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

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

(5) Compliance Certification:

- (a) If visible emissions are not present during the observation, the RO may certify that the source is in compliance with the applicable opacity requirement in 30 TAC § 111.111(a)(1) and (a)(1)(B).
- (b) However, if visible emissions are present during the observation, the permit holder shall either list this occurrence as a deviation on the next deviation report as required under 30 TAC § 122.145(2) or conduct the appropriate opacity test specified in 30 TAC § 111.111(a)(1)(F) to determine if the source is in compliance with the opacity requirements. If an opacity test is performed and the source is determined to be in compliance, the RO may certify that the source is in compliance with the applicable opacity requirement. However, if an opacity test is performed and the source is determined to be out of compliance, the permit holder shall list this occurrence as a deviation on the next deviation report as required under 30 TAC § 122.145(2). The opacity test must be performed by a certified opacity reader.
- (c) Some vents may be subject to multiple visible emission or monitoring requirements. All credible

data must be considered when certifying compliance with this requirement even if the observation or monitoring was performed to demonstrate compliance with a different requirement.

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

(i) Title 30 TAC § 111.111(a)(7)(A) (relating to Requirements for Specified Sources)

(ii) Title 30 TAC § 111.111(a)(7)(B)(i) or (ii)

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

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

(2) Records of all observations shall be maintained.

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

When water vapor within the plume condenses and becomes visible at a distance from the emissions outlet, the observation shall be evaluated at the outlet prior to condensation of water vapor. A certified opacity reader is not required for visible emissions observations.

(4) Compliance Certification:

- (a) If visible emissions are not present during the observation, the RO may certify that the source is in compliance with the applicable opacity requirement in 30 TAC § 111.111(a)(7) and (a)(7)(A)
- (b) However, if visible emissions are present during the observation, the permit holder shall either list this occurrence as a deviation on the next deviation report as required under 30 TAC § 122.145(2) or conduct the appropriate opacity test specified in 30 TAC § 111.111(a)(7)(B) to determine if the source is in compliance with the opacity requirements. If an opacity test is performed and the source is determined to be in compliance, the RO may certify that the source is in compliance with the applicable opacity requirement. However, if an opacity test is performed and the source is determined to be out of compliance, the permit holder shall list this occurrence as a deviation on the next deviation report as required under 30 TAC § 122.145(2). The opacity test must be performed by a certified opacity reader.

- C. Certification of opacity readers determining opacities under Method 9 (as outlined in 40 CFR Part 60, Appendix A) to comply with opacity monitoring requirements shall be accomplished by completing the Visible Emissions Evaluators Course, or approved agency equivalent, no more than 180 days before the opacity reading.
- D. Emission limits on nonagricultural processes, except for the steam generators specified in 30 TAC § 111.153, shall comply with the following requirements:
 - (i) Emissions of PM from any source may not exceed the allowable rates as required in 30 TAC § 111.151(a) (relating to Allowable Emissions Limits)
 - (ii) Sources with an effective stack height (h_e) less than the standard effective stack height (H_e), must reduce the allowable emission level by multiplying it by $[h_e/H_e]^2$ as required in 30 TAC § 111.151(b)

- (iii) Effective stack height shall be calculated by the equation specified in 30 TAC § 111.151(c)
- 4. 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)
- 5. The permit holder shall comply with certified registrations submitted to the TCEQ for purposes of establishing federally enforceable emission limits. A copy of the certified registration shall be maintained with the permit. Records sufficient to demonstrate compliance with the established limits shall be maintained. The certified registration and records demonstrating compliance shall be provided, on request, to representatives of the appropriate TCEQ regional office and any local air pollution control agency having jurisdiction over the site. The permit holder shall submit updated certified registrations when changes at the site require establishment of new emission limits. If changes result in emissions that do not remain below major source thresholds, the permit holder shall submit a revision application to codify the appropriate requirements in the permit.

Additional Monitoring Requirements

- 6. The permit holder shall comply with the periodic monitoring requirements as specified in the attached “Periodic Monitoring Summary” upon issuance of the permit. Except for, as applicable, monitoring malfunctions, associated repairs, and required quality assurance or control activities (including, as applicable, calibration checks and required zero and span adjustments), the permit holder shall conduct all monitoring in continuous operation (or shall collect data at all required intervals) at all times that the pollutant-specific emissions unit is operating. The permit holder may elect to collect monitoring data on a more

frequent basis and average the data, consistent with the averaging time specified in the “Periodic Monitoring Summary,” for purposes of determining whether a deviation has occurred. However, the additional data points must be collected on a regular basis. In no event shall data be collected and used in particular instances to avoid reporting deviations. Deviations shall be reported according to 30 TAC § 122.145 (Reporting Terms and Conditions).

New Source Review Authorization Requirements

7. 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
8. 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.
9. 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.
 - A. If applicable, monitoring of control device performance or general work practice standards shall be made in accordance with the TCEQ Periodic Monitoring Guidance document.
 - B. 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

10. 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.
11. Permit holder shall comply with the following 30 TAC Chapter 117 requirements:
 - A. The permit holder shall comply with the compliance schedules and submit written notification to the TCEQ Executive Director as required in 30 TAC Chapter 117, Subchapter H, Division 1:
 - (i) For sources in the Beaumont-Port Arthur Nonattainment area, 30 TAC § 117.9000
12. Use of Emission Credits to comply with applicable requirements:
 - A. Unless otherwise prohibited, the permit holder may use emission credits to comply with the following applicable requirements listed elsewhere in this permit:
 - (i) Title 30 TAC Chapter 115
 - (ii) Title 30 TAC Chapter 117
 - (iii) Offsets for Title 30 TAC Chapter 116
 - B. The permit holder shall comply with the following requirements in order to use the emission credits to comply with the applicable requirements:
 - (i) The permit holder must notify the TCEQ according to 30 TAC § 101.306(c)(2)
 - (ii) The emission credits to be used must meet all the geographic, timeliness, applicable pollutant type, and availability requirements listed in 30 TAC Chapter 101, Subchapter H, Division 1
 - (iii) The executive director has approved the use of the credit according to 30 TAC § 101.306(c)(2)
 - (iv) The permit holder keeps records of the use of credits towards compliance with the applicable requirements in accordance with 30 TAC § 101.302(g) and 30 TAC Chapter 122
13. 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

Protection of Stratospheric Ozone

- 14. Permit holders at a site subject to Title VI of the FCAA Amendments shall meet the following requirements for protection of stratospheric ozone.
 - A. Any on site servicing, maintenance, and repair on refrigeration and nonmotor vehicle air-conditioning appliances using ozone-depleting refrigerants or non-exempt substitutes shall be conducted in accordance with 40 CFR Part 82, Subpart F. Permit holders shall ensure that repairs on or refrigerant removal from refrigeration and nonmotor vehicle air-conditioning appliances using ozone-depleting refrigerants are performed only by properly certified technicians using certified equipment. Records shall be maintained as required by 40 CFR Part 82, Subpart F.
 - B. The permit holder shall comply with 40 CFR Part 82, Subpart A for controlling the production, transformation, destruction, export or import of a controlled (ozone-depleting) substance or product as specified in 40 CFR § 82.1 - § 82.13 and the applicable Part 82 Appendices.

- C. The permit holder shall comply with 40 CFR Part 82, Subpart A, § 82.13 related to recordkeeping and reporting requirements for the production and consumption of ozone depleting substances.

Permit Location

- 15. 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)

- 16. 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.

Acid Rain Permit Requirements

- 17. For units CTG-1 & CTG-2, located at the affected source identified by ORIS/Facility code 55120, the designated representative and the owner or operator, as applicable, shall comply with the following Acid Rain Permit requirements.
 - A. General Requirements
 - (i) Under 30 TAC § 122.12(1) and 40 CFR Part 72, the Acid Rain Permit requirements contained here are a separable portion of the Federal Operating Permit (FOP) and have an independent public comment process which may be separate from, or combined with the FOP.
 - (ii) The owner and operator shall comply with the requirements of 40 CFR Part 72 and 40 CFR Part 76. Any noncompliance with the Acid Rain Permit will be considered noncompliance with the FOP and may be subject to enforcement action.
 - (iii) The owners and operators of the affected source shall operate the source and the unit in compliance with the requirements of this Acid Rain Permit and all other applicable State and federal requirements.

- (iv) The owners and operators of the affected source shall comply with the General Terms and Conditions of the FOP that incorporates this Acid Rain Permit.
- (v) The term for the Acid Rain permit shall commence with the issuance of the FOP that incorporates the Acid Rain permit and shall be run concurrent with the remainder of the term of the FOP. Renewal of the Acid Rain permit shall coincide with the renewal of the FOP that incorporates the Acid Rain permit and subsequent terms shall be no more than five years from the date of renewal of the FOP and run concurrent with the permit term of the FOP.

