

FEDERAL OPERATING PERMIT

A FEDERAL OPERATING PERMIT IS HEREBY ISSUED TO
Corpus Christi Cogeneration, LLC

AUTHORIZING THE OPERATION OF
Corpus Christi Cogeneration Plant
Corpus Christi Cogeneration
Electric Power Generation

LOCATED AT
Nueces County, Texas
Latitude 27° 48' 50" Longitude 97° 25' 42"
Regulated Entity Number: RN100224302

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

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

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

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

Permit No: 02122 Issuance Date: _____

For the Commission

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General Terms and Conditions

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

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

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

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

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

Special Terms and Conditions:

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

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

- E. Emission units subject to 40 CFR Part 63, Subpart ZZZZ, as identified in the attached Applicable Requirements Summary table, are subject to 30 TAC Chapter 113, Subchapter C, §113.1090 which incorporates the 40 CFR Part 63 Subpart by reference.
2. The permit holder shall comply with the following sections of 30 TAC Chapter 101 (General Air Quality Rules):
- A. Title 30 TAC § 101.1 (relating to Definitions), insofar as the terms defined in this section are used to define the terms used in other applicable requirements
 - B. Title 30 TAC § 101.3 (relating to Circumvention)
 - C. Title 30 TAC § 101.8 (relating to Sampling), if such action has been requested by the TCEQ
 - D. Title 30 TAC § 101.9 (relating to Sampling Ports), if such action has been requested by the TCEQ
 - E. Title 30 TAC § 101.10 (relating to Emissions Inventory Requirements)
 - F. Title 30 TAC § 101.201 (relating to Emission Event Reporting and Recordkeeping Requirements)
 - G. Title 30 TAC § 101.211 (relating to Scheduled Maintenance, Start-up, and Shutdown Reporting and Recordkeeping Requirements)
 - H. Title 30 TAC § 101.221 (relating to Operational Requirements)
 - I. Title 30 TAC § 101.222 (relating to Demonstrations)
 - J. Title 30 TAC § 101.223 (relating to Actions to Reduce Excessive Emissions)
3. Permit holder shall comply with the following requirements of 30 TAC Chapter 111:
- A. Visible emissions from stationary vents with a flow rate of less than 100,000 actual cubic feet per minute and constructed after January 31, 1972 that are not listed in the Applicable Requirements Summary attachment for 30 TAC Chapter 111, Subchapter A, Division 1, shall not exceed 20% opacity averaged over a six-minute period. The permit holder shall comply with the following requirements for stationary vents at the site subject to this standard:
 - (i) Title 30 TAC § 111.111(a)(1)(B) (relating to Requirements for Specified Sources)
 - (ii) Title 30 TAC § 111.111(a)(1)(E)
 - (iii) Title 30 TAC § 111.111(a)(1)(F)(i), (ii), (iii), or (iv)
 - (iv) For emission units with vent emissions subject to 30 TAC § 111.111(a)(1)(B), complying with 30 TAC § 111.111(a)(1)(F)(ii), (iii), or (iv), and capable of producing visible emissions from, but not limited to, particulate matter, acid gases and NO_x, the permit holder shall also comply with the following periodic monitoring requirements for the purpose of annual compliance certification under 30 TAC § 122.146. These periodic monitoring requirements do not apply to vents that are not capable of producing visible emissions such as vents that emit only colorless VOCs; vents from non-fuming liquids; vents that provide passive

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

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

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

- (c) Some vents may be subject to multiple visible emission or monitoring requirements. All credible data must be considered when certifying compliance with this requirement even if the observation or monitoring was performed to demonstrate compliance with a different requirement.
- B. For emission units with contributions from uncombined water, the permit holder shall comply with the requirements of 30 TAC § 111.111(b).
- C. Permit holders for sites that have materials handling, construction, roads, streets, alleys, and parking lots shall comply with the following requirements:
 - (i) Title 30 TAC § 111.143 (relating to Materials Handling)
 - (ii) Title 30 TAC § 111.145 (relating to Construction and Demolition)
 - (iii) Title 30 TAC § 111.147 (relating to Roads, Streets, and Alleys)
 - (iv) Title 30 TAC § 111.149 (relating to Parking Lots)
- 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 the requirements of 30 TAC Chapter 113, Subchapter C, § 113.100 for units subject to any subpart of 40 CFR Part 63, unless otherwise stated in the applicable subpart.
 6. For each gasoline dispensing facility, with a throughput of less than 10,000 gallons per month as specified in 40 CFR Part 63, Subpart CCCCCC, the permit holder shall comply with the following requirements (Title 30 TAC, Subchapter C, § 113.1380 incorporated by reference):
 - A. Title 40 CFR § 63.11111(e), for records of monthly throughput
 - B. Title 40 CFR § 63.11111(i), for compliance due to increase of throughput
 - C. Title 40 CFR § 63.11111(j), for dispensing from fixed tank into portable tank for on-site delivery
 - D. Title 40 CFR § 63.11113(c), for compliance due to increase of throughput
 - E. Title 40 CFR § 63.11115(a), for operation of the source
 - F. Title 40 CFR § 63.11116(a) and (a)(1) - (4), for work practices
 - G. Title 40 CFR § 63.11116(b), for records availability
 - H. Title 40 CFR § 63.11116(d), for portable gasoline containers

Additional Monitoring Requirements

7. The permit holder shall comply with the periodic monitoring requirements as specified in the attached "Periodic Monitoring Summary" upon issuance of the permit. Except for, as applicable, monitoring malfunctions, associated repairs, and required quality assurance or control activities (including, as applicable, calibration checks and required zero and span adjustments), the permit holder shall conduct all monitoring in continuous operation (or shall collect data at all required intervals) at all times that the pollutant-specific emissions unit is operating. The permit holder may elect to collect monitoring data on a more frequent basis and average the data, consistent with the averaging time or minimum frequency specified in the "Periodic Monitoring Summary," for purposes of determining whether a deviation has occurred. However, the additional data points must be collected on a regular basis. In no event shall data be collected and used in particular instances to avoid reporting deviations. Deviations shall be reported according to 30 TAC § 122.145 (Reporting Terms and Conditions).

New Source Review Authorization Requirements

8. Permit holder shall comply with the requirements of New Source Review authorizations issued or claimed by the permit holder for the permitted area, including permits, permits by rule (including the terms, conditions, monitoring, recordkeeping, and reporting identified in registered PBRs and permits by rule identified in the PBR Supplemental Tables dated February 23, 2024 in the application for project 36371), 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
9. 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.
10. The permit holder shall maintain records to demonstrate compliance with any emission limitation or standard that is specified in a permit by rule (PBR) or Standard Permit listed in the New Source Review Authorizations attachment. The records shall yield reliable data from the relevant time period that are representative of the emission unit's compliance with the PBR or Standard Permit. These records may include, but are not limited to, production capacity and throughput, hours of operation, safety data sheets (SDS), chemical composition of raw materials, speciation of air contaminant data, engineering calculations, maintenance records, fugitive data, performance tests, capture/control device efficiencies, direct pollutant monitoring (CEMS, COMS, or PEMS), or control device parametric monitoring. These records shall be made readily accessible and available as required by 30 TAC § 122.144. Any monitoring or recordkeeping data indicating noncompliance with the PBR or Standard Permit shall be considered and reported as a deviation according to 30 TAC § 122.145 (Reporting Terms and Conditions).

Compliance Requirements

11. 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.
12. Use of Discrete Emission Credits to comply with the applicable requirements:
- A. Unless otherwise prohibited, the permit holder may use discrete emission credits to comply with the following applicable requirements listed elsewhere in this permit:
 - (i) Title 30 TAC Chapter 115
 - (ii) Title 30 TAC Chapter 117
 - (iii) If applicable, offsets for Title 30 TAC Chapter 116
 - (iv) Temporarily exceed state NSR permit allowables
 - B. The permit holder shall comply with the following requirements in order to use the credit to comply with the applicable requirements:
 - (i) The permit holder must notify the TCEQ according to 30 TAC § 101.376(d)
 - (ii) The discrete emission credits to be used must meet all the geographic, timeliness, applicable pollutant type, and availability requirements listed in 30 TAC Chapter 101, Subchapter H, Division 4

- (iii) The executive director has approved the use of the discrete emission credits according to 30 TAC § 101.376(d)(1)(A)
- (iv) The permit holder keeps records of the use of credits towards compliance with the applicable requirements in accordance with 30 TAC § 101.372(h) and 30 TAC Chapter 122
- (v) Title 30 TAC § 101.375 (relating to Emission Reductions Achieved Outside the United States)

Protection of Stratospheric Ozone

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

Permit Location

14. 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)

15. 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

16. For units CU1 and CU2 (identified in the Certificate of Representation as units CT1 and CT2), located at the affected source identified by ORIS code 55206, 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 in 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.

