sampling, documentation of the actual recorded hours of engine operation since the previous emission test, and an estimate of the date of the next required sampling.
11. The total sulfur recovered from the sulfur recovery unit (SRU) shall not exceed 40 long tons per day (LTPD), averaged over any-24 hour consecutive period. **(10/07)**
12. The minimum sulfur recovery efficiency for the SRUs shall be determined according to the current sulfur production:

<u>Sulfur Production (LTPD)</u>	<u>Sulfur (percent)</u>	<u>Recovery Length of Time</u>
0 - 10	96	Indefinite
10+	96+	Up to 9 months
10 - 20	98.5	Indefinite
20+	98.5+	Up to 18 months
20 - 260	99.85+	Indefinite

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Once sulfur production exceeds ten LTPD the minimum sulfur recovery efficiency must equal or exceed 96 percent for a period not to exceed nine months. After nine months, the minimum efficiency must equal or exceed 98.5 percent or 99.85 percent depending on current sulfur production.

Once sulfur production exceeds 20 LTPD the minimum sulfur recovery efficiency must equal or exceed 98.5 percent for a period not to exceed 18 months. After 18 months, the minimum efficiency must equal or exceed 99.85 percent.

The sulfur recovery efficiency shall be determined by calculation as follows if a conventional Claus-based SRU is being used:

$$\text{Efficiency} = \frac{(\text{S recovered}) * (100)}{(\text{S recovered}) + (\text{S incinerator})}$$

Where: Efficiency = sulfur recovery efficiency, percent  
S recovered = (S elemental in pit or rolling bin), lbs/hr  
S incinerator = sulfur in incinerator stack, lb/hr

The average sulfur emission recovery efficiency shall be demonstrated for each 24-hour period by a mass balance calculation using data obtained from the incinerator stack sulfur dioxide (SO<sub>2</sub>) monitor, sulfur production records, and other process flow data. Records and copies of the compliance calculations shall be maintained on-site for a period of two years and made immediately available to TCEQ personnel upon request. **(02/00)**

13. All tail gas from the SRU or tail gas cleanup unit shall be routed to the SRU incinerator. The holder of this permit shall report under 30 TAC §§ 101.6 or 101.7 any time the sulfur recovery plant or SRU incinerator is not working sufficiently to achieve the required permitted performance levels. In the event that the SRU is inoperable, the acid gas feed stream may be routed to the emergency facility flare or to the acid gas flare for a period not to exceed 8 hours. Total acid gas flaring shall not exceed 176 hours on a 12-monthly rolling basis. **(10/98)**
14. The SRU Incinerator firebox exit temperature and oxygen (O<sub>2</sub>) level shall be continuously monitored and recorded. The SRU Incinerator shall be operated with not less than 3 percent O<sub>2</sub>. The minimum firebox chamber temperature shall be no less than 1100°F. The minimum set point high temperature cut off for the SRU Incinerator shall be 1800°F.

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15. Emissions of NO<sub>x</sub> from the SRU Incinerator Stack (EPN INCVENT-1) shall not exceed 0.08 lb/MMBtu.
16. Emissions of carbon monoxide (CO) from the SRU Incinerator Stack (EPN INCVENT-1) shall not exceed 100 ppmv corrected to 3 percent O<sub>2</sub>.
17. There shall be no visible emissions from the SRU incinerator stack during normal operations.
18. The rich amine flash tanks shall be equipped with a level detection device which will provide amine/hydrocarbon level detection. This detector shall alarm immediately should the level go below the minimum set point on the level controller. In addition, the rich amine flash tanks shall be manually checked for hydrocarbons at least once per day using sight glasses.
19. The facility's flare shall be designed and operated in accordance with the following requirements: **(10/07)**
  - A. The flare systems shall be designed such that the combined assist natural gas and waste stream to each flare meets the 40 CFR § 60.18 specifications of minimum heating value and maximum tip velocity under normal, upset, and maintenance flow conditions.