B. Monitoring Requirements

- (i) The owners and operators, and the designated representative, of the affected source and each affected unit at the source shall comply with the monitoring requirements contained 40 CFR Part 75.
- (ii) The emissions measurements recorded and reported in accordance with 40 CFR Part 75 and any other credible evidence shall be used to determine compliance by the affected source with the acid rain emissions limitations and emissions reduction requirements for SO₂ and NO_x under the ARP.
- (iii) The requirements of 40 CFR Part 75 shall not affect the responsibility of the owners and operators to monitor emission of other pollutants or other emissions characteristics at the unit under other applicable requirements of the FCAA Amendments (42 U.S.C. 7401, as amended November 15, 1990) and other terms and conditions of the operating permit for the source.

C. SO₂ emissions requirements

- (i) The owners and operators of each source and each affected unit at the source shall comply with the applicable acid rain emissions limitations for SO₂.
- (ii) As of the allowance transfer deadline the owners and operators of the affected source and each affected unit at the source shall hold, in the unit's compliance subaccount, allowances in an amount not less than the total annual emissions of SO₂ for the previous calendar year.
- (iii) Each ton of SO₂ emitted in excess of the acid rain emissions limitations for SO₂ shall constitute a separate violation of the FCAA amendments.

- (iv) An affected unit shall be subject to the requirements under (i) and (ii) of the SO₂ emissions requirements as follows:
 - (1) Starting January 1, 2000, an affected unit under 40 CFR § 72.6(a)(2); or
 - (2) Starting on the later of January 1, 2000 or the deadline for monitor certification under 40 CFR Part 75, an affected unit under 40 CFR § 72.6(a)(3).
- (v) Allowances shall be held in, deducted from, or transferred into or among Allowance Tracking System accounts in accordance with the requirements of the ARP.
- (vi) An allowance shall not be deducted, for compliance with the requirements of this permit, in a calendar year before the year for which the allowance was allocated.
- (vii) An allowance allocated by the EPA Administrator or under the ARP is a limited authorization to emit SO₂ in accordance with the ARP. No provision of the ARP, Acid Rain permit application, this Acid Rain Permit, or an exemption under 40 CFR §§ 72.7 or 72.8 and no provision of law shall be construed to limit the authority of the United States to terminate or limit such authorization.
- (viii) An allowance allocated by the EPA Administrator under the ARP does not constitute a property right.

D. NO_x Emission Requirements

- (i) The owners and operators of the source and each affected unit at the source shall comply with the applicable acid rain emissions limitations for NO_x under 40 CFR Part 76.

E. Excess emissions requirements for SO₂ and NO_x.

- (i) The designated representative of an affected unit that has excess emissions in any calendar year shall submit a proposed offset plan, as required under 40 CFR Part 77.
- (ii) If an affected source has excess emissions in any calendar year shall, as required by 40 CFR Part 77:
 - (1) Pay, without demand, the penalty required and pay, upon demand, the interest on that penalty.
 - (2) Comply with the terms of an approved offset plan.

F. Recordkeeping and Reporting Requirements

- (i) Unless otherwise provided, the owners and operators of the affected source and each affected unit at the source shall keep on site at the source each of the following documents for a period of 5 years from the date the document is created. This period may be extended for cause, at any time before the end of 5 years, in writing by the permitting authority or the EPA Administrator.
 - (1) The certificate of representation for the designated representative for the source and each affected unit and all documents that demonstrate the truth of the statements in the certificate of representation, in accordance with 40 CFR § 72.24; provided that the certificate and documents shall be retained on site at the source beyond such 5-year period until such documents are superseded because of the submission of a new certificate of representation changing the designated representative.
 - (2) All emissions monitoring information, in accordance with 40 CFR Part 75, provided that to the extent that 40 CFR Part 75 provides for a 3-year period for recordkeeping (rather than a five-year period cited in 30 TAC § 122.144), the 3-year period shall apply.
 - (3) Copies of all reports, compliance certifications, and other submissions and all records made or required under the ARP or relied upon for compliance certification.
 - (4) Copies of all documents used to complete an acid rain permit application and any other submission under the ARP or to demonstrate compliance with the requirements of the ARP.
- (ii) The designated representative of an affected source and each affected unit at the source shall submit the reports required under the ARP including those under 40 CFR Part 72, Subpart I and 40 CFR Part 75.

G. Liability

- (i) Any person who knowingly violates any requirement or prohibition of the ARP, a complete acid rain permit application, an acid rain permit, or a written exemption under 40 CFR §§ 72.7 or 72.8, including any requirement for the payment of any penalty owed to the United States, shall be subject to enforcement pursuant to FCAA § 113(c).
- (ii) Any person who knowingly makes a false, material statement in any record, submission, or report under the ARP shall be subject to

criminal enforcement pursuant to FCAA § 113(c) and 18 U.S.C. 1001.

- (iii) No permit revision shall excuse any violation of the requirements of the ARP that occurs prior to the date that the revision takes effect.
 - (iv) The affected source and each affected unit shall meet the requirements of the ARP contained in 40 CFR Parts 72 through 78.
 - (v) Any provision of the ARP that applies to an affected source or the designated representative of an affected source shall also apply to the owners and operators of such source and of the affected units at the source.
 - (vi) Any provision of the ARP that applies to an affected unit (including a provision applicable to the DR of an affected unit) shall also apply to the owners and operators of such unit. Except as provided under 40 CFR § 72.44 (Phase II repowering extension plans) and 40 CFR § 76.11 (NO_x averaging plans), and except with regard to the requirements applicable to units with a common stack under 40 CFR Part 75 (including 40 CFR §§ 75.16, 75.17, and 75.18), the owners and operators and the DR of one affected unit shall not be liable for any violation by any other affected unit of which they are not owners or operators or the DR and that is located at a source of which they are not owners or operators or the DR.
 - (vii) Each violation of a provision of 40 CFR Parts 72, 73, 74, 75, 76, 77, and 78 by an affected source or affected unit, or by an owner or operator or DR of such source or unit, shall be a separate violation of the FCAA Amendments.
- H. Effect on other authorities. No provision of the ARP, an acid rain permit application, an acid rain permit, or an exemption under 40 CFR §§ 72.7 or 72.8 shall be construed as:
- (i) Except as expressly provided in Title IV of the FCAA Amendments, exempting or excluding the owners and operators and, to the extent applicable, the DR of an affected source or affected unit from compliance with any other provision of the FCAA Amendments, including the provisions of Title I of the FCAA Amendments relating to applicable National Ambient Air Quality Standards or State Implementation Plans.
 - (ii) Limiting the number of allowances a unit can hold; provided, that the number of allowances held by the unit shall not affect the source's obligation to comply with any other provisions of the FCAA Amendments.

- (iii) Requiring a change of any kind in any state law regulating electric utility rates and charges, affecting any state law regarding such state regulation, or limiting such state regulation, including any prudence review requirements under such state law.
 - (iv) Modifying the Federal Power Act or affecting the authority of the Federal Energy Regulatory Commission under the Federal Power Act; or,
 - (v) Interfering with or impairing any program for competitive bidding for power supply in a state in which such program is established.
- I. The number of SO₂ allowances allocated by the EPA in 40 CFR Part 73 is enforceable only by the EPA Administrator.

Clean Air Interstate Rule Permit Requirements

18. For units CTG-1 & CTG-2, located at the site identified by ORIS/Facility code 55120, the designated representative and the owner or operator, as applicable, shall comply with the following Clean Air Interstate Rule (CAIR) Permit requirements. Until approval of the Texas CAIR SIP by EPA, the permit holder shall comply with the equivalent requirements of 40 CFR Part 97 in place of the referenced 40 CFR Part 96 requirements in the Texas CAIR permit and 30 TAC Chapter 122 requirements.
- A. General Requirements
- (i) Under 30 TAC § 122.420(b) and 40 CFR §§ 96.120(b) and 96.220(b) the CAIR Permit requirements contained here are a separable portion of the Federal Operating Permit (FOP).
 - (ii) The owners and operators of the CAIR NO_x and the CAIR SO₂ source shall operate the source and the unit in compliance with the requirements of this CAIR permit and all other applicable State and federal requirements.
 - (iii) The owners and operators of the CAIR NO_x and the CAIR SO₂ source shall comply with the General Terms and Conditions of the FOP that incorporates this CAIR Permit.
 - (iv) The term for the initial CAIR permit shall commence with the issuance of the revision containing the CAIR permit and shall be the remaining term for the FOP that incorporates the CAIR permit. Renewal of the initial CAIR permit shall coincide with the renewal of the FOP that incorporates the CAIR permit and subsequent terms shall be no more than five years from the date of renewal of the FOP and run concurrent with the permit term of the FOP.

B. Monitoring and Reporting Requirements

- (i) The owners and operators, and the CAIR designated representative, of the CAIR NO_x source and each CAIR NO_x unit at the source shall comply with the monitoring, reporting, and recordkeeping requirements contained 40 CFR Part 96, Subpart HH.
- (ii) The owners and operators, and the CAIR designated representative, of the CAIR SO₂ source and each CAIR SO₂ unit at the source shall comply with the monitoring, reporting, and recordkeeping requirements contained 40 CFR Part 96, Subpart HHH.
- (iii) The emissions measurements recorded and reported in accordance with 40 CFR Part 96, Subpart HH and any other credible evidence shall be used to determine compliance by the CAIR NO_x source with the CAIR NO_x emissions limitation.
- (iv) The emissions measurements recorded and reported in accordance with 40 CFR Part 96, Subpart HHH and any other credible evidence shall be used to determine compliance by the CAIR SO₂ source with the CAIR SO₂ emissions limitation.