Cross-State Air Pollution Rule (CSAPR) Trading Program Requirements

17. For units CU1 and CU2 (identified in the Certificate of Representation as units CT1 and CT2), located at the site identified by Plant code/ORIS/Facility code 55206, the designated representative and the owner or operator, as applicable, shall comply with the following CSAPR requirements.
- A. General Requirements
- (i) The owners and operators of the CSAPR NO_x Ozone Season Group 2 source and each CSAPR NO_x Ozone Season Group 2 unit at the source shall operate the source and the unit in compliance with the requirements of the CSAPR NO_x Ozone Season Group 2 Trading Program and all other applicable State and federal requirements.
 - (ii) The owners and operators of the CSAPR NO_x Ozone Season Group 2 source and each CSAPR NO_x Ozone Season Group 2 unit at the source shall comply with the requirements of 40 CFR Part 97, Subpart EEEEE for CSAPR NO_x Ozone Season Group 2 Trading Program, and with the General Terms and Conditions of the Federal Operating Permit (FOP) that incorporates the CSAPR requirements.
- B. Description of CSAPR Monitoring Provisions
- (i) The CSAPR subject unit(s), and the unit-specific monitoring provisions at this source, are identified in the following paragraph(s). These unit(s) are subject to the requirements for the CSAPR NO_x Ozone Season Group 2 Trading Program.

- (1) For units CU1 and CU2, the owners and operators shall comply with the continuous emission monitoring system or systems (CEMS) requirements pursuant to 40 CFR Part 75, Subpart H for NO_x, and with the excepted monitoring system requirements for gas- and oil-fired units pursuant to 40 CFR Part 75, Appendix D for heat input.
 - (ii) The above description of the monitoring used by a unit does not change, create an exemption from, or otherwise affect the monitoring, recordkeeping, and reporting requirements applicable to the unit under 40 CFR §§ 97.830 through 97.835 (CSAPR NO_x Ozone Season Group 2 Trading Program). The monitoring, recordkeeping and reporting requirements applicable to each unit are included below in the standard conditions for the applicable CSAPR trading program.
 - (iii) Owners and operators must submit to the Administrator a monitoring plan for each unit in accordance with 40 CFR §§ 75.53, 75.62 and 75.73, as applicable. The monitoring plan for each unit is available at the EPA's website at <https://www.epa.gov/airmarkets/clean-air-markets-monitoring-plans-part-75-sources>.
 - (iv) Owners and operators that want to use an alternative monitoring system must submit to the Administrator a petition requesting approval of the alternative monitoring system in accordance with 40 CFR Part 75, Subpart E and 40 CFR § 75.66 and § 97.835 (CSAPR NO_x Ozone Season Group 2 Trading Program). The Administrator's response approving or disapproving any petition for an alternative monitoring system is available on the EPA's website at <https://www.epa.gov/airmarkets/part-75-petition-responses>.
 - (v) Owners and operators that want to use an alternative to any monitoring, recordkeeping, or reporting requirement under 40 CFR §§ 97.830 through 97.834 (CSAPR NO_x Ozone Season Group 2 Trading Program) must submit to the Administrator a petition requesting approval of the alternative in accordance with 40 CFR § 75.66 and § 97.835 (CSAPR NO_x Ozone Season Group 2 Trading Program). The Administrator's response approving or disapproving any petition for an alternative to a monitoring, recordkeeping, or reporting requirement is available on the EPA's website at <https://www.epa.gov/airmarkets/part-75-petition-responses>.
 - (vi) The descriptions of monitoring applicable to the unit(s) included above meet the requirement of 40 CFR §§ 97.830 through 97.834 (CSAPR NO_x Ozone Season Group 2 Trading Program), and therefore procedures for minor permit revisions, in accordance with 30 TAC § 122.217, may be used to add or change this unit's monitoring system description.
- 18. CSAPR NO_x Ozone Season Group 2 Trading Program Requirements (40 CFR § 97.806)
 - A. Designated representative requirements
 - (i) The owners and operators shall comply with the requirement to have a designated representative, and may have an alternate designated representative, in accordance with 40 CFR §§ 97.813 through 97.818.
 - B. Emissions monitoring, reporting, and recordkeeping requirements
 - (i) The owners and operators, and the designated representative, of each CSAPR NO_x Ozone Season Group 2 source and each CSAPR NO_x Ozone Season

Group 2 unit at the source shall comply with the monitoring, reporting, and recordkeeping requirements of 40 CFR § 97.830 (general requirements, including installation, certification, and data accounting, compliance deadlines, reporting data, prohibitions, and long-term cold storage), § 97.831 (initial monitoring system certification and recertification procedures), § 97.832 (monitoring system out-of-control periods), § 97.833 (notifications concerning monitoring), § 97.834 (recordkeeping and reporting, including monitoring plans, certification applications, quarterly reports, and compliance certification), and § 97.835 (petitions for alternatives to monitoring, recordkeeping, or reporting requirements).

- (ii) The emissions data determined in accordance with 40 CFR § 97.830 through § 97.835 and any other credible evidence shall be used to calculate allocations of CSAPR NO_x Ozone Season Group 2 allowances under 40 CFR §§ 97.811(a)(2) and (b) and § 97.812 and to determine compliance with the CSAPR NO_x Ozone Season Group 2 emissions limitation and assurance provisions under paragraph C. below, provided that, for each monitoring location from which mass emissions are reported, the mass emissions amount used in calculating such allocations and determining such compliance shall be the mass emissions amount for the monitoring location determined in accordance with 40 CFR §§ 97.830 through 97.835 and rounded to the nearest ton, with any fraction of a ton less than 0.50 being deemed to be zero.

C. NO_x emissions requirements

(i) CSAPR NO_x Ozone Season Group 2 emissions limitation

- (1) As of the allowance transfer deadline for a control period in a given year, the owners and operators of each CSAPR NO_x Ozone Season Group 2 source and each CSAPR NO_x Ozone Season Group 2 unit at the source shall hold, in the source's compliance account, CSAPR NO_x Ozone Season Group 2 allowances available for deduction for such control period under 40 CFR § 97.824(a) in an amount not less than the tons of total NO_x emissions for such control period from all CSAPR NO_x Ozone Season Group 2 units at the source.
- (2) If total NO_x emissions during a control period in a given year from the CSAPR NO_x Ozone Season Group 2 units at a CSAPR NO_x Ozone Season Group 2 source are in excess of the CSAPR NO_x Ozone Season Group 2 emissions limitation set forth in paragraph C.(i)(1) above, then:
 - (a) The owners and operators of the source and each CSAPR NO_x Ozone Season Group 2 unit at the source shall hold the CSAPR NO_x Ozone Season Group 2 allowances required for deduction under 40 CFR § 97.824(d); and
 - (b) The owners and operators of the source and each CSAPR NO_x Ozone Season Group 2 unit at the source shall pay any fine, penalty, or assessment or comply with any other remedy imposed, for the same violations, under the Clean Air Act, and each ton of such excess emissions and each day of such control period shall constitute a separate violation of 40 CFR Part 97, Subpart EEEEE and the Clean Air Act.

(ii) CSAPR NO_x Ozone Season Group 2 assurance provisions

- (1) If total NO_x emissions during a control period in a given year from all CSAPR NO_x Ozone Season Group 2 units at CSAPR NO_x Ozone Season Group 2 sources in the state exceed the state assurance level, then the owners and operators of such sources and units in each group of one or more sources and units having a common designated representative for such control period, where the common designated representative's share of such NO_x emissions during such control period exceeds the common designated representative's assurance level for the state and such control period, shall hold (in the assurance account established for the owners and operators of such group) CSAPR NO_x Ozone Season Group 2 allowances available for deduction for such control period under 40 CFR § 97.825(a) in an amount equal to two times the product (rounded to the nearest whole number), as determined by the Administrator in accordance with 40 CFR § 97.825(b), of multiplying -
 - (a) The quotient of the amount by which the common designated representative's share of such NO_x emissions exceeds the common designated representative's assurance level divided by the sum of the amounts, determined for all common designated representatives for such sources and units in the state for such control period, by which each common designated representative's share of such NO_x emissions exceeds the respective common designated representative's assurance level; and
 - (b) The amount by which total NO_x emissions from all CSAPR NO_x Ozone Season Group 2 units at CSAPR NO_x Ozone Season Group 2 sources in the state for such control period exceed the state assurance level.
- (2) The owners and operators shall hold the CSAPR NO_x Ozone Season Group 2 allowances required under paragraph C.(ii)(1) above, as of midnight of November 1 (if it is a business day), or midnight of the first business day thereafter (if November 1 is not a business day), immediately after such control period.
- (3) Total NO_x emissions from all CSAPR NO_x Ozone Season Group 2 units at CSAPR NO_x Ozone Season Group 2 sources in the state during a control period in a given year exceed the state assurance level if such total NO_x emissions exceed the sum, for such control period, of the state NO_x Ozone Season Group 2 trading budget under 40 CFR § 97.810(a) and the state's variability limit under 40 CFR § 97.810(b).
- (4) It shall not be a violation of 40 CFR Part 97, Subpart EEEEE or of the Clean Air Act if total NO_x emissions from all CSAPR NO_x Ozone Season Group 2 units at CSAPR NO_x Ozone Season Group 2 sources in the state during a control period exceed the state assurance level or if a common designated representative's share of total NO_x emissions from the CSAPR NO_x Ozone Season Group 2 units at CSAPR NO_x Ozone Season Group 2 sources in the state during a control period exceeds the common designated representative's assurance level.
- (5) To the extent the owners and operators fail to hold CSAPR NO_x Ozone Season Group 2 allowances for a control period in a given year in accordance with paragraphs C.(ii)(1) through (3) above,