The heating value and velocity requirements shall be satisfied during operations authorized by this permit. Flare testing per 40 CFR § 60.18(f) may be requested by the appropriate regional office to demonstrate compliance with these requirements.
  - B. The flare shall be operated with a flame present at all times and/or have a constant pilot flame. The pilot flame shall be continuously monitored by a thermocouple or an infrared monitor. The time, date, and duration of any loss of pilot flame shall be recorded. Each monitoring device shall be accurate to, and shall be calibrated at, a frequency in accordance with, the manufacturer's specifications.
  - C. The flare shall be operated with no visible emissions except periods not to exceed a total of five minutes during any two consecutive hours. This shall be ensured by the use of air assist to the flare.
  - D. The flare shall not have a bypass. **(10/09)**

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LEAK DETECTION AND REPAIR PROGRAMS

20. Piping, Valves, Pumps, and Compressors in H<sub>2</sub>S Service

- A. Audio, olfactory, and visual checks for H<sub>2</sub>S leaks within the operating area shall be made everyday during normal operations.
- B. Immediately but no later than one hour upon detection of a leak, plant personnel shall take the following actions:
  - (1) Isolate the leak
  - (2) Commence repair or replacement of the leaking component
  - (3) Use a leak collection/containment system to prevent the leak until repair or replacement can be made if immediate repair is not possible.

Records shall be maintained at the plant site of all repairs and replacements made due to leaks. These records shall be made available to representatives of the TCEQ upon request.

FEDERAL PROGRAM REQUIREMENTS

- 21. These facilities shall comply with the applicable requirements of the EPA regulations on Standards of Performance for New Stationary Sources promulgated for Onshore Natural Gas Processing: SO<sub>2</sub> emissions in 40 CFR Part 60, Subparts A and LLL.

RECORDKEEPING REQUIREMENTS (10/07)

- 22. The holder of this permit shall make and maintain records of the following:
  - A. Hours that any SRU/SRU Incinerator is inoperable or in the event of an excursion the corrective action taken.
  - B. Daily sulfur production from the SRU.
  - C. The SRU Incinerator firebox exit temperature.
  - D. Manual level checks and alarms related to the amine feed tanks as required by Special Condition No. 18.

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- E. Monitoring and emissions data required to be obtained pursuant to Special Condition Nos. 3, 5, 6, 7, and 10.

The records required shall be maintained at the plant site on a rolling two-year retention basis following the date of such measurements, maintenance, reports, or records and shall be made available upon request to the TCEQ or any local air pollution agency having jurisdiction.

## CAM REQUIREMENTS (10/09)

- 23. For Electric Generator Engines 1B, 2, 3, and 4B (EPNs GENSTK-1B, GENSTK-2, GENSTK-3, and GENSTK-4B) the following requirements must be met:
  - A. The catalytic converter inlet flue gas temperature for each engine shall be maintained between 650° F and 1350° F. It shall be monitored and recorded daily. Each monitoring device shall be calibrated at a frequency in accordance with the manufacturer's specifications or at least annually, whichever is more frequent, and shall be accurate to within 2 percent of reading or degrees Fahrenheit.
  - B. The GENSTK-1B, GENSTK-2, GENSTK-3, and GENSTK-4B NO<sub>x</sub> concentration shall be determined using Reference Method 7E or 20 to stack test the units for NO<sub>x</sub> emissions within 2 years after the previous emission test. The exhaust flow rate shall be determined from measured fuel flow rate and EPA Method 19. California Air Resources Board Method A-100 (adopted June 29, 1983) is an acceptable alternate to EPA test methods. NO<sub>x</sub> Emissions shall be corrected/calculated in units of grams per horsepower-hour.

Date: October 28, 2009

## EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

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This table lists the maximum allowable emission rates and all sources of air contaminants on the applicant's property covered by this permit. The emission rates shown are those derived from information submitted as part of the application for permit and are the maximum rates allowed for these facilities. Any proposed increase in emission rates may require an application for a modification of the facilities covered by this permit. **(4/08)**

### AIR CONTAMINANTS DATA

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates *	
			lb/hr	TPY **
INCVENT-1	SRU Incinerator Stack	VOC	0.16	0.69
		NO <sub>x</sub>	4.50	19.69
		CO	11.62	50.89
		SO <sub>2</sub>	26.29	115.15
		COS	0.01	0.04
		H <sub>2</sub> S	0.09	0.41
		CS <sub>2</sub>	0.01	0.01
		PM <sub>10</sub>	0.77	3.37
FLARE-1	Process Gas Flare	VOC	0.77	3.38
		NO <sub>x</sub>	0.15	0.67
		CO	0.30	1.33
		SO <sub>2</sub>	0.01	0.01
TEGSTK-1A, 2A, and 3A	Glycol Heater No. 1	VOC	0.03	0.14
		NO <sub>x</sub>	0.59	2.58
		CO	0.49	2.16
		SO <sub>2</sub>	0.01	0.02
		PM <sub>10</sub>	0.04	0.20
TEGSTK-1B	Glycol Heater No. 2	VOC	0.01	0.05
		NO <sub>x</sub>	0.22	0.98
		CO	0.19	0.82
		SO <sub>2</sub>	0.01	0.01
		PM <sub>10</sub>	0.02	0.07
AMSTK-1A	Amine Heater No. 1A	VOC	0.10	0.44
		NO <sub>x</sub>	1.18	7.94
		CO	1.52	6.67
		SO <sub>2</sub>	0.01	0.05
		PM <sub>10</sub>	0.14	0.60

## EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

## AIR CONTAMINANTS DATA

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates *	
			lb/hr	TPY **
AMSTK-2A	Amine Heater No. 2A	VOC	0.10	0.44
		NO <sub>x</sub>	1.18	7.94
		CO	1.52	6.67
		SO <sub>2</sub>	0.01	0.05
		PM <sub>10</sub>	0.14	0.60
AMSTK-3A	Amine Heater No. 3A	VOC	0.10	0.44
		NO <sub>x</sub>	1.18	7.94
		CO	1.52	6.67
		SO <sub>2</sub>	0.01	0.05
		PM <sub>10</sub>	0.14	0.60
AUXSTK-1	Auxiliary Boiler No. 1	VOC	0.20	0.87
		NO <sub>x</sub>	3.63	15.89
		CO	3.06	13.38
		SO <sub>2</sub>	0.02	0.10
		PM <sub>10</sub>	0.28	1.21
GENSTK-1B	Electric Generator Engine No. 1B	VOC	0.98	4.28
		NO <sub>x</sub>	1.63	7.14
		CO	9.78	42.85
		SO <sub>2</sub>	0.01	0.03
		PM <sub>10</sub>	0.11	0.48
GENSTK-2	Electric Generator Engine No. 2	VOC	0.05	0.23
		NO <sub>x</sub>	4.02	17.59
		CO	8.03	35.17
		SO <sub>2</sub>	0.01	0.02
		PM <sub>10</sub>	0.09	0.41
GENSTK-3	Electric Generator Engine No. 3	VOC	0.05	0.23
		NO <sub>x</sub>	4.02	17.59
		CO	8.03	35.17
		SO <sub>2</sub>	0.01	0.02
		PM <sub>10</sub>	0.09	0.41
GENSTK-4B	Electric Generator Engine No. 4B	VOC	0.98	4.28
		NO <sub>x</sub>	1.63	7.14
		CO	9.78	42.85
		SO <sub>2</sub>	0.01	0.03
		PM <sub>10</sub>	0.11	0.48

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

AIR CONTAMINANTS DATA

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates *	
			lb/hr	TPY **
EPTANK-2	Amine Tank	VOC	0.02	0.01
EPTANK-3	Glycol Tank	VOC	0.01	0.01
EPTANK-4	Engine Oil Tank	VOC	0.01	0.01
EPTANK-5	Engine Antifreeze Tank	VOC	0.02	0.01
TRUCKFUG-1	Sulfur Truck Loading (4)	H <sub>2</sub> S	0.06	0.26
		SO <sub>2</sub>	0.02	0.08
FACFUG	Facility Fugitive Emissions (4)	VOC	0.36	1.56
		H <sub>2</sub> S	0.02	0.07

- (1) Emission point identification - either specific equipment designation or emission point number from a plot plan.
- (2) Specific point source names. For fugitive sources, use an area name or fugitive source name.
- (3) VOC - volatile organic compounds as defined in Title 30 Texas Administrative Code § 101.1  
NO<sub>x</sub> - total oxides of nitrogen  
SO<sub>2</sub> - sulfur dioxide  
PM<sub>10</sub> - particulate matter (PM) equal to or less than 10 microns in diameter. Where PM is not listed, it shall be assumed that no PM greater than 10 microns is emitted.  
CO - carbon monoxide  
COS - carbonyl sulfide  
CS<sub>2</sub> - carbon disulfide  
H<sub>2</sub>S - hydrogen sulfide
- (4) Fugitive emissions are an estimate only and should not be considered as a maximum allowable emission rate.

\* Emission rates are based on and the facilities are limited by the following maximum operating schedule:

\_\_\_Hrs/day \_\_\_Days/week \_\_\_Weeks/year or 8,760 Hrs/year

\*\* Compliance with annual emission limits is based on a rolling 12-month period.

Date: October 28, 2009