C. NO_x emissions requirements

- (i) As of the allowance transfer deadline for a control period, the owners and operators of the CAIR NO_x source and each CAIR NO_x unit at the source shall hold, in the source's compliance account, CAIR NO_x allowances available for compliance deductions for the control period under 40 CFR § 96.154(a) in an amount not less than the tons of total nitrogen oxides emissions for the control period from all CAIR NO_x units at the source, as determined in accordance with the requirements of 40 CFR Part 96, Subpart HH.
- (ii) A CAIR NO_x unit shall be subject to the requirements of paragraph C.(i) of this CAIR Permit starting on the later of January 1, 2009, or the deadline for meeting the unit's monitor certification requirements under 40 CFR § 96.170(b)(1), (2), or (5).
- (iii) A CAIR NO_x allowance shall not be deducted, for compliance with the requirements of this permit, for a control period in a calendar year before the year for which the CAIR NO_x allowance was allocated.
- (iv) CAIR NO_x allowances shall be held in, deducted from or transferred into or among CAIR NO_x Allowance Tracking System accounts in accordance with the requirements of 40 CFR Part 96, Subpart FF or Subpart GG.

- (v) A CAIR NO_x allowance is a limited authorization to emit one ton of nitrogen oxides in accordance with the CAIR NO_x Annual Trading Program. No provision of the CAIR NO_x Annual Trading Program, the CAIR permit application, the CAIR permit, or an exemption under 40 CFR § 96.105 and no provision of law shall be construed to limit the authority of the State or the United States to terminate or limit such authorization.
- (vi) A CAIR NO_x allowance does not constitute a property right.
- (vii) Upon recordation by the Administrator under 40 CFR Part 96, Subpart FF or Subpart GG, every allocation, transfer, or deduction of a CAIR NO_x allowance to or from a CAIR NO_x unit's compliance account is incorporated automatically in this CAIR permit.

D. NO_x excess emissions requirement

- (i) If a CAIR NO_x source emits nitrogen oxides during any control period in excess of the CAIR NO_x emissions limitation, the owners and operators of the source and each CAIR NO_x unit at the source shall surrender the CAIR NO_x allowances required for deduction under 40 CFR § 96.154(d)(1) and pay any fine, penalty, or assessment or comply with any other remedy imposed, for the same violations, under the Clean Air Act or applicable State law.
- (ii) Each ton of such excess emissions and each day of such control period shall constitute a separate violation of 40 CFR Part 96, Subpart AA, the Clean Air Act, and applicable State law.

E. SO₂ emissions requirements

- (i) As of the allowance transfer deadline for a control period, the owners and operators of the CAIR SO₂ source and each CAIR SO₂ unit at the source shall hold, in the source's compliance account, CAIR SO₂ allowances available for compliance deductions for the control period under 40 CFR § 96.254(a) and (b) in an amount not less than the tons of total sulfur dioxides emissions for the control period from all CAIR SO₂ units at the source, as determined in accordance with the requirements of 40 CFR Part 96, Subpart HHH.
- (ii) A CAIR SO₂ unit shall be subject to the requirements of paragraph E.(i) of this CAIR Permit starting on the later of January 1, 2010, or the deadline for meeting the unit's monitor certification requirements under 40 CFR § 96.270(b)(1), (2), or (5).
- (iii) A CAIR SO₂ allowance shall not be deducted, for compliance with the requirements of this permit, for a control period in a calendar

year before the year for which the CAIR SO₂ allowance was allocated.

- (iv) CAIR SO₂ allowances shall be held in, deducted from, or transferred into or among CAIR SO₂ Allowance Tracking System accounts in accordance with the requirements of 40 CFR Part 96, Subpart FFF or Subpart GGG.
- (v) A CAIR SO₂ allowance is a limited authorization to emit sulfur dioxide in accordance with the CAIR SO₂ Trading Program. No provision of the CAIR SO₂ Trading Program, the CAIR permit application, the CAIR permit, or an exemption under 40 CFR § 96.205 and no provision of law shall be construed to limit the authority of the State or the United States to terminate or limit such authorization.
- (vi) A CAIR SO₂ allowance does not constitute a property right.
- (vii) Upon recordation by the Administrator under 40 CFR Part 96, Subpart FFF or Subpart GGG, every allocation, transfer, or deduction of a CAIR SO₂ allowance to or from a CAIR SO₂ unit's compliance account is incorporated automatically in this CAIR permit.

F. SO₂ excess emissions requirements

- (i) If a CAIR SO₂ source emits sulfur dioxides during any control period in excess of the CAIR SO₂ emissions limitation, the owners and operators of the source and each CAIR SO₂ unit at the source shall surrender the CAIR SO₂ allowances required for deduction under 40 CFR § 96.254(d)(1) and pay any fine, penalty, or assessment or comply with any other remedy imposed, for the same violations, under the Clean Air Act or applicable State law.
- (ii) Each ton of such excess emissions and each day of such control period shall constitute a separate violation of 40 CFR Part 96, Subpart AAA, the Clean Air Act, and applicable State law.

G. Recordkeeping and Reporting Requirements

- (i) Unless otherwise provided, the owners and operators of the CAIR NO_x source and each CAIR NO_x unit at the source and the CAIR SO₂ source and each CAIR SO₂ unit at the source shall keep on site at the source each of the following documents for a period of 5 years from the date the document is created. This period may be extended for cause, at any time before the end of 5 years, in writing by the permitting authority or the Administrator.

- (1) The certificate of representation under 40 CFR §§ 96.113 and 96.213 for the CAIR NO_x designated representative for the source and each CAIR NO_x unit and the CAIR SO₂ designated representative for the source and each CAIR SO₂ unit at the source and all documents that demonstrate the truth of the statements in the certificate of representation; provided that the certificate and documents shall be retained on site at the source beyond such 5 year period until such documents are superseded because of the submission of a new certificate of representation under 40 CFR §§ 96.113 and 96.213 changing the CAIR designated representative.
 - (2) All emissions monitoring information, in accordance with 40 CFR Part 96, Subpart HH and Subpart HHH, provided that to the extent that these subparts provide for a 3-year period for recordkeeping, the 3-year period shall apply.
 - (3) Copies of all reports, compliance certifications, and other submissions and all records made or required under the CAIR NO_x Annual Trading Program and CAIR SO₂ Trading Program or relied upon for compliance determinations.
 - (4) Copies of all documents used to complete a CAIR permit application and any other submission under the CAIR NO_x Annual Trading Program and CAIR SO₂ Trading Program or to demonstrate compliance with the requirements of the CAIR NO_x Annual Trading Program and CAIR SO₂ Trading Program.
- (ii) The CAIR designated representative of a CAIR NO_x source and each CAIR NO_x unit at the source and a CAIR SO₂ source and each CAIR SO₂ unit at the source shall submit the reports required under the CAIR NO_x Annual Trading Program and the CAIR SO₂ Trading Program including those under 40 CFR Part 96, Subpart HH and Subpart HHH.
- H. The CAIR NO_x source and each CAIR NO_x unit shall meet the requirements of the CAIR NO_x Annual Trading Program contained in 40 CFR Part 96, Subparts AA through II.
- I. The CAIR SO₂ source and each CAIR SO₂ unit shall meet the requirements of the CAIR SO₂ Trading Program contained in 40 CFR Part 96, Subparts AAA through III.
- J. Any provision of the CAIR NO_x Annual Trading Program and the CAIR SO₂ Trading Program that applies to a CAIR NO_x source or CAIR SO₂ source or the CAIR designated representative of a CAIR NO_x source or

CAIR SO₂ source shall also apply to the owners and operators of such source and the units at the source.

- K. Any provision of the CAIR NO_x Annual Trading Program and the CAIR SO₂ Trading Program that applies to a CAIR NO_x unit or CAIR SO₂ unit or the CAIR designated representative of a CAIR NO_x unit or CAIR SO₂ unit shall also apply to the owners and operators of such unit.
- L. No provision of the CAIR NO_x Annual Trading Program, CAIR SO₂ Trading Program, a CAIR permit application, a CAIR permit, or an exemption under 40 CFR §§ 96.105 or 96.205 shall be construed as exempting or excluding the owners and operators, and the CAIR designated representative, of a CAIR NO_x source or CAIR NO_x unit or a CAIR SO₂ source or CAIR SO₂ unit from compliance with any other provision of the applicable, approved State implementation plan, a federally enforceable permit, or the Clean Air Act.