- (a) The owners and operators shall pay any fine, penalty, or assessment or comply with any other remedy imposed under the Clean Air Act; and
 - (b) Each CSAPR NO_x Ozone Season Group 2 allowance that the owners and operators fail to hold for such control period in accordance with paragraphs C.(ii)(1) through (3) above and each day of such control period shall constitute a separate violation of 40 CFR Part 97, Subpart EEEEE and the Clean Air Act.
- (iii) Compliance periods
 - (1) A CSAPR NO_x Ozone Season Group 2 unit shall be subject to the requirements under paragraph C.(i) above for the control period starting on the later of May 1, 2017 or the deadline for meeting the unit's monitor certification requirements under 40 CFR § 97.830(b) and for each control period thereafter.
 - (2) A CSAPR NO_x Ozone Season Group 2 unit shall be subject to the requirements under paragraph C.(ii) above for the control period starting on the later of May 1, 2017 or the deadline for meeting the unit's monitor certification requirements under 40 CFR § 97.830(b) and for each control period thereafter.
- (iv) Vintage of allowances held for compliance
 - (1) A CSAPR NO_x Ozone Season Group 2 allowance held for compliance with the requirements under paragraph C.(i)(1) above for a control period in a given year must be a CSAPR NO_x Ozone Season Group 2 allowance that was allocated for such control period or a control period in a prior year.
 - (2) A CSAPR NO_x Ozone Season Group 2 allowance held for compliance with the requirements under paragraphs C.(i)(2)(a) and (ii)(1) through (3) above for a control period in a given year must be a CSAPR NO_x Ozone Season Group 2 allowance that was allocated for a control period in a prior year or the control period in the given year or in the immediately following year.
- (v) Allowance Management System requirements. Each CSAPR NO_x Ozone Season Group 2 allowance shall be held in, deducted from, or transferred into, out of, or between Allowance Management System accounts in accordance with 40 CFR Part 97, Subpart EEEEE.
- (vi) Limited authorization. A CSAPR NO_x Ozone Season Group 2 allowance is a limited authorization to emit one ton of NO_x during the control period in one year. Such authorization is limited in its use and duration as follows:
 - (1) Such authorization shall only be used in accordance with the CSAPR NO_x Ozone Season Group 2 Trading Program; and
 - (2) Notwithstanding any other provision of 40 CFR Part 97, Subpart EEEEE, the Administrator has the authority to terminate or limit the use and duration of such authorization to the extent the Administrator determines

is necessary or appropriate to implement any provision of the Clean Air Act.

- (vii) Property right. A CSAPR NO_x Ozone Season Group 2 allowance does not constitute a property right.

D. FOP revision requirements

- (i) No FOP revision shall be required for any allocation, holding, deduction, or transfer of CSAPR NO_x Ozone Season Group 2 allowances in accordance with 40 CFR Part 97, Subpart EEEEE.
- (ii) This FOP incorporates the CSAPR emissions monitoring, recordkeeping and reporting requirements pursuant to 40 CFR §§ 97.830 through 97.835, and the requirements for a continuous emission monitoring system (pursuant to 40 CFR Part 75, subpart H), an excepted monitoring system (pursuant to 40 CFR Part 75, appendices D and E), a low mass emissions excepted monitoring methodology (pursuant to 40 CFR § 75.19), and an alternative monitoring system (pursuant to 40 CFR Part 75, subpart E). Therefore the Description of CSAPR Monitoring Provisions for CSAPR subject unit(s) may be added to, or changed, in this FOP using procedures for minor permit revisions in accordance with 30 TAC § 122.217.

E. Additional recordkeeping and reporting requirements

- (i) Unless otherwise provided, the owners and operators of each CSAPR NO_x Ozone Season Group 2 source and each CSAPR NO_x Ozone Season Group 2 unit at the source shall keep on site at the source each of the following documents (in hardcopy or electronic format) 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 Administrator.
 - (1) The certificate of representation under 40 CFR § 97.816 for the designated representative for the source and each CSAPR NO_x Ozone Season Group 2 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 certificate of representation and documents are superseded because of the submission of a new certificate of representation under 40 CFR § 97.816 changing the designated representative.
 - (2) All emissions monitoring information, in accordance with 40 CFR Part 97, Subpart EEEEE.
 - (3) Copies of all reports, compliance certifications, and other submissions and all records made or required under, or to demonstrate compliance with the requirements of, the CSAPR NO_x Ozone Season Group 2 Trading Program.
- (ii) The designated representative of a CSAPR NO_x Ozone Season Group 2 source and each CSAPR NO_x Ozone Season Group 2 unit at the source shall make all submissions required under the CSAPR NO_x Ozone Season Group 2 Trading Program, except as provided in 40 CFR § 97.818. This requirement does not

change, create an exemption from, or otherwise affect the responsible official submission requirements under 30 TAC § 122.165.

F. Liability

- (i) Any provision of the CSAPR NO_x Ozone Season Group 2 Trading Program that applies to a CSAPR NO_x Ozone Season Group 2 source or the designated representative of a CSAPR NO_x Ozone Season Group 2 source shall also apply to the owners and operators of such source and of the CSAPR NO_x Ozone Season Group 2 units at the source.
- (ii) Any provision of the CSAPR NO_x Ozone Season Group 2 Trading Program that applies to a CSAPR NO_x Ozone Season Group 2 unit or the designated representative of a CSAPR NO_x Ozone Season Group 2 unit shall also apply to the owners and operators of such unit.

G. Effect on other authorities

- (i) No provision of the CSAPR NO_x Ozone Season Group 2 Trading Program or exemption under 40 CFR § 97.805 shall be construed as exempting or excluding the owners and operators, and the designated representative, of a CSAPR NO_x Ozone Season Group 2 source or CSAPR NO_x Ozone Season Group 2 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	20
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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
CLEANER	SOLVENT DEGREASING MACHINES	N/A	115-SOLV	30 TAC Chapter 115, Degreasing Processes	No changing attributes.
EMENG	SRIC ENGINES	N/A	63ZZZZ-ENG	40 CFR Part 63, Subpart ZZZZ	No changing attributes.
GRPBOILER	BOILERS/STEAM GENERATORS/STEAM GENERATING UNITS	AB1, AB2	60DB-FG	40 CFR Part 60, Subpart Db	D-Series Fuel Type #1 = Gaseous fossil fuel other than natural gas and coal-derived synthetic fuel meeting the definition of natural gas., Heat Input Gas/Oil = The facility does not combust natural gas or distillate oil in excess of 30 % of the heat input from the combustion of all fuels.
GRPBOILER	BOILERS/STEAM GENERATORS/STEAM GENERATING UNITS	AB1, AB2	60DB-MG	40 CFR Part 60, Subpart Db	D-Series Fuel Type #1 = Natural gas., D-Series Fuel Type #2 = Gaseous fossil fuel other than natural gas and coal-derived synthetic fuel meeting the definition of natural gas., Heat Input Gas/Oil = The facility combusts natural gas or distillate oil in excess of 30% of the heat input from the combustion of all fuels., Heat Release Rate = Natural gas with a heat release rate less than or equal to 70 MBtu/hr/ft ³ .
GRPBOILER	BOILERS/STEAM GENERATORS/STEAM GENERATING UNITS	AB1, AB2	60DB-NG	40 CFR Part 60, Subpart Db	D-Series Fuel Type #1 = Natural gas., Heat Input Gas/Oil = The facility combusts natural gas or distillate oil in excess of 30% of the heat input from the combustion of all fuels., Heat Release Rate = Natural gas with a heat release rate less than or equal to 70 MBtu/hr/ft ³ .

Unit Summary

Unit/Group/ Process ID No.	Unit Type	Group/Inclusive Units	SOP Index No.	Regulation	Requirement Driver
GRPSTACK	EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS	AB1, AB2, CU1, CU2	R1151	30 TAC Chapter 111, Nonagricultural Processes	No changing attributes.
GRPSTACK	EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS	AB1, AB2, CU1, CU2	R111	30 TAC Chapter 111, Visible Emissions	No changing attributes.
GRPTURBINE	STATIONARY TURBINES	CU1, CU2	60KKKK-1	40 CFR Part 60, Subpart KKKK	75% of Peak = The combustion turbine does not operate at less than 75% of peak load or at temperatures less than zero degrees F.
GRPTURBINE	STATIONARY TURBINES	CU1, CU2	60KKKK-2	40 CFR Part 60, Subpart KKKK	75% of Peak = The combustion turbine operates at less than 75% of peak load or at temperatures less than zero degrees F., 30 MW = The combustion turbine has an output of greater than 30 MW.
UNLOAD	LOADING/UNLOADING OPERATIONS	N/A	115-UNLOAD	30 TAC Chapter 115, Loading and Unloading of VOC	No changing attributes.

Applicable Requirements Summary

Unit Group Process ID No.	Unit Group Process Type	SOP Index No.	Pollutant	State Rule or Federal Regulation Name	Emission Limitation, Standard or Equipment Specification Citation	Textual Description (See Special Term and Condition 1.B.)	Monitoring And Testing Requirements	Recordkeeping Requirements (30 TAC § 122.144)	Reporting Requirements (30 TAC § 122.145)
CLEANER	EU	115-SOLV	VOC	30 TAC Chapter 115, Degreasing Processes	§ 115.411(5)	In Gregg, Nueces, and Victoria Counties, degreasing operations located on any property that can emit, when uncontrolled, a combined weight of VOC < 550 pounds in any consecutive 24-hour period are exempt from §115.412 of this title.	None	§ 115.416 § 115.416(3)	None
EMENG	EU	63ZZZZ-ENG	112(B) HAPS	40 CFR Part 63, Subpart ZZZZ	§ 63.6603(a)-Table 2d.4 § 63.6595(a)(1) § 63.6605(a) § 63.6605(b) § 63.6625(e) § 63.6625(f) § 63.6625(h) § 63.6625(i) § 63.6640(f)(1) § 63.6640(f)(2) § 63.6640(f)(2)(i) § 63.6640(f)(4) § 63.6640(f)(4)(i)	For each existing emergency stationary CI RICE and black start stationary CI RICE, located at an area source, you must comply with the requirements as specified in Table 2d.4.a-c.	§ 63.6625(i) § 63.6640(a) § 63.6640(a)-Table 6.9.a.i § 63.6640(a)-Table 6.9.a.ii	§ 63.6625(i) § 63.6655(e) § 63.6655(f) § 63.6660(a) § 63.6660(b) § 63.6660(c)	§ 63.6640(e) § 63.6650(f)
GRPBOILER	EU	60DB-FG	NO _x	40 CFR Part 60, Subpart Db	§ 60.40b(a)	The affected facility to which this subpart applies is each steam generating unit that commences construction, modification, or reconstruction after June 19, 1984, and that has a heat input capacity from fuels combusted in the steam generating unit of greater than 29 megawatts (MW) (100 million British thermal units per hour (MMBtu/hr)).	None	[G]§ 60.49b(d) § 60.49b(o)	§ 60.49b(a) § 60.49b(a)(1) § 60.49b(a)(3)

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)
GRPBOILER	EU	60DB-FG	PM	40 CFR Part 60, Subpart Db	§ 60.40b(a)	The affected facility to which this subpart applies is each steam generating unit that commences construction, modification, or reconstruction after June 19, 1984, and that has a heat input capacity from fuels combusted in the steam generating unit of greater than 29 megawatts (MW) (100 million British thermal units per hour (MMBtu/hr)).	None	[G]§ 60.49b(d) § 60.49b(o)	§ 60.49b(a) § 60.49b(a)(1) § 60.49b(a)(3)
GRPBOILER	EU	60DB-FG	PM (Opacity)	40 CFR Part 60, Subpart Db	§ 60.40b(a)	The affected facility to which this subpart applies is each steam generating unit that commences construction, modification, or reconstruction after June 19, 1984, and that has a heat input capacity from fuels combusted in the steam generating unit of greater than 29 megawatts (MW) (100 million British thermal units per hour (MMBtu/hr)).	None	[G]§ 60.49b(d) § 60.49b(o)	§ 60.49b(a) § 60.49b(a)(1) § 60.49b(a)(3)
GRPBOILER	EU	60DB-FG	SO ₂	40 CFR Part 60, Subpart Db	§ 60.40b(a)	The affected facility to which this subpart applies is each steam generating unit that commences construction, modification, or reconstruction after June 19, 1984, and that has a heat input capacity from fuels combusted in the steam generating unit of	None	[G]§ 60.49b(d) § 60.49b(o)	§ 60.49b(a) § 60.49b(a)(1) § 60.49b(a)(3)

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)
						greater than 29 megawatts (MW) (100 million British thermal units per hour (MMBtu/hr)).			
GRPBOILER	EU	60DB-MG	PM	40 CFR Part 60, Subpart Db	§ 60.40b(a)	The affected facility to which this subpart applies is each steam generating unit that commences construction, modification, or reconstruction after June 19, 1984, and that has a heat input capacity from fuels combusted in the steam generating unit of greater than 29 megawatts (MW) (100 million British thermal units per hour (MMBtu/hr)).	None	[G]§ 60.49b(d) § 60.49b(o)	§ 60.49b(a) § 60.49b(a)(1) § 60.49b(a)(3)
GRPBOILER	EU	60DB-MG	PM (Opacity)	40 CFR Part 60, Subpart Db	§ 60.40b(a)	The affected facility to which this subpart applies is each steam generating unit that commences construction, modification, or reconstruction after June 19, 1984, and that has a heat input capacity from fuels combusted in the steam generating unit of greater than 29 megawatts (MW) (100 million British thermal units per hour (MMBtu/hr)).	None	[G]§ 60.49b(d) § 60.49b(o)	§ 60.49b(a) § 60.49b(a)(1) § 60.49b(a)(3)
GRPBOILER	EU	60DB-MG	SO ₂	40 CFR Part 60, Subpart Db	§ 60.40b(a)	The affected facility to which this subpart applies is each steam generating unit that commences construction, modification, or reconstruction after June	None	[G]§ 60.49b(d) § 60.49b(o)	§ 60.49b(a) § 60.49b(a)(1) § 60.49b(a)(3)

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)
						19, 1984, and that has a heat input capacity from fuels combusted in the steam generating unit of greater than 29 megawatts (MW) (100 million British thermal units per hour (MMBtu/hr)).			
GRPBOILER	EU	60DB-NG	PM	40 CFR Part 60, Subpart Db	§ 60.40b(a)	The affected facility to which this subpart applies is each steam generating unit that commences construction, modification, or reconstruction after June 19, 1984, and that has a heat input capacity from fuels combusted in the steam generating unit of greater than 29 megawatts (MW) (100 million British thermal units per hour (MMBtu/hr)).	None	[G]§ 60.49b(d) § 60.49b(o)	§ 60.49b(a) § 60.49b(a)(1) § 60.49b(a)(3)
GRPBOILER	EU	60DB-NG	PM (Opacity)	40 CFR Part 60, Subpart Db	§ 60.40b(a)	The affected facility to which this subpart applies is each steam generating unit that commences construction, modification, or reconstruction after June 19, 1984, and that has a heat input capacity from fuels combusted in the steam generating unit of greater than 29 megawatts (MW) (100 million British thermal units per hour (MMBtu/hr)).	None	[G]§ 60.49b(d) § 60.49b(o)	§ 60.49b(a) § 60.49b(a)(1) § 60.49b(a)(3)
GRPBOILER	EU	60DB-NG	SO ₂	40 CFR Part 60, Subpart Db	§ 60.40b(a)	The affected facility to which this subpart applies is each	None	[G]§ 60.49b(d) § 60.49b(o)	§ 60.49b(a) § 60.49b(a)(1)

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)
						steam generating unit that commences construction, modification, or reconstruction after June 19, 1984, and that has a heat input capacity from fuels combusted in the steam generating unit of greater than 29 megawatts (MW) (100 million British thermal units per hour (MMBtu/hr)).			§ 60.49b(a)(3)
GRPSTACK	EP	R1151	PM	30 TAC Chapter 111, Nonagricultural Processes	§ 111.151(a) § 111.151(c)	No person may cause, suffer, allow, or permit emissions of particulate matter from any source to exceed the allowable rates specified in Table 1 as follows, except as provided by §111.153 of this title (relating to Emissions Limits for Steam Generators).	** See Periodic Monitoring Summary	None	None
GRPSTACK	EP	R111	Opacity	30 TAC Chapter 111, Visible Emissions	§ 111.111(a)(1)(C) § 111.111(a)(1)(E)	Visible emissions from any stationary vent shall not exceed an opacity of 15% averaged over a six minute period for any source with a total flow rate of at least 100,000 acfm unless a CEMS is installed.	[G]§ 111.111(a)(1)(F) ** See Periodic Monitoring Summary	None	None
GRPTURBINE	EU	60KKKK-1	NO _x	40 CFR Part 60, Subpart KKKK	§ 60.4320(a)-Table 1 § 60.4320(a) § 60.4320(b) § 60.4325 § 60.4333(a) § 60.4333(b)(1) § 60.4335(b)(1)	New, modified, or reconstructed turbine firing natural gas with a heat input at peak load > 850 MMBtu/h must meet the nitrogen oxides emission standard of 54 ng/J of useful output (0.43 lb/MWh).	§ 60.4333(b)(1) § 60.4335(b)(1) § 60.4335(b)(2) § 60.4335(b)(3) § 60.4335(b)(4) [G]§ 60.4345 § 60.4350(a) § 60.4350(b)	[G]§ 60.4345 § 60.4350(b)	[G]§ 60.4345 § 60.4350(d) § 60.4375(a) § 60.4380 [G]§ 60.4380(b) § 60.4395

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)
					§ 60.4335(b)(2) § 60.4335(b)(3) § 60.4335(b)(4) [G]§ 60.4345		§ 60.4350(c) § 60.4350(d) § 60.4350(e) § 60.4350(f) § 60.4350(f)(2) § 60.4350(h) [G]§ 60.4400(a) § 60.4400(b) § 60.4400(b)(1) § 60.4400(b)(2) § 60.4400(b)(4) § 60.4400(b)(5) § 60.4400(b)(6) [G]§ 60.4405		
GRPTURBINE	EU	60KKKK-1	SO ₂	40 CFR Part 60, Subpart KKKK	§ 60.4330(a)(2) § 60.4333(a)	You must not burn in the subject stationary combustion turbine any fuel which contains total potential sulfur emissions in excess of 26 ng SO ₂ /J (0.060 lb SO ₂ /MMBtu) heat input. If your turbine simultaneously fires multiple fuels, each fuel must meet this requirement.	§ 60.4365 § 60.4365(b) § 60.4415(a) § 60.4415(a)(2) § 60.4415(a)(2)(ii)	§ 60.4365(b)	§ 60.4375(a)
GRPTURBINE	EU	60KKKK-2	NO _x	40 CFR Part 60, Subpart KKKK	§ 60.4320(a)-Table 1 § 60.4320(a) § 60.4320(b) § 60.4333(a) § 60.4333(b)(1) § 60.4335(b)(1) § 60.4335(b)(2) § 60.4335(b)(3) § 60.4335(b)(4) [G]§ 60.4345	Turbines operating at less than 75 percent of peak load, or turbines operating at temperatures less than 0 degrees F with greater than 30 MW output must meet the nitrogen oxides emission standard of 590 ng/J of useful output (4.7 lb/MWh).	§ 60.4333(b)(1) § 60.4335(b)(1) § 60.4335(b)(2) § 60.4335(b)(3) § 60.4335(b)(4) [G]§ 60.4345 § 60.4350(a) § 60.4350(b) § 60.4350(c) § 60.4350(d) § 60.4350(e) § 60.4350(f) § 60.4350(f)(2)	[G]§ 60.4345 § 60.4350(b)	[G]§ 60.4345 § 60.4350(d) § 60.4375(a) § 60.4380 [G]§ 60.4380(b) § 60.4395