Attachments

Applicable Requirements Summary

Additional Monitoring Requirements

Permit Shield

New Source Review Authorization References

Applicable Requirements Summary

Unit Summary 24

Applicable Requirements Summary 25

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

Unit Summary

Unit/Group/ Process ID No.	Unit Type	Group/Inclusive Units	SOP Index No.	Regulation	Requirement Driver
GRP-HRSG	Boilers/Steam Generators/ Steam Generating Units	HRSG-1, HRSG-2	60Da-1	40 CFR Part 60, Subpart Da	D-SERIES FUEL TYPE #1 = Natural gas
GRP-HRSG	Boilers/Steam Generators/ Steam Generating Units	HRSG-1, HRSG-2	60Da-2	40 CFR Part 60, Subpart Da	D-SERIES FUEL TYPE #1 = Natural gas D-SERIES FUEL TYPE #2 = Gaseous nonfossil fuel.
GRP-STACK	Emission Points/Stationary Vents/Process Vents	CTG-1, CTG-2	R111-1	30 TAC Chapter 111, Visible Emissions	No changing attributes.
GRP-TURBINE	Stationary Turbines	CTG-1, CTG-2	60GG-1	40 CFR Part 60, Subpart GG	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)
GRP-HRSG	EU	60Da-1	NO _x	40 CFR Part 60, Subpart Da	§ 60.44Da(d)(1) § 60.48Da(a)	No owner or operator shall discharge any gases that contain NO _x (expressed as NO ₂) in excess of 200 ng/J (1.6 lb/MWh) gross energy output, based on a 30-day rolling average basis.	§ 60.48Da(h) § 60.48Da(i) [G]§ 60.48Da(k)(2) [G]§ 60.48Da(k)(3) § 60.49Da(c)(2) § 60.49Da(e) § 60.49Da(j)(2) § 60.49Da(j)(3) § 60.49Da(j)(4) [G]§ 60.49Da(k) § 60.49Da(m) [G]§ 60.49Da(s) [G]§ 60.49Da(w) § 60.50Da(a) [G]§ 60.50Da(d) [G]§ 60.50Da(e) § 60.50Da(f)	[G]§ 60.49Da(s) [G]§ 60.49Da(w)	[G]§ 60.49Da(s) [G]§ 60.49Da(w) § 60.51Da(a) § 60.51Da(b) § 60.51Da(b)(1) § 60.51Da(b)(5) § 60.51Da(b)(6) § 60.51Da(b)(7) § 60.51Da(b)(8) § 60.51Da(b)(9) § 60.51Da(f) [G]§ 60.51Da(h) § 60.51Da(j) § 60.51Da(k)
GRP-HRSG	EU	60Da-1	SO ₂	40 CFR Part 60, Subpart Da	§ 60.43Da(b)(2) § 60.43Da(g) § 60.48Da(a)	No owner or operator shall discharge any gases that contain sulfur dioxide in excess of 100 percent of the potential combustion concentration (zero percent reduction) when emissions are less than 86 ng/J (0.20 lb/MMBtu) heat input.	§ 60.50Da(a) [G]§ 60.50Da(c) [G]§ 60.50Da(e) § 60.50Da(f)	None	§ 60.51Da(a) § 60.51Da(b) § 60.51Da(b)(1) § 60.51Da(b)(5) § 60.51Da(b)(6) § 60.51Da(b)(7) [G]§ 60.51Da(e) § 60.51Da(f) [G]§ 60.51Da(h) § 60.51Da(j) § 60.51Da(k)
GRP-HRSG	EU	60Da-2	PM (OPACITY)	40 CFR Part 60, Subpart Da	§ 60.42Da(b) § 60.48Da(a)	No owner or operator shall discharge any gases which exhibit greater than 20 percent opacity (6-minute average), except for one 6-minute period per hour of not more than 27 percent opacity. Owners and operators that elect to install, calibrate, maintain	§ 60.48Da(q) [G]§ 60.49Da(a)(3) § 60.50Da(a) § 60.50Da(b)(3) [G]§ 60.50Da(e)	[G]§ 60.52Da(b)	§ 60.51Da(a) § 60.51Da(f) [G]§ 60.51Da(h) § 60.51Da(i) § 60.51Da(j) § 60.51Da(k)

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)
						and operate a CEMS for measuring PM emissions are exempt from the opacity standard.			
GRP-HRSG	EU	60Da-2	NO _x	40 CFR Part 60, Subpart Da	§ 60.44Da(d)(1) § 60.48Da(a)	No owner or operator shall discharge any gases that contain NO _x (expressed as NO ₂) in excess of 200 ng/J (1.6 lb/MWh) gross energy output, based on a 30-day rolling average basis.	§ 60.48Da(h) § 60.48Da(i) [G]§ 60.48Da(k)(2) [G]§ 60.48Da(k)(3) § 60.49Da(c)(2) § 60.49Da(e) § 60.49Da(h) § 60.49Da(j)(2) § 60.49Da(j)(3) § 60.49Da(j)(4) [G]§ 60.49Da(k) § 60.49Da(m) [G]§ 60.49Da(s) [G]§ 60.49Da(w) § 60.50Da(a) [G]§ 60.50Da(d) [G]§ 60.50Da(e) § 60.50Da(f)	[G]§ 60.49Da(s) [G]§ 60.49Da(w)	[G]§ 60.49Da(s) [G]§ 60.49Da(w) § 60.51Da(a) § 60.51Da(b) § 60.51Da(b)(1) § 60.51Da(b)(5) § 60.51Da(b)(6) § 60.51Da(b)(7) § 60.51Da(b)(8) § 60.51Da(b)(9) § 60.51Da(f) [G]§ 60.51Da(h) § 60.51Da(j) § 60.51Da(k)
GRP-HRSG	EU	60Da-2	SO ₂	40 CFR Part 60, Subpart Da	§ 60.43Da(b)(2) § 60.43Da(g) § 60.48Da(a)	No owner or operator shall discharge any gases that contain sulfur dioxide in excess of 100 percent of the potential combustion concentration (zero percent reduction) when emissions are less than 86 ng/J (0.20 lb/MMBtu) heat input.	§ 60.50Da(a) [G]§ 60.50Da(c) [G]§ 60.50Da(e) § 60.50Da(f)	None	§ 60.51Da(a) § 60.51Da(b) § 60.51Da(b)(1) § 60.51Da(b)(5) § 60.51Da(b)(6) § 60.51Da(b)(7) [G]§ 60.51Da(e) § 60.51Da(f) [G]§ 60.51Da(h) § 60.51Da(j) § 60.51Da(k)
GRP-STACK	EP	R111-1	OPACITY	30 TAC Chapter 111, Visible Emissions	§ 111.111(a)(1)(C) § 111.111(a)(1)(E)	Visible emissions from any stationary vent shall not exceed an opacity of 15% averaged over a six minute	[G]§ 111.111(a)(1)(F) ** See Periodic Monitoring Summary	None	None

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
						period for any source with a total flow rate of at least 100,000 acfm unless a CEMS is installed.			
GRP-TURBINE	EU	60GG-1	SO ₂	40 CFR Part 60, Subpart GG	§ 60.333(b)	No stationary gas turbine shall burn any fuel which contains sulfur in excess of 0.8% by weight.	§ 60.334(h) [G]§ 60.334(h)(3)	None	None
GRP-TURBINE	EU	60GG-1	NO _x	40 CFR Part 60, Subpart GG	§ 60.332(a)(1) § 60.332(a)(3)	No owner or operator shall discharge into the atmosphere from any stationary gas turbine, any gases which contain nitrogen oxides in excess of the amount as determined from the specified equation.	[G]§ 60.334(b) § 60.334(j) § 60.334(j)(1) [G]§ 60.334(j)(1)(iii) [G]§ 60.335(a) § 60.335(b)(2) § 60.335(b)(3)	[G]§ 60.334(b)	§ 60.334(j) § 60.334(j)(5)

Additional Monitoring Requirements

Periodic Monitoring Summary..... 29

Periodic Monitoring Summary

Unit/Group/Process Information	
ID No.: GRP-STACK	
Control Device ID No.: N/A	Control Device Type: N/A
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 111, Visible Emissions	SOP Index No.: R111-1
Pollutant: OPACITY	Main Standard: § 111.111(a)(1)(C)
Monitoring Information	
Indicator: Fuel Type	
Minimum Frequency: Annually	
Averaging Period: n/a	
Deviation Limit: If an alternate fuel is fired, either alone or in combination with the specified gas, it shall be considered and reported as a deviation.	
Periodic Monitoring Text: Record the type of fuel used by the unit. If an alternate fuel is fired, either alone or in combination with the specified gas, it shall be considered and reported as a deviation.	