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)
							§ 60.4350(h) [G]§ 60.4400(a) § 60.4400(b) § 60.4400(b)(1) § 60.4400(b)(2) § 60.4400(b)(4) § 60.4400(b)(5) § 60.4400(b)(6) [G]§ 60.4405		
GRPTURBINE	EU	60KKKK-2	SO ₂	40 CFR Part 60, Subpart KKKK	§ 60.4330(a)(2) § 60.4333(a)	You must not burn in the subject stationary combustion turbine any fuel which contains total potential sulfur emissions in excess of 26 ng SO ₂ /J (0.060 lb SO ₂ /MMBtu) heat input. If your turbine simultaneously fires multiple fuels, each fuel must meet this requirement.	§ 60.4365 § 60.4365(b) § 60.4415(a) § 60.4415(a)(2) § 60.4415(a)(2)(ii)	§ 60.4365(b)	§ 60.4375(a)
UNLOAD	EU	115-UNLOAD	VOC	30 TAC Chapter 115, Loading and Unloading of VOC	§ 115.217(b)(2) § 115.212(b)(2) § 115.214(b)(1)(B) § 115.214(b)(1)(D) § 115.214(b)(1)(D)(i)	All land-based loading and unloading of VOC with a true vapor pressure less than 1.5 psia under actual storage conditions is exempt from the requirements of the division (relating to Loading and Unloading of VOCs), except as specified.	§ 115.214(b)(1)(A) § 115.214(b)(1)(A)(i) § 115.215 § 115.215(4)	§ 115.216 § 115.216(2) § 115.216(3)(B)	None

Additional Monitoring Requirements

Periodic Monitoring Summary 30

Periodic Monitoring Summary

Unit/Group/Process Information	
ID No.: GRPSTACK	
Control Device ID No.: N/A	Control Device Type: N/A
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 111, Nonagricultural Processes	SOP Index No.: R1151
Pollutant: PM	Main Standard: § 111.151(a)
Monitoring Information	
Indicator: Fuel Type	
Minimum Frequency: Annually or at any time an alternate fuel is used	
Averaging Period: N/A	
Deviation Limit: Alternate fuel other than pipeline natural gas or refinery gas containing less than 10 gr total Sulfur per 100 cubic feet is combusted for a period greater than 24 consecutive hours.	
<p>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, for a period greater than or equal to 24 consecutive hours it shall be considered and reported as a deviation or the permit holder shall conduct an observation of the stationary vent for each such period to determine if visible emissions are observed. Any time an alternate fuel is fired for a period of greater than 7 consecutive days then visible emissions observations will be conducted no less than once per week. Documentation of all observations shall be maintained. If visible emissions are present during the firing of an alternate fuel, the permit holder shall either list this occurrence as a deviation or the permit holder may determine the opacity consistent with Test Method 9. Any opacity readings that are above the opacity limit from the underlying applicable requirement shall be reported as a deviation.</p>	

Periodic Monitoring Summary

Unit/Group/Process Information	
ID No.: GRPSTACK	
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
Pollutant: Opacity	Main Standard: § 111.111(a)(1)(C)
Monitoring Information	
Indicator: Fuel Type	
Minimum Frequency: Annually or at any time an alternate fuel is used	
Averaging Period: N/A	
Deviation Limit: Alternate fuel other than pipeline natural gas or refinery gas containing less than 10 gr total Sulfur per 100 cubic feet is combusted for a period greater than 24 consecutive hours.	
<p>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, for a period greater than or equal to 24 consecutive hours it shall be considered and reported as a deviation or the permit holder shall conduct an observation of the stationary vent for each such period to determine if visible emissions are observed. Any time an alternate fuel is fired for a period of greater than 7 consecutive days then visible emissions observations will be conducted no less than once per week. Documentation of all observations shall be maintained. If visible emissions are present during the firing of an alternate fuel, the permit holder shall either list this occurrence as a deviation or the permit holder may determine the opacity consistent with Test Method 9. Any opacity readings that are above the opacity limit from the underlying applicable requirement shall be reported as a deviation.</p>	

Permit Shield

Permit Shield 33

Permit Shield

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

Unit / Group / Process ID No.	Group / Inclusive Units	Regulation	Basis of Determination
CNDTK	N/A	30 TAC Chapter 115, Storage of VOCs	Storage tank with a storage capacity less than or equal to 1,000 gallons.
CNDTK	N/A	40 CFR Part 60, Subpart Kb	Capacity not greater than or equal to 75 m3.
CT	N/A	40 CFR Part 63, Subpart Q	Chromium-based water treatment chemicals are not used.
EMENG	N/A	30 TAC Chapter 112, Sulfur Compounds	Not a liquid or solid fuel-fired steam generator, furnace, or heater
EMENG	N/A	40 CFR Part 60, Subpart IIII	Not constructed, modified or reconstructed after July 11, 2005
ENGSTK	N/A	30 TAC Chapter 115, Vent Gas Controls	Vent gas stream originates from a combustion unit exhaust stream which is not used as a control device.
FUG	N/A	30 TAC Chapter 115, Fugitives Pet Ref B Counties	Neither located in HGA, BPA, or DFW nor a petroleum refinery
GASTK	N/A	30 TAC Chapter 115, Storage of VOCs	Storage tank with a storage capacity less than or equal to 1,000 gallons.
GASTK	N/A	40 CFR Part 60, Subpart Kb	Capacity not greater than or equal to 75 m3.
GRPBOILER	AB1, AB2	30 TAC Chapter 112, Sulfur Compounds	Not a liquid or solid fuel-fired generator, furnace or heater
GRPBOILER	AB1, AB2	40 CFR Part 60, Subpart TTTT	Not constructed after January 8, 2014 and not modified or reconstructed after June 18, 2014.
GRPBOILER	AB1, AB2	40 CFR Part 63, Subpart DDDDD	Not located at a major HAP source.
GRPBOILER	AB1, AB2	40 CFR Part 63, Subpart JJJJJ	Gas-fired boilers are not subject to this subpart.
GRPDB	CU1, CU2	30 TAC Chapter 117, East Texas Combustion	Placed into service before December 31, 1995

Permit Shield

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

Unit / Group / Process ID No.	Group / Inclusive Units	Regulation	Basis of Determination
GRPDB	CU1, CU2	40 CFR Part 60, Subpart Da	The heat recovery steam generators used with duct burners are now subject to NSPS KKKK and so are not subject to this rule.
GRPDB	CU1, CU2	40 CFR Part 60, Subpart Db	The heat recovery steam generators associated with the stationary combustion turbines are now subject to NSPS KKKK and so are not subject to this rule.
GRPDB	CU1, CU2	40 CFR Part 63, Subpart DDDDD	Not located at a major HAP source.
GRPDB	CU1, CU2	40 CFR Part 63, Subpart JJJJJ	Gas-fired boilers are not subject to this subpart.
GRPSTACK	AB1, AB2, CU1, CU2	30 TAC Chapter 115, Vent Gas Controls	Vent gas stream originates from a combustion unit exhaust stream which is not used as a control device.
GRPTURBINE	CU1, CU2	30 TAC Chapter 112, Sulfur Compounds	Not a liquid or solid fuel-fired generator, furnace or heater
GRPTURBINE	CU1, CU2	30 TAC Chapter 117, East Texas Combustion	Placed into service before December 31, 1995
GRPTURBINE	CU1, CU2	40 CFR Part 60, Subpart GG	Stationary combustion turbines regulated under NSPS KKKK are exempt from the requirements of NSPS GG.
GRPTURBINE	CU1, CU2	40 CFR Part 60, Subpart TTTT	This rule does not apply to modifications of stationary combustion turbines.
GRPTURBINE	CU1, CU2	40 CFR Part 63, Subpart YYYY	Not located at a major HAP source.

New Source Review Authorization References

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New Source Review Authorization References by Emission Unit	37

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.: PSDTX943	Issuance Date: 02/11/2020
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.: 41500	Issuance Date: 02/11/2020
Permits By Rule (30 TAC Chapter 106) for the Application Area	
Number: 106.102	Version No./Date: 11/15/1996
Number: 106.122	Version No./Date: 09/04/2000
Number: 106.227	Version No./Date: 09/04/2000
Number: 106.244	Version No./Date: 09/04/2000
Number: 106.261	Version No./Date: 09/04/2000
Number: 106.261	Version No./Date: 11/01/2003
Number: 106.262	Version No./Date: 11/01/2003
Number: 106.263	Version No./Date: 11/01/2001
Number: 106.265	Version No./Date: 09/04/2000
Number: 106.373	Version No./Date: 09/04/2000
Number: 106.412	Version No./Date: 09/04/2000
Number: 106.452	Version No./Date: 09/04/2000
Number: 106.454	Version No./Date: 11/01/2001
Number: 106.472	Version No./Date: 09/04/2000
Number: 106.473	Version No./Date: 09/04/2000
Number: 106.478	Version No./Date: 09/04/2000
Number: 106.511	Version No./Date: 09/04/2000
Number: 106.532	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**
AB1	AUXILIARY BOILER 1	41500, PSDTX943, 106.261/09/04/2000 [47963]
AB2	AUXILIARY BOILER 2	41500, PSDTX943, 106.261/09/04/2000 [47950]
CLEANER	SOLVENT DEGREASER	106.454/11/01/2001
CNDTK	REFINERY GAS CONDENSATE TANK (1000 GALLONS)	106.473/09/04/2000, 106.478/09/04/2000
CT	COOLING TOWER	41500, PSDTX943
CU1	TURBINE/HEAT RECOVERY STEAM GENERATOR 1	41500, PSDTX943, 106.261/11/01/2003 [159506], 106.262/11/01/2003 [159506]
CU2	TURBINE/HEAT RECOVERY STEAM GENERATOR 2	41500, PSDTX943, 106.261/11/01/2003 [163027], 106.262/11/01/2003 [163027]
EMENG	EMERGENCY ENGINE	106.511/09/04/2000
ENGSTK	ENGINE STACK	106.511/09/04/2000
FUG	PIPING FUGITIVES	41500, PSDTX943
GASTK	GASOLINE TANK (500 GALLONS)	106.473/09/04/2000, 106.478/09/04/2000
UNLOAD	DIESEL UNLOADING	106.472/09/04/2000

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

Appendix A

Acronym List 39

Acronym List

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

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

Appendix B

Major NSR Summary Table 41

Major NSR Summary Table

Permit Numbers: 41500 and PSDTX943					Issuance Date: February 11, 2020		
Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates *		Monitoring and Testing Requirements	Recordkeeping Requirements	Reporting Requirements
			lbs/hour	TPY **	Special Condition/Application Information	Special Condition/Application Information.	Special Condition/Application Information
CU1	Turbine/HRSG No. 1 GE 7241 FA Turbine with 700 MMBtu/hr Duct Burner	NOx	164.75	--	2, 3, 6, 7, 12, 13, 15, 16	2, 3, 4, 5, 7, 12, 13, 15, 16, 17, 18, 19	2, 12, 13, 14, 20
		CO	116.90	--			
		PM/PM ₁₀	35.90	--			
		VOC	19.72	--			
		SO ₂	48.35	--			
		H ₂ SO ₄	7.40	--			
CU2	Turbine/HRSG No. 2 GE 7241 FA Turbine with 700 MMBtu/hr Duct Burner	NOx	164.75	--	2, 3, 6, 7, 12, 13, 15, 16	2, 3, 4, 5, 7, 12, 13, 15, 16, 17, 18, 19	2, 12, 13, 14, 20
		CO	116.90	--			
		PM/PM ₁₀	35.90	--			
		VOC	19.72	--			
		SO ₂	48.35	--			
		H ₂ SO ₄	7.40	--			
FUG	Piping Fugitives	VOC	2.02	2.38			
		H ₂ S	0.002	0.004			
AB1	Auxiliary Boiler 1 315 MMBtu/hr (4)	NOx	18.84	--	2, 7, 9, 12, 13, 15, 16	2, 5, 7, 9, 12, 13, 15, 16, 17, 18, 19	2, 12, 13, 14, 20
		CO	28.11	--			
		PM/PM ₁₀	1.57	--			
		VOC	2.81	--			
		SO ₂	9.40	--			
AB2	Auxiliary Boiler 2 315 MMBtu/hr (5)	NOx	18.84	--	2, 7, 9, 12, 13, 15, 16	2, 5, 7, 9, 12, 13, 15, 16, 17, 18, 19	2, 12, 13, 14, 20
		CO	28.11	--			
		PM/PM ₁₀	1.57	--			
		VOC	2.81	--			

Major NSR Summary Table

Permit Numbers: 41500 and PSDTX943					Issuance Date: February 11, 2020		
Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates *		Monitoring and Testing Requirements	Recordkeeping Requirements	Reporting Requirements
			lbs/hour	TPY **	Special Condition/Application Information	Special Condition/Application Information.	Special Condition/Application Information
		SO ₂	9.40	--			
CU1 and CU2 AB1 and AB2	Annual Total for Two Turbines****/ Duct Burners*** and Two Auxiliary Boilers (Includes MSS emissions)	NO _x	--	820.10	2, 3, 6, 7, 9, 12, 13, 15, 16	2, 3, 4, 5, 7, 9, 12, 13, 15, 16, 17, 18, 19	2, 12, 13, 14, 20
		CO	--	685.40			
		PM/PM ₁₀	--	226.90			
		VOC	--	74.70			
		SO ₂	--	126.20			
		H ₂ SO ₄	--	19.30			
CT	Cooling Towers	PM/PM ₁₀	11.15	48.85			
CU1	Turbine/HRSG No. 1 (MSS)	NO _x	335.41	--	13, 22	13, 19, 21, 22	13
		CO	1020.96	--			
		PM/PM ₁₀	35.90	--			
		VOC	183.49	--			
		SO ₂	48.35	--			
		H ₂ SO ₄	7.40	--			
CU2	Turbine/HRSG No. 2 (MSS)	NO _x	335.41	--	13, 22	13, 19, 21, 22	13
		CO	1020.96	--			
		PM/PM ₁₀	35.90	--			
		VOC	183.49	--			
		SO ₂	48.35	--			
		H ₂ SO ₄	7.40	--			
AB1	Auxiliary Boiler 1 (MSS)	NO _x	31.50	--	13	13, 19, 21	13
		CO	116.41	--			
	Auxiliary Boiler 2	NO _x	31.50	--			

Major NSR Summary Table

Permit Numbers: 41500 and PSDTX943					Issuance Date: February 11, 2020		
Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates *		Monitoring and Testing Requirements	Recordkeeping Requirements	Reporting Requirements
			lbs/hour	TPY **	Special Condition/Application Information	Special Condition/Application Information.	Special Condition/Application Information
AB2	(MSS)	CO	116.41	--	13	13, 19, 21	13

- (1) Emission point identification - either specific equipment designation or emission point number from a plot plan.
- (2) Specific point source names. For fugitive sources, use an area name or fugitive source name.
- (3) VOC - volatile organic compounds as defined in Title 30 Texas Administrative Code §101.1
 NOx - total oxides of nitrogen
 SO₂ - sulfur dioxide
 PM - particulate matter, suspended in the atmosphere, including PM₁₀ and PM_{2.5}
 PM₁₀ - particulate matter equal to or less than 10 microns in diameter
 CO - carbon monoxide
 H₂SO₄ - sulfuric acid
 H₂S - hydrogen sulfide
- (4) The maximum heat input capacity above 315 MMBtu/hr (up to 336.4 MMBtu/hr) is currently authorized under 30 TAC §106.261 and Permit by Rule Registration Number 47963 effective July 20, 2001.
- (5) The maximum heat input capacity above 315 MMBtu/hr (up to 336.4 MMBtu/hr) is currently authorized under 30 TAC §106.261 and Permit by Rule Registration Number 47950 effective July 5, 2001.

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

24 Hrs/day 7 Days/week 52 Weeks/year or 8,760 Hrs/year

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

*** The combined annual heat input for the two duct burners based on any consecutive 12-month period shall not exceed 6,745,200 MMBtu/yr (higher heating value).

**** Steam augmentation for 1,000 hours per year per turbine.

Texas Commission on Environmental Quality Air Quality Permit

A Permit Is Hereby Issued To
Corpus Christi Cogeneration, LLC
Authorizing the Continued Operation of
Corpus Christi Cogeneration
Located at **Corpus Christi, Nueces County, Texas**
Latitude 27° 48' 50" Longitude -97° 25' 42"

Permit: 41500 and PSDTX943

Issuance Date: February 11, 2020

Expiration Date: February 11, 2030



For the Commission

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

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

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

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

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Scope and Federal Applicability

1. This permit covers only those sources of emissions listed in the attached table entitled "Emission Sources - Maximum Allowable Emission Rates," (MAERT) and those sources are limited to the emission limits and other conditions specified in that attached table. Compliance with the annual emission limits and operating schedules is based on a rolling 12-month period (i.e., updated monthly) rather than the calendar year. (PSD)
2. The facilities operated under this permit shall comply with applicable requirements of the U.S. Environmental Protection Agency (EPA) regulations in Title 40 Code of Federal Regulations (40 CFR) Part 60 on Standards of Performance for New Stationary Sources,
 - A. Subpart A: General Conditions.
 - B. Subpart Da: Standards of Performance for Electric Utility Steam Generating Units for which Construction is Commenced after Sept 18, 1978. [Heat Recovery Steam Generating (HRSG) Duct Burners]
 - C. Subpart Db: Standards of Performance for Industrial-Commercial Institutional Steam Generating Units (Auxiliary Boiler).
 - D. Subpart GG: Standards of Performance for Stationary Gas Turbines. (Gas Turbines)

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.