Permit Shield

Permit Shield31

Permit Shield

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

Unit/Group/Process		Regulation	Basis of Determination
ID No.	Group/Inclusive Units		
GRP-HRSG	HRSG-1, HRSG-2	30 TAC Chapter 117, Commercial	Boiler is a new unit placed into service after 11/15/1992.
GRP-HRSG	HRSG-1, HRSG-2	40 CFR Part 60, Subpart D	Steam generating unit meets the applicability requirements under 40 CFR 60 Subpart Da.
GRP-HRSG	HRSG-1, HRSG-2	40 CFR Part 60, Subpart Db	Steam generating unit meets the applicability requirements under 40 CFR 60 Subpart Da.
GRP-HRSG	HRSG-1, HRSG-2	40 CFR Part 60, Subpart Dc	Steam generating unit has a maximum design heat input capacity greater than 100 MMBtu/hr.
GRP-HRSG	HRSG-1, HRSG-2	40 CFR Part 63, Subpart JJJJJJ	Unit is a gas-fired boiler as defined in this subpart.
GRP-STACK	CTG-1, CTG-2	30 TAC Chapter 115, Vent Gas Controls	Vent gas stream is not being used as a control device and originates from a non-combustion source.
CTG-CT-1	N/A	40 CFR Part 63, Subpart Q	Industrial process cooling tower does not operate with chromium-based water treatment chemicals.
ENGINE 1	N/A	30 TAC Chapter 117, Subchapter B	CI ICE is a portable emergency engine.
ENGINE 1	N/A	40 CFR Part 60, Subpart IIII	CI ICE is a portable emergency engine.
ENGINE 1	N/A	40 CFR Part 63, Subpart ZZZZ	CI ICE is a portable emergency engine.
GRP-TURBINE	CTG-1, CTG-2	30 TAC Chapter 117, Commercial	Stationary gas turbine is a new unit placed into service after 11/15/1992.
OWS-1	N/A	30 TAC Chapter 115, Water Separation	Water separator is designed solely to capture stormwater, spills, or exterior surface cleanup waters and is fully covered.

New Source Review Authorization References

New Source Review Authorization References 33

New Source Review Authorization References by Emission Unit..... 34

New Source Review Authorization References

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

Prevention of Significant Deterioration (PSD) Permits	
PSD Permit No.: PSDTX929	Issuance Date: 03/12/2012
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.: 40496	Issuance Date: 03/12/2012
Permits By Rule (30 TAC Chapter 106) for the Application Area	
Number: 106.263	Version No./Date: 11/01/2001
Number: 106.472	Version No./Date: 09/04/2000
Number: 106.511	Version No./Date: 09/04/2000

New Source Review Authorization References by Emissions Unit

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

Unit/Group/Process ID No.	Emission Unit Name/Description	New Source Review Authorization
CTG-1	TURBINE	40496, PSDTX929
CTG-1	TURBINE/HRSG STACK	40496, PSDTX929
CTG-2	TURBINE	40496, PSDTX929
CTG-2	TURBINE/HRSG STACK	40496, PSDTX929
CTG-CT-1	COOLING TOWER	40496, PSDTX929
ENGINE 1	PORTABLE EMERGENCY DIESEL ENGINE	106.511/09/04/2000
HRSG-1	DUCT BURNER	40496, PSDTX929
HRSG-2	DUCT BURNER	40496, PSDTX929
OWS-1	OIL WATER SEPARATOR	40496, PSDTX929

Appendix A

Acronym List 36

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 ₂ S	.....	hydrogen sulfide
ID No.	.....	identification number
lb/hr	.....	pound(s) per hour
MMBtu/hr	.....	Million British thermal units per hour
MRRT	.....	monitoring, recordkeeping, reporting, and testing
NA	.....	nonattainment
N/A	.....	not applicable
NADB	.....	National Allowance Data Base
NO _x	.....	nitrogen oxides
NSPS	.....	New Source Performance Standard (40 CFR Part 60)
NSR	.....	New Source Review
ORIS	.....	Office of Regulatory Information Systems
Pb	.....	lead
PBR	.....	Permit By Rule
PM	.....	particulate matter
ppmv	.....	parts per million by volume
PSD	.....	prevention of significant deterioration
RO	.....	Responsible Official
SO ₂	.....	sulfur dioxide
TCEQ	.....	Texas Commission on Environmental Quality
TSP	.....	total suspended particulate
TVP	.....	true vapor pressure
U.S.C.	.....	United States Code
VOC	.....	volatile organic compound

Appendix B

Major NSR Summary Table.....38

Major NSR Summary Table

Permit Number: 40496 and PSDTX929 (Issuance Date: 3/12/2012)							
Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates *		Monitoring and Testing Requirements	Recordkeeping Requirements	Reporting Requirements
			lb/hr	TPY**			
CTG-1	Turbine/HRSG	NOx NOx (MSS) CO CO (MSS) VOC VOC (MSS) PM SO2 NH3 H2SO4	41.4 205.48 90.49 1022.56 9.83 25 23.06 35.6 32.8 3.6		4; 5; 7; 10; 12; 13; 15; 16; 17; 19; 26	4; 5; 7; 10; 12; 13; 15; 16; 17; 18; 19; 26	12; 13; 20; 22
CTG-2	Turbine/HRSG	NOx NOx (MSS) CO CO (MSS) VOC VOC (MSS) PM SO2 NH3 H2SO4	41.4 205.48 90.49 1022.56 9.83 25 23.06 35.6 32.8 3.6		4; 5; 7; 10; 12; 13; 15; 16; 17; 19; 26	4; 5; 7; 10; 12; 13; 15; 16; 17; 18; 19; 26	12; 13; 20; 22
CTG-1 and CTG-2	Two Turbines/HRSG	NOx CO VOC PM SO2 NH3 H2SO4	349.8 682.7 25.9 46.1 71.2 65.6 7.1		4; 5; 7; 10; 12; 13; 15; 16; 17; 19; 26	4; 5; 7; 10; 12; 13; 15; 16; 17; 18; 19; 26	12; 13; 20; 22
CTG-1 and CTG-2	Two Turbines/HRSG	NOx NOx (MSS) CO CO (MSS) VOC VOC (MSS) PM SO2 NH3 H2SO4		379.5 3.57 2345.5 9.14 63 0.85 189.4 12.6 259.6 1.3	4; 5; 7; 10; 12; 13; 15; 16; 17; 19; 26	4; 5; 7; 10; 12; 13; 15; 16; 17; 18; 19; 26	12; 13; 20; 22
CTG-CT-1	Cooling Tower	PM	2.48	2.48			
CTGFUG	Fugitives (5)	VOC NH3	0.01 0.16	0.09 0.7			
COALESCER	Natural Gas / Liquid Separator	VOC	0.23	1			
CTGNH3	Ammonia Tank Storage	NH3	0.02	1	9	9	
OVS	Oil/Water Separator	VOC	0.02	0.1			
UNLOAD	Unloading Ammonia (AQ) Trucks	NH3	0.02	0.1			

MAINT	Maint. Startup, Shutdown	VOC	0.02	0.1	25; 26	25; 26	
CHEMSTOR	Water Treatment Chemical Storage	VOC	0.02	0.1	25; 26	25; 26	
FUEL-VENT	Fuel Venting	VOC CO	0.18 <0.01	25; 26	25;26		
ON-WASH	Online Turbine Water Washing	PM	0.03	<0.01	25; 26	25; 26	
OFF-WASH	Offline Turbine Washing	VOC	399.4	1.43	25; 26	25; 26	
COAL-LOAD	Loading of Coalescer Fluid	VOC	0.32	<0.01	25; 26	25; 26	
COAL-DEPR	Depress of Coalescer	VOC CO	3.3 0.1	<0.01 <0.01	25; 26	25; 26	
VAC-LOAD	Vacuum Loading form Tanks / Sumps	VOC NH3	0.68 2.12	<0.01 <0.01	25; 26	25; 26	
TANK-DEGAS	Draining and Degassing of Tanks	NH3	26.49	0.01	25; 26	25; 26	
CEM-CAL	CEMS Calibration	NOx CO	0.06 0.04	<0.01 <0.01	25; 26	25; 26	

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

NOx – total oxides of nitrogen

SO2 – sulfur dioxide

PM – total particulate matter, suspended in the atmosphere, including PM10 and

PM2.5, as represented

PM10 – total particulate matter equal to or less than 10 microns in diameter, including

PM2.5, as represented

PM2.5 – particulate matter equal to or less than 2.5 micron in diameter

CO – carbon monoxide

NH3 – ammonia

H2SO4 – sulfuric acid

- (4) Compliance with annual emission limits (tons per year) is based on a 12 month rolling period.
- (5) Fugitive emissions are an estimate only and should not be considered as a maximum allowable emissions rate