Emission Standards, Plant Design, Operation Practices, and Fuel Specifications

3. The two HRSG duct burners are each limited to a maximum heat input capacity of 700 million British thermal units per hour (MMBtu/hr) based on the higher heating value (HHV) of the fuels. The combined annual heat input for the two duct burners based on any consecutive 12-month period shall not exceed 6,745,200 million British thermal units per year (HHV). 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. (PSD)
4. The gas turbines shall be limited to firing pipeline-quality, sweet natural gas containing no more than 5.0 (hourly) and 2.0 (on an annual basis) grains (gr) total sulfur per 100 dry standard cubic feet (dscf).
5. The HRSG duct burners and the auxiliary boilers shall be limited to firing the following fuels:
 - A. Natural gas as described in the Special Condition No. 4.
 - B. Refinery gas from CITGO at 0.1 gr/dscf of sulfur based on a three-hour rolling average.

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- C. Mixtures of the above fuels.
 - D. Firing of any other fuel will require authorization from the permitting authority.
6. Upon request by the Executive Director of the Texas Commission on Environmental Quality (TCEQ) or any local air pollution control program having jurisdiction, the holder of this permit shall provide a sample and/or an analysis of the fuels fired in the gas turbines and HRSG duct burners.
7. The opacity of particulate matter (PM) emissions shall not exceed five (5) percent at Emission Point Nos. (EPNs:) CU 1, CU 2, AB 1 and AB 2 except during periods of startup or shutdown, which shall not exceed 20 percent. This determination shall be made first by observing for visible emissions while each facility is in operation. Observations shall be made at least 15 feet and no more than 0.25 miles from each emission point. If no visible emissions are observed from an emission point, then opacity measurements are not required. If visible emissions are observed from the emission point, then opacity shall be determined by 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.
8. Each cogeneration train's normal operating range is from 50 to 100 percent base load except for periods of maintenance, startup, and shutdown (MSS). Steam augmentation for 1,000 hours per year per turbine and reduced load operation below base load not associated with MSS is authorized provided the maximum emission rates specified in the MAERT are not exceeded. (PSD)
9. The auxiliary boilers shall each be limited to a maximum heat input capacity of 336.4 MMBtu/hr, HHV. The heat input shall be calculated on the HHV of the fuel. The permit holder may fire any combination of auxiliary boilers provided emissions from the gas turbines/HRSG duct burners and auxiliary boilers being fired does not exceed the maximum emission rates specified in the MAERT. If the auxiliary boilers will be fired or maintained on a hot standby basis, emissions from the auxiliary boilers must be measured continuously to determine compliance with the annual ton per year limitations in the MAERT. Emission concentrations from the boilers shall be corrected to 3 percent oxygen (O₂). The increased maximum heat input capacity above 315 MMBtu/hr for each boiler is currently authorized under Title 30 Texas Administrative Code § 106.261 and Permit by Rule Registration Numbers 47963 and 47950 effective July 20, 2001 and July 5, 2001, for Auxiliary Boiler 1 and Auxiliary Boiler 2, respectively. (PSD)

Additional Controls

10. The holder of this permit shall leave appropriate clearances in and around each HRSG to allow for the future installation of additional controls in the event that additional control technology is required by the Executive Director of the TCEQ as a result of future modifications to the permit.

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.

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: CU 1, CU 2, AB 1 and AB 2. The initial determination of compliance stack sampling for all both identical auxiliary boilers may be demonstrated by testing one of the auxiliary boilers and submitting the stack sampling results as data in lieu of stack sampling for the other identical boiler not tested. The stack sampling for EPNs: CU 1 and CU 2 shall be performed without steam injection for power augmentation. One of the auxiliary boilers and one of the HRSG duct burners shall be tested while firing refinery gas. 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, with final method approval to be determined at the pretest meeting. Testing was conducted in July through October 2002 for the combustion turbines, and in February and March 2003 for the auxiliary boilers and for refinery gas firing in the combustion turbines. (PSD)

Fuel sampling using the methods and procedures of 40 CFR § 60.335(d) may be conducted in lieu of stack sampling for sulfur dioxide (SO₂). If fuel sampling is used, compliance with New Source Performance Standards (NSPS), Subpart GG, sulfur dioxide (SO₂) limits shall be based on 100 percent conversion of the sulfur in the fuel to SO₂. Fuel sampling may be used to demonstrate compliance with the SO₂ maximum allowable emission rates from the auxiliary boilers and duct burners. Any deviations from those procedures must be approved by the Executive Director of the TCEQ prior to sampling. The TCEQ Executive Director or his 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 Corpus Christi 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 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 Air Permits Division. Test waivers and alternate/equivalent procedure proposals for NSPS testing which must have EPA approval shall be submitted to the TCEQ Regional Director.

- B. Emissions to be tested for at full turbine load include (but are not limited to) nitrogen oxide (NO_x), O₂, carbon monoxide (CO), and volatile organic compounds (VOC). The testing will be used to demonstrate initial compliance with Special Condition No. 12E and the MAERT.
- C. Emissions of VOC and O₂ from each turbine shall be tested while firing at the minimum point in the operating range, which is 50 percent of base load.
- D. Emissions of NO_x, O₂, CO, VOC, particulate matter equal to or less than 10 microns in diameter (PM₁₀) and opacity shall be tested with the turbine and duct burners operating concurrently at full rated capacity. Emissions of NO_x, O₂, CO, VOC, PM₁₀, and opacity from the auxiliary boilers shall be tested while firing at full rated capacity.
- E. The holder of this permit shall demonstrate during the initial compliance testing that the best available control technology has been selected by demonstrating that the concentrations of NO_x and CO from the gas turbine, the HRSG duct burner, and auxiliary boilers while firing natural gas do not exceed the following limits:
 - (1) Turbine Emission Limits expressed as parts per million by volume dry basis (ppmvd) when corrected to 15 percent O₂, without correction to International Standards Organization conditions. The NO_x shall not exceed 9 ppmvd and CO shall not exceed 13.0 ppmvd.
 - (2) HRSG Duct Burner Emission Limits expressed in lb/MMBtu. Emissions of NO_x shall not exceed 0.08 pounds per million British thermal units (lb/MMBtu). The CO emissions shall not exceed 0.08 lb/MMBtu.
 - (3) Each Auxiliary Boiler's emissions of NO_x shall not exceed 0.06 lb/MMBtu. The CO emissions shall not exceed 100 ppmvd when corrected to 3 percent O₂.
- F. Sampling of each gas turbine and duct burner shall occur within 60 days after achieving the maximum production rate at which each gas turbine and duct burner will be operated but no later than 180 days after initial start-up of each unit. Additional sampling shall occur as may be required by the TCEQ or the EPA.
- G. Within 60 days after the completion of the testing and sampling required herein, three copies of the sampling reports shall be distributed as follows:
 - (1) One copy to the TCEQ Corpus Christi Regional Office.
 - (2) One copy to the TCEQ Austin Office of Permitting and Registration, Air Permits Division.

- (3) One copy to the EPA Region 6 Office, Dallas.

Continuous Determination of Compliance for Co and NO_x

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 O₂ from each Turbine/HRSG Stack (EPNs: CU 1 and 2) and from each of the auxiliary boilers. The initial certification and relative accuracy test audit (RATA) shall be conducted prior to or during the sampling required by Special Condition No. 12. **(PSD)**

- 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 Permitting and Registration, Air Permits Division in Austin 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, § 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. Compliance with the reporting requirements of 40 CFR Part 60, Subpart A and Special Condition No. 20 will satisfy the reporting requirements of this condition.

All cylinder gas audit exceedances of ± 15 percent accuracy or 5 parts per million, whichever is greater, shall be reported as necessary to the appropriate TCEQ Regional Director. Additionally, any CEMS downtime shall be reported to the appropriate TCEQ Regional Director as required by 40 CFR Part 60, Subpart A, and necessary corrective action shall be taken. Supplemental stack concentration measurements may be required at the discretion of the appropriate TCEQ Regional Director.

- 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. Monitored NO_x and CO concentrations shall be corrected and reported in dimensional units corresponding to the MAERT limitations.
- 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 his designated representative upon request. The data from the CEMS may, at the discretion of the TCEQ, be used to determine compliance with the conditions of this permit. Hourly average concentrations shall be summed to tons per year and used to determine compliance with the annual emission limits in the MAERT.

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- D. The appropriate TCEQ Regional Office shall be notified at least 30 days prior to any required RATA in order to provide them the opportunity to observe the testing.
 - E. The daily calibration, maintenance, and CEMS operating requirements of this permit shall only apply to the auxiliary boilers on the days that the auxiliary boilers are fired or are on hot stand-by.
 - F. If applicable, the CEMS will 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. 40 CFR Part 75 is deemed an acceptable alternative to the performance specifications and quality assurance requirements of 40 CFR Part 60.
14. 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. (PSD)
15. The holder of this permit shall install, calibrate, maintain, and operate continuous monitoring systems to monitor and record the average hourly natural gas and refinery gas consumed by the gas turbine, duct burners, and auxiliary boilers. The systems shall be accurate to ±5.0 percent of the units' maximum flow. (PSD)
16. The holder of this permit shall monitor the fuels fired in the turbines for fuel-bound sulfur as specified in 40 CFR Part 60.334(h) or by maintaining contracts from fuel suppliers which guarantee that the sulfur content of the fuel meets the requirements of Special Condition 4, as specified in 40 CFR Part 60, Subpart GG.

The holder of this permit shall be set-up to receive real-time sulfur content concentration data from the on-site refinery gas monitor to assist in demonstrating continuous compliance with the SO₂ limits of this permit. The monitor will comply with all applicable requirements of 40 CFR 75, Appendix D. In the event the sulfur concentration of the CITGO refinery gas exceeds the limitation specified in Special Condition No. 5B, the permit holder shall make the necessary adjustments in the fuel flow to the duct burners or auxiliary boilers to achieve compliance with the limitation specified in Special Condition No. 5B. The permit holder shall maintain records of the fuel flow adjustments that were made. (PSD)

17. The holder of this permit shall either measure or develop a program to calculate the total mass flow rate through the HRSG stack using the measured or calculated flow rate as provided for by EPA Reference Method 19 to ensure continuous compliance with the emission limitations specified in the MAERT. The permit holder shall calculate hourly mass emissions in pounds per hour (lb/hr) using the measured or calculated exhaust flow rate and the measured concentrations of NO_x and CO from the CEMS required in Special Condition No. 13. These data shall be stored on a computer hard drive and on a computer

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disk or other TCEQ-accepted computer media. Records of this information shall also be available in a form suitable for inspection. (PSD)

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, the EPA, or any air pollution control agency with jurisdiction.

- A. A copy of this permit.
- B. Permit application dated May 27, 1999, MSS application dated August 8, 2009 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 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 used to demonstrate compliance with the MAERT. These records shall be made immediately available upon request to representatives of the TCEQ, EPA, or any local air pollution control program having jurisdiction: (PSD)

- A. Raw data files of all CEMS data including calibration checks and adjustments and maintenance performed on these systems.
- B. Records of the turbines, auxiliary boilers, and 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 May 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.
- C. Records of fuel sampling conducted pursuant to Special Condition No. 16. Additionally, the permit holder shall maintain records of fuel flow adjustments, sulfur concentrations, and calculation to demonstrate that the SO₂ maximum lb/hr allowable emission rate has not been exceeded when firing refinery gas that has a concentration that exceeds 0.1 gr/dscf of sulfur.
- D. Records of MSS events which include the following information:
 - (1) The physical location at which emissions from the MSS activity occurred, including the emission point number and common name for the point at which the emissions were released into the atmosphere.
 - (2) The type of planned MSS activity and the reason for the planned activity.

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- (3) The common name and the facility identification number, if applicable, of the facilities at which the MSS activity and emissions occurred.
- (4) The start date and time of the MSS activity and its duration.
- (5) The amount of emissions for the event.
- (6) Records of hours of diagnostic load reduction activities. **(4/16)**

Reporting

20. The holder of this permit shall submit to the TCEQ Corpus Christi Regional Office and the Air Enforcement Branch of EPA in Dallas 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 noncomplying emissions and CEMS downtimes by cause. (PSD)

Routine Maintenance, Startup, and Shutdown

21. The emissions from routine MSS activities are reflected in the MAERT. These emissions will be minimized by the following:

- A. Facility and air pollution control equipment will be operated in a manner consistent with good practices for minimizing emissions.
- B. The frequency and duration of operation in MSS mode will be minimized and the applicable emissions monitoring systems will be kept in operation.
- C. MSS activities are authorized provided that the NO_x, CO and VOC emission rates in lb/hr do not exceed those specified for MSS conditions in the MAERT and comply with the tons per year specified in the MAERT.
- D. For EPNs: CU 1 and 2, the following shall apply:
 - (1) Cold startup events shall not exceed five hours. A cold startup is defined as a startup after a unit has received no fuel for a period of 24 hours or more.
 - (2) Warm startup events shall not exceed three hours. A warm startup is defined as a startup which is not a cold startup.
 - (3) Shutdown events shall not exceed two hours.
- E. For EPNs: AB 1 and 2, shutdown, cold and warm startup events shall not exceed two hours in duration.

22. Emissions from combustion turbine load reduction activities as identified in Attachment A, shall be subject to the hourly MSS emission rates listed on the MAERT and shall not exceed 36 hours per calendar year for all gas turbines combined. **(4/16)**

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Date: April 12, 2016

Attachment A

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Non-Inherently Low Emitting Planned Maintenance Activities						
Planned Maintenance Activity	EPN	Emissions				
		NO _x	CO	VOC	PM	SO ₂
Combustion Turbine Optimization ^{1,3}	CU1	X	X	X	X	X
Turbine Load Reduction Activities ^{2,3}	CU2	X	X	X	X	X

Date: April 12, 2016

¹ Includes, but is not limited to, (i) leak and operability checks (e.g., turbine over-speed tests, troubleshooting), (ii) balancing, and (iii) tuning activities that occur during seasonal tuning or after the completion of initial construction, a combustor change-out, a major repair, maintenance to a combustor, or other similar circumstances.

² Includes, but is not limited to combustion turbine load reductions (runbacks) associated with: initiation of steam turbine operation, low load steam turbine operation, variability in water or fuel supply, electric generator protection, and variation in turbine operations (including but not limited to, combustor flashback, primary combustion zone re-ignition, or combustion exhaust blade path spread)

³ Hourly emissions from these activities will be subject to the hourly emission limit for maintenance, startup, and shutdown activities from gas turbines listed on the MAERT.

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

Permit Numbers 41500 and PSDTX943

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

AIR CONTAMINANTS DATA

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates*	
			lb/hr	TPY**
<u>TURBINE AND DUCT BURNER</u>				
CU1	Turbine/HRSG No. 1 GE 7241 FA Turbine with 700 MMBtu/hr Duct Burner	NO _x	164.75	--
		CO	116.90	--
		PM/PM ₁₀	35.90	--
		VOC	19.72	--
		SO ₂	48.35	--
		H ₂ SO ₄	7.40	--
CU2	Turbine/HRSG No. 2 GE 7241 FA Turbine with 700 MMBtu/hr Duct Burner	NO _x	164.75	--
		CO	116.90	--
		PM/PM ₁₀	35.90	--
		VOC	19.72	--
		SO ₂	48.35	--
		H ₂ SO ₄	7.40	--
<u>FUGITIVES</u>				
FUG	Piping Fugitives	VOC	2.02	2.38
		H ₂ S	0.002	0.004
<u>AUXILIARY BOILERS</u>				
AB 1	Auxiliary Boiler 1 315 MMBtu/hr (4)	NO _x	18.84	--
		CO	28.11	--
		PM/PM ₁₀	1.57	--
		VOC	2.81	--
		SO ₂	9.40	--

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

AB 2	Auxiliary Boiler 2 315 MMBtu/hr (5)	NO _x	18.84	--
		CO	28.11	--
		PM/PM ₁₀	1.57	--
		VOC	2.81	--
		SO ₂	9.40	--

TURBINES, DUCT BURNERS, AND AUXILIARY BOILERS (TONS PER YEAR)

CU 1 and 2	Annual Total for Two Turbines****/Duct Burners ***and Two Auxiliary Boilers (Includes MSS emissions)	NO _x	--	820.10
AB 1 and 2		CO	--	685.40
		PM/PM ₁₀	--	226.90
		VOC	--	74.70
		SO ₂	--	126.20
		H ₂ SO ₄	--	19.30

COOLING TOWERS

CT	Cooling Towers	PM/PM ₁₀	11.15	48.85
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MAINTENANCE, STARTUP, AND SHUTDOWN

CU1	Turbine/HRSG No. 1	NO _x	335.41	--
		CO	1020.96	--
		PM/PM ₁₀	35.90	--
		VOC	183.49	--
		SO ₂	48.35	--
		H ₂ SO ₄	7.40	--
CU2	Turbine/HRSG No. 2	NO _x	335.41	--
		CO	1020.96	--
		PM/PM ₁₀	35.90	--
		VOC	183.49	--
		SO ₂	48.35	--
		H ₂ SO ₄	7.40	--
AB1	Auxiliary Boiler 1	NO _x	31.50	--
		CO	116.41	--

EMISSION SOURCES - MAXIMUM ALLOWABLE EMISSION RATES

AB2	Auxiliary Boiler 2	NO _x	31.50	--
		CO	116.41	--

(1) Emission point identification - either specific equipment designation or emission point number from a plot plan.

(2) Specific point source names. For fugitive sources, use an area name or fugitive source name.

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

NO_x - total oxides of nitrogen

SO₂ - sulfur dioxide

PM - particulate matter, suspended in the atmosphere, including PM₁₀ and PM_{2.5}

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

CO - carbon monoxide

H₂SO₄ - sulfuric acid

H₂S - hydrogen sulfide

(4) The maximum heat input capacity above 315 Million British thermal units per hour (MMBtu/hr) (up to 336.4 MMBtu/hr) is currently authorized under 30 TAC § 106.261 and Permit by Rule Registration Number 47963 effective July 20, 2001.

(5) The maximum heat input capacity above 315 MMBtu/hr (up to 336.4 MMBtu/hr) is currently authorized under 30 TAC § 106.261 and Permit by Rule Registration Number 47950 July 5, 2001.

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

24 Hrs/day 7 Days/week 52 Weeks/year or 8,760 Hrs/year

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

*** The combined annual heat input for the two duct burners based on any consecutive 12-month period shall not exceed 6,745,200 MMBtu/yr (higher heating value).

****Steam augmentation for 1,000 hours per year per turbine.

Date April 9, 2010