Special Conditions

Permit Numbers 40496 and PSDTX929

Emission Standards and Operating Specifications

1. This permit covers only those sources of emissions listed in the attached table entitled "Emission Sources - Maximum Allowable Emission Rates," and those sources are limited to the emission limits and other conditions specified in the attached table. The annual rates are based on a rolling 12-month period. The permit authorizes planned maintenance, startup, and shutdown (MSS) activities and normal (or production) operations which comply with the emission limits in the maximum allowable emission rates table (MAERT). **(03/12)**
2. Fuel for the gas turbines is limited to pipeline-quality, sweet natural gas containing no more than 5.0 grains total sulfur per 100 dry standard cubic feet (dscf). Firing of any other fuel in the turbines will require authorization from the permitting authority.
3. The heat recovery steam generating (HRSG) unit duct burners shall be limited to firing the following fuels:
 - A. Pipeline-quality, sweet natural gas containing no more than 5.0 grains total sulfur per 100 dscf,
 - B. Volatile organic compounds (VOC) vent gas from the cyclohexane oxidation process,
 - C. High-pressure diamine off-gas,
 - D. Hydrogen off-gas,
 - E. Mixtures of the above-listed gas streams, and
 - F. Firing of any other fuel will require authorization from the permitting authority.
4. The HRSG unit duct burners are each limited to a maximum hourly heat input rate of 506 MMBtu per hour based on the higher heating value of fuel fired. The permit holder shall monitor and record HRSG unit duct burners' fuel firing rates by fuel type fired to calculate emissions of contaminants not measured by a continuous emission monitoring system (CEMS) in order to demonstrate that the maximum allowable emissions will not be exceeded.
5. Upon request by the Executive Director of the Texas Commission on Environmental Quality (TCEQ) or any air pollution control program having jurisdiction, the holder of this permit shall provide a sample and/or an analysis of the fuel fired in the gas turbines and duct burners or shall allow air pollution control agency representatives to obtain a sample for analysis.
6. Each cogeneration train's normal operating range is from 60 to 100 percent base load except for planned MSS periods. Steam augmentation or reduced load operation below base load not associated with planned MSS is authorized to accommodate periods of reduced power demand provided the maximum pounds per hour (lbs/hr) emission rates specified in the attached MAERT for Emission Point Nos. (EPNs) CTG-1 or CTG-2 is not exceeded. **(03/12)**

7. Except during MSS activities, the opacity shall not exceed five percent averaged over a six-minute period from each stack or vent. During MSS activities, the opacity shall not exceed 15 percent. Each determination shall be made by first observing for visible emissions while each facility is in operation. Observations shall be made at least 15 feet and no more than 0.25 mile from the emission point. If visible emissions are observed from an emission point, then the opacity shall be determined and documented within 24 hours for that emission point using Title 40 Code of Federal Regulations Part 60 (40 CFR Part 60), Appendix A, Test Method 9. Contributions from uncombined water shall not be included in determining compliance with this condition. Observations shall be performed and recorded quarterly. If the opacity exceeds five percent or 15 percent during MSS activities, corrective action to eliminate the source of visible emissions shall be taken promptly and documented within one week of first observation. **(03/12)**

Ammonia (NH₃)

8. Concentrations of ammonia (NH₃) exiting EPNs CTG-1 or CTG-2 shall not exceed 10 parts per million volume on a dry basis on an annual average or maximum hourly basis when corrected to 15 percent oxygen (O₂) at any load except during periods of startup or shutdown.
9. The NH₃ handled at the cogeneration facility shall be in solution, and the solution shall contain no more than 30 percent NH₃ by volume.

Federal Applicability

10. These facilities shall comply with applicable requirements of the Environmental Protection Agency (EPA) regulations in 40 CFR Part 60 on Standards of Performance for New Stationary Sources (NSPS) promulgated for:
 - A. General Conditions, Subpart A.
 - B. The duct burner-fired HRSGs are subject to the applicable requirements of Subpart Da, Standards of Performance for Electric Utility Steam Generating Units.
 - C. The gas turbines are subject to the applicable requirements of Subpart GG, Standards of Performance for Stationary Gas Turbines.
 - D. The holder of this permit shall monitor the fuel as specified in 40 CFR § 60.334(b). Any request for a custom monitoring schedule shall be made in writing and directed to the Enforcement Branch, EPA Region 6, Dallas, Texas. Any custom schedule approved by the EPA pursuant to 40 CFR § 60.334(b) will be recognized as an enforceable condition of this permit.

If any condition of this permit is more stringent than the regulations so incorporated, then for the purposes of complying with this permit, the permit shall govern and be the standard by which compliance shall be demonstrated.

Initial Determination of Compliance

11. Sampling ports and platforms shall be incorporated into the design of all exhaust stacks according to the specifications set forth in the attachment entitled "Chapter 2, Stack Sampling Facilities." Alternate sampling facility designs may be submitted for approval by the TCEQ Regional Director. **(03/12)**

12. The holder of this permit shall perform stack sampling and other testing as required to establish the actual quantities of air contaminants being emitted into the atmosphere from EPNs CTG-1 and CTG-2. Sampling shall be conducted in accordance with the appropriate procedures of the TCEQ Sampling Procedures Manual and in accordance with the appropriate EPA Reference Methods (RM) 201A and 202 or RM 5, modified to include back-half condensibles, for the concentration of particulate matter less than 10 microns in diameter (PM₁₀) with the allowance for ambient particulates (i.e., subtracting out particulates entering the turbine); RM 8 or RM 6 or 6c for sulfur dioxide (SO₂); RM 9 for opacity (consisting of 30 six minute readings as provided in 40 CFR §60.11[b]); RM 10 for the concentration of carbon monoxide (CO); RM 25A, modified to exclude methane and ethane, for the concentration of VOC (to measure total carbon as propane); and RM 20 for the concentrations of nitrogen oxide (NO_x) and O₂ or equivalent methods.

Fuel sampling using the methods and procedures of 40 CFR § 60.335(d) may be conducted in lieu of stack sampling for SO₂. If fuel sampling is used, compliance with NSPS, Subpart GG, SO₂ limits shall be based on 100 percent conversion of the sulfur in the fuel to SO₂. Any deviations from those procedures must be approved by the Executive Director of the TCEQ prior to sampling. The TCEQ Executive Director or designated representative shall be afforded the opportunity to observe all such sampling.

The holder of this permit is responsible for providing sampling and testing facilities and conducting the sampling and testing operations at his expense.

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

The notice shall include:

- (1) Date for pretest meeting.
- (2) Date sampling will occur.
- (3) Name of firm conducting sampling.
- (4) Type of sampling equipment to be used.
- (5) Method or procedure to be used in sampling.
- (6) Procedure used to determine turbine loads during and after 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 submitting the test reports. A written proposed description of any deviation from sampling procedures specified in permit conditions or the 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 this condition shall be submitted to the TCEQ Office of Air, Air Permits Division. Test waivers and alternate/equivalent procedure proposals for NSPS testing which must have the EPA approval shall be submitted to the TCEQ Regional Office.

- B. Air contaminants and diluents to be sampled and analyzed include (but are not limited to) NO_x, CO, VOC, SO₂, PM₁₀, NH₃, opacity, and O₂. (As noted above, fuel sampling using the methods and procedures of 40 CFR §60.335[d] may be conducted in lieu of stack sampling for SO₂).
- C. Each turbine shall be tested at a minimum of four points in the permitted operating range that is defined in Special Condition No. 6, including the minimum point in the range and at full load for the atmospheric conditions which exist during testing. The duct burners shall be tested at its maximum firing rate when firing natural gas while the turbine is operating as close to base load as possible. Additionally, the duct burners shall be tested at their proposed maximum firing rate when firing the hydrogen off-gas while the turbine is operating as close to base load as possible. Each tested turbine load shall be identified in the sampling report. The permit holder shall present at the pretest meeting the manner in which stack sampling will be executed in order to demonstrate compliance with emission standards found in NSPS Subparts Da and GG.
- D. Sampling as required by this condition shall occur within 60 days after achieving the maximum fuel-firing rate at which the turbines and duct burners will be operated but no later than 180 days after initial startup. Additional sampling shall occur as may be required by the TCEQ or EPA.
- E. Within 60 days after the completion of the testing and sampling required herein, two copies of the sampling reports shall be distributed as follows: **(03/12)**
 - (1) One copy to the EPA Region 6 Office, Dallas.
 - (2) One copy to the TCEQ Beaumont Regional Office.

Continuous Determination of Compliance

- 13. The holder of this permit shall install, calibrate, maintain, and operate a CEMS to measure and record the concentrations of NO_x, CO, and diluent gases (O₂ or carbon dioxide [CO₂]), from each Exhaust Stack, EPNs CTG-1 and CTG-2.
 - 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, or an acceptable alternative. If there are no applicable performance specifications in 40 CFR Part 60, Appendix B, contact the TCEQ Office of Air, Air Permits Division for requirements to be met. The CEMS shall comply with the following requirements:

The holder of this permit shall assure that the CEMS meets the applicable quality assurance requirements specified in 40 CFR Part 60, Appendix F, Procedure 1, or an acceptable alternative. Relative accuracy exceedances, as specified in 40 CFR Part 60, Appendix F, Section 5.2.3 and any CEMS downtime shall be reported to the appropriate TCEQ Regional Director, and necessary corrective action shall be taken. Supplemental stack concentration measurements may be required at the discretion of the appropriate TCEQ Regional Director.

All certified gas analysis exceedances of ± 15 percent accuracy and any CEMS downtime shall be reported to the appropriate TCEQ Regional Director, and necessary corrective action shall be taken. Supplemental stack concentration measurements may be required at the discretion of the appropriate TCEQ Regional Director. **(03/12)**

- B. The monitoring data shall be reduced to hourly average values at least once everyday, using a minimum of four equally-spaced data points from each one-hour period. Two valid data points shall be generated during the hourly period in which zero and span is performed.
 - C. All monitoring data and quality-assurance data shall be maintained by the source for a period of two years and shall be made available to the TCEQ Executive Director or designated representative upon request. The data from the CEMS may be used to determine compliance with the conditions of this permit. Hourly average concentrations from EPNs CTG-1 and CTG-2 shall be summed to tons per year and used to determine compliance with the emission limits of this permit.
 - D. The appropriate TCEQ Regional Office shall be notified at least 21 days prior to any required relative accuracy test audit in order to provide them the opportunity to observe the testing.
 - E. If applicable, the CEMS may be required to meet the design and performance specifications, pass the field tests, and meet the installation requirements and data analysis and reporting requirements specified in the applicable performance specifications in 40 CFR Part 75, Appendix A.
14. If any emission monitor fails to meet specified performance, it shall be repaired or replaced as soon as reasonably possible, but no later than seven days after failure was first detected by any employee at the facility, unless written permission or verbal followed by written permission is obtained from the TCEQ Regional Office which allows for a longer repair/replacement time.
15. The holder of this permit shall additionally install, calibrate, maintain, and operate continuous monitoring systems to monitor and record the average hourly natural gas consumption of the gas turbines, and the average hourly consumption of gas of the duct burners. The systems shall be accurate to ± 5.0 percent of the unit's maximum flow.
16. The holder of this permit shall calculate or measure with a flow meter the total mass flow rate through the HRSG stack to ensure continuous compliance with the emission limitations specified in the attached MAERT. These data shall be stored on a computer hard drive and on computer disk or

other TCEQ accepted computer media. Records of this information will also be available in a form suitable for inspection.

17. The NH_3 concentration in each Exhaust Stack (EPNs CTG-1 and CTG-2) shall be tested or calculated according to one of the methods listed below and shall be tested or calculated according to frequency listed below. Testing for NH_3 slip is only required on days when the selective catalytic reduction (SCR) unit is in operation. **(03/12)**
 - A. The holder of this permit may install, calibrate, maintain, and operate a CEMS to measure and record the concentrations of NH_3 . The NH_3 concentrations shall be corrected and reported in accordance with Special Condition No. 8.
 - B. As an approved alternative, the NH_3 slip may be measured using a sorbent or stain tube device specific for NH_3 measurement in the 5 to 10 parts per million (ppm) range. The frequency of sorbent/stain tube testing shall be daily for the first 60 days of operation, after which, the frequency may be reduced to weekly testing if operating procedures have been developed to prevent excess amounts of NH_3 from being introduced in the SCR unit and when operation of the SCR unit has been proven successful with regard to controlling NH_3 slip. Daily sorbent or stain tube testing shall resume when the catalyst is within 30 days of its useful life expectancy. These results shall be recorded and used to determine compliance with Special Condition No. 8.
 - C. As an approved alternative to sorbent/stain tube testing or an NH_3 CEMS, the permit holder may install and operate a second NO_x CEMS probe located between the duct burners and the SCR, upstream of the stack NO_x CEMS, which may be used in association with the SCR efficiency and NH_3 injection rate to estimate NH_3 slip. This condition shall not be construed to set a minimum NO_x reduction efficiency on the SCR unit. These results shall be recorded and used to determine compliance with Special Condition No. 8.
 - D. If the measured or calculated NH_3 slip concentration exceeds 8 ppm at any time, the permit holder shall begin NH_3 testing by either the Phenol-Nitroprusside Method, the Indophenol Method, or EPA Conditional Test Method (CTM) 27 on a quarterly basis, in addition to the weekly sorbent or stain tube testing. The quarterly testing shall continue until such time as the SCR unit catalyst is replaced; or if the quarterly testing indicates NH_3 slip is 5 ppm or less, the Phenol-Nitroprusside/Indophenol/CTM 27 tests may be suspended until sorbent/stain tube testing again indicate 8 ppm NH_3 slip or greater. These results shall be recorded and used to determine compliance with Special Condition No. 8.
 - E. Any other method used for measuring NH_3 slip shall require prior approval from the TCEQ Regional Director.

Recordkeeping Requirements

18. The following records shall be kept at the plant for the life of the permit. All records required in this permit shall be made available at the request of personnel from the TCEQ, EPA, or any air pollution control agency with jurisdiction.
 - A. A copy of this permit.
 - B. Permit application dated January 27, 1999, and subsequent representations submitted to the TCEQ.
 - C. A complete copy of the testing reports and records of the initial performance testing completed pursuant to Special Condition No. 12 to demonstrate initial compliance.
 - D. Stack sampling results or other air emissions testing (other than CEMS data) that may be conducted on units authorized under this permit after the date of issuance of this permit.

19. The following information shall be maintained by the holder of this permit in a form suitable for inspection for a period of five years after collection, and shall be made immediately available upon request to representatives of the TCEQ, EPA, or any air pollution control agency having jurisdiction: **(03/12)**
 - A. The NO_x, CO, and dilutant gases (O₂ or CO₂) CEMS emissions data from EPNs CTG-1 and CTG-2 to demonstrate compliance with the emission rates listed in MAERT.
 - B. Raw data files of all CEMS data including calibration checks and adjustments and maintenance performed on these systems.
 - C. Records of the hours of operation and average daily quantity of natural gas fired in the turbines and HRSG duct burners.
 - D. Records of the HRSG unit duct burners' hours of operation, average daily quantity of gas fired by fuel type, and calculated emissions of contaminants not measured by a CEMS. Emission factors corresponding to fuel type fired shall be taken from the permit application dated January 27, 1999, and subsequent representations. Other fuel-specific emission factors may be used to calculate emissions if the emissions factors are based upon stack sampling results of the units authorized by this permit.
 - E. Records of visible emissions/opacity observations pursuant to Special Condition No. 7.
 - F. Records of fuel sampling conducted pursuant to Special Condition No. 12D.
 - G. Records of NH₃ emissions sampling and calculations pursuant to Special Condition No. 17.
 - H. Records to demonstrate compliance with Special Condition Nos. 23 through 26. **(03/12)**

Reporting

20. The holder of this permit shall submit to the TCEQ Beaumont Regional Office and the Air Enforcement Branch of the EPA in Dallas quarterly reports as described in 40 CFR § 60.7. Such reports are required for each emission unit which is required to be continuously monitored pursuant to this permit. In addition to the information specified in 40 CFR § 60.7(c), each report shall contain the hours of operation of the equipment authorized by this permit and a report summary of the periods of non-complying emissions and CEMS downtimes by cause.
21. For the purposes of reporting, non-complying emissions from equipment authorized by this permit shall be defined as follows:
 - A. Non-complying emissions of NO_x or CO shall be defined as each one-hour period of operation, except during startup or shutdown, during which the average emissions as measured and recorded by the CEMS exceeds NO_x or CO lbs/hr emission limitations specified in the MAERT.
 - B. Non-complying emissions of SO₂ shall be defined as emissions resulting from firing of any other fuel not authorized by the permitting authority or the firing of an authorized fuel, either of which causes an exceedance of the SO₂ limitation specified in the MAERT based on 100 percent conversion of the sulfur in the fuel to SO₂.
 - C. Non-complying emissions of PM₁₀ and VOC shall be defined as emissions resulting from firing of any unauthorized fuel or the emissions resulting from the firing of an authorized fuel which exceeds the emission limitation specified in the MAERT.
 - D. Non-complying annual emissions shall be defined as any rolling 12-month period of operation during which the 12-month cumulative emissions exceeds the annual limits specified in the MAERT of this permit.
22. If the average NO_x or CO stack outlet emission rate exceeds the maximum allowable emissions rate for more than one hour, the holder of this permit shall investigate and determine the reason for the exceedance and, if needed, make necessary repairs and/or adjustments as soon as possible. If the NO_x or CO emission rate exceeds the emission rate in the MAERT for more than 24 hours, the permit holder shall notify the TCEQ Regional Office either verbally or with a written report detailing the cause of the increase in emissions, and all efforts being made to correct the problem.

Maintenance, Startup, and Shutdown Requirements

23. This permit authorizes the emissions from the planned MSS activities listed in Attachment A, Attachment B, and the MAERT attached to this permit. Attachment A identifies the inherently low emitting (ILE) planned maintenance activities that this permit authorizes to be performed. Attachment B identifies the planned maintenance activities that are non-ILE planned maintenance activities that this permit authorizes to be performed. **(03/12)**

24. The holder of this permit shall operate the two turbines and HRSG duct burners (EPNs CTG-1 and CTG-2) in accordance with good air pollution control practice to minimize emissions during startup and shutdown, by operating in accordance with a written startup and shutdown plan. **(03/12)**
25. Authorized planned MSS activities that result in various emissions are as follows: **(03/12)**

Planned MSS Activity		Allowable No. of Activities or Hours per Year
Combustion Turbine Optimization:		
	Startups	8 times
	Tuning	2 times
	Shutdowns	8 times
	Green Rotor Run-Ins	2 times
Gaseous Fuel Venting		48 hours
Online Turbine Water Washing		730 washes
Offline Turbine Washing		8 washes
Depressuring of Coalescer		2 activities
Loading of Coalescer Fluid		890 gallons of liquid loaded
Vacuum Loading		105,279 gallons of materials loaded
Tank Draining and Degassing		1 tank
CEMS Calibration		1460 activities

- A. The methods used to estimate the emissions for each of the activities listed in this Special Condition are those based on the permit application submitted in January, 2011.
- B. The permit holder shall annually confirm the continued validity of the estimated potential to emit represented in the permit application for all ILE planned maintenance activities. The total emissions from all ILE planned maintenance activities (See Attachment A) shall be considered to be no more than the estimated potential to emit for those activities that are represented in the permit application.
- C. For each pollutant emitted during non-ILE planned maintenance activities (See Attachment B) whose emissions are measured using a CEMS, as per Special Condition No. 26A, the permit holder shall compare the pollutant's short-term (hourly) emissions during planned maintenance activities as measured by the CEMS to the applicable short-term planned MSS emissions limit in the MAERT.

- D. For each pollutant emitted during non-ILE planned maintenance activities (See Attachment B) whose emissions occur through a stack, but are not measured using CEMS as per Special Condition No. 26A, the permit holder shall do the following for each calendar month.
 - (1) Determine the total emissions of the pollutant through the stack that result from such non-ILE planned maintenance activities in accordance with Special Condition No. 26B.
 - (2) Once monthly emissions have been determined in accordance with Special Condition No. 25D(1) for 12 months after the MSS permit amendment has been issued, the permit holder shall add the rolling 12-month MSS emissions for the pollutant to the 12-month emissions (same 12 month period) that occurred and were emitted through the same stack during other operations. This total annual emission rate for the stack shall be compared to the applicable annual emission limit specified in the MAERT.
26. The permit holder shall determine the emissions during planned MSS activities for use in Special Condition No. 25 as follows. **(03/12)**
- A. For each pollutant whose emissions during normal facility operations are measured with a CEMS that has been certified to measure the pollutant's emissions over the entire range of a planned MSS activity, the permit holder shall measure the emissions of the pollutant during the planned MSS activity using the CEMS.
 - B. For each pollutant not described in Special Condition No. 26A, the permit holder shall calculate the pollutant's emissions during all occurrences of each type of planned MSS activity for each calendar month using the frequency of the planned MSS activity identified in work orders or equivalent records and the emissions of the pollutant during the planned MSS activity as represented in the planned MSS permit application. In lieu of using the emissions of the pollutant during the planned MSS activity as represented in the planned MSS permit application to calculate such emissions, the permit holder may determine the emissions of the pollutant during the planned MSS activity using an appropriate method, including but not limited to, any of the methods described in paragraphs 1 through 3 below, provided that the permit holder maintains appropriate records supporting such determination.
 - (1) Use of emission factor(s), facility-specific parameter(s), and/or engineering knowledge of the facility's operations.
 - (2) Use of emission data measured (by a CEMS or during emissions testing) during the same type of planned MSS activity occurring at or on a similar facility, and correlation of that data with the facility's relevant operating parameters, including, but not limited to, electric load, temperature, fuel input, and fuel sulfur content.
 - (3) Use of emissions testing data collected during a planned MSS activity occurring at or on the facility, and correlation of that data with the facility's relevant operating parameters, including, but not limited to, electric load, temperature, fuel input, and fuel sulfur content.

27. With the exception of the emission limits in the MAERT attached to this permit, the permit conditions relating to planned MSS activities do not become effective until 180 days after issuance of the permit amendment that added such conditions. **(03/12)**

Date: March 12, 2012

Attachment A

Permit Numbers 40496 and PSDTX929
Inherently Low Emitting (ILE) Planned Maintenance Activities

Planned Maintenance Activity	Emissions					
	NO _x	CO	SO ₂	PM	VOC	NH ₃
Gaseous fuel venting ¹		x			x	
Online Turbine Water Washing ²				x		
Offline Turbine Washing					x	
Coalescer Filter Change-out ³					x	
Vacuum Loading					x	x
Tank Draining and Degassing						x
CEMS Calibration	x	x				

Notes:

1. Includes, but is not limited to, venting of fuel gas(es) during equipment maintenance or shutdown.
2. Involves use of water only.
3. Includes, but is not limited to, (i) opening and depressuring the vessel and (ii) loading the coalesce condensate into a container such as a drum.

Dated March 12, 2012

Attachment B

Permit Numbers 40496 and PSDTX929
Non-Inherently Low Emitting Planned Maintenance Activities

Planned Maintenance Activity	Emissions				
	NO _x	CO	SO ₂	PM	VOC
Combustion Turbine Optimization ^{1,2}	x	x	x	x	x

Notes:

1. Includes, but is not limited to, tuning, green rotor run-ins, start-up and shutdown activities of turbines.
2. Emissions associated from these activities will be subject to the hourly and annual limits listed on the MAERT.

Dated March 12, 2012

Emission Sources - Maximum Allowable Emission Rates

Permit Numbers 40496 and PSDTX929

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

Air Contaminants Data

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates	
			lbs/hour	TPY (4)
Turbine and Duct Burner (DB) Hourly Limits with DBs Firing Natural Gas Only				
CTG-1	Turbine/HRSG	NO _x	41.40	-
		NO _x (MSS)	205.48	-
		CO	90.49	-
		CO (MSS)	1022.56	-
		VOC	9.83	-
		VOC (MSS)	25.00	-
		PM	23.06	-
		SO ₂	35.60	-
		NH ₃	32.80	-
CTG-2	Turbine/HRSG	H ₂ SO ₄	3.60	-
		NO _x	41.40	-
		NO _x (MSS)	205.48	-
		CO	90.49	-
		CO (MSS)	1022.56	-
		VOC	9.83	-
		VOC (MSS)	25.00	-
		PM	23.06	-
		SO ₂	35.60	-
NH ₃	32.80	-		
H ₂ SO ₄	3.60	-		

Emission Sources - Maximum Allowable Emission Rates

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates	
			lbs/hour	TPY (4)
Turbine and DB Hourly Limits with DBs Firing Mixtures of Approved Gases				
CTG-1 and CTG-2	Two Turbines/HRSG	NO _x	349.80	-
		CO	682.70	-
		VOC	25.90	-
		PM	46.10	-
		SO ₂	71.20	-
		NH ₃	65.60	-
		H ₂ SO ₄	7.10	-
Turbine and DB Combined Annual Limits for All Fuels Fired in DBs				
CTG-1 and CTG-2	Two Turbines/HRSG DBs	NO _x	-	379.50
		NO _x (MSS)	-	3.57
		CO	-	2345.50
		CO (MSS)	-	9.14
		VOC	-	63.00
		VOC (MSS)	-	0.85
		PM	-	189.40
		SO ₂	-	12.60
		NH ₃	-	259.60
		H ₂ SO ₄	-	1.30
CTG-CT-1	Cooling Tower	PM	2.48	10.85
CTGFUG	Fugitives (5)	VOC	0.01	0.09
		NH ₃	0.16	0.70
COALESCER	Natural Gas/Liquid Separator	VOC	0.23	1.00

Emission Sources - Maximum Allowable Emission Rates

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates	
			lbs/hour	TPY (4)
CTGNH3	Ammonia Tank Storage	NH ₃	0.02	0.10
OWS	Oil/Water Separator	VOC	0.02	0.10
UNLOAD	Unloading Ammonia (AQ) Trucks	NH ₃	0.02	0.10
MAINT	Maintenance, Start-up and Shutdown	VOC	0.02	0.10
CHEMSTOR	Water Treatment Chemical Storage	VOC	0.02	0.10
FUEL-VENT	Fuel Venting	VOC	0.18	<0.01
		CO	<0.01	<0.01
ON-WASH	Online Turbine Water Washing	PM	0.03	<0.01
OFF-WASH	Offline Turbine Washing	VOC	399.40	1.43
COAL-LOAD	Loading of Coalescer Fluid	VOC	0.32	<0.01
COAL-DEPR	Depressuring of Coalescer	VOC	3.30	<0.01
		CO	0.10	<0.01
VAC-LOAD	Vacuum Loading from Tanks/Sumps	VOC	0.68	<0.01
		NH ₃	2.12	<0.01
TANK-DEGAS	Draining and Degassing of Tank	NH ₃	26.49	0.01
CEM-CAL	CEMS Calibration	NO _x	0.06	<0.01
		CO	0.04	<0.01

Emission Sources - Maximum Allowable Emission Rates

- (1) Emission point identification - either specific equipment designation or emission point number from plot plan.
- (2) Specific point source name. For fugitive sources, use area name or fugitive source name.
- (3) VOC - volatile organic compounds as defined in Title 30 Texas Administrative Code § 101.1
 - NO_x - total oxides of nitrogen
 - SO₂ - sulfur dioxide
 - PM - total particulate matter, suspended in the atmosphere, including PM₁₀ and PM_{2.5}, as represented
 - PM₁₀ - total particulate matter equal to or less than 10 microns in diameter, including PM_{2.5}, as represented
 - PM_{2.5} - particulate matter equal to or less than 2.5 microns in diameter
 - CO - carbon monoxide
 - NH₃ - ammonia
 - H₂SO₄ - sulfuric acid
- (4) Compliance with annual emission limits (tons per year) is based on a 12 month rolling period.
- (5) Fugitive emissions are an estimate only and should not be considered as a maximum allowable emission rate.

Date: March 12, 2012