# FEDERAL OPERATING PERMIT

A FEDERAL OPERATING PERMIT IS HEREBY ISSUED TO
City Public Service Board

AUTHORIZING THE OPERATION OF
Nueces Bay Power Station
Fossil Fuel Electric Power Generation

LOCATED AT
Nueces County, Texas
Latitude 27° 49′ 6″ Longitude 97° 25′ 12″
Regulated Entity Number: RN100552181

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: O40 Issuance Date: _____

_____
For the Commission

# Table of Contents


**Section** **Page**

General Terms and Conditions ..... 1

Special Terms and Conditions: ..... 1
- Emission Limitations and Standards, Monitoring and Testing, and Recordkeeping and Reporting ..... 1
- Additional Monitoring Requirements ..... 5
- New Source Review Authorization Requirements ..... 6
- Compliance Requirements ..... 6
- Protection of Stratospheric Ozone ..... 7
- Temporary Fuel Shortages (30 TAC § 112.15) ..... 7
- Permit Location ..... 7
- Permit Shield (30 TAC § 122.148) ..... 8
- Acid Rain Permit Requirements ..... 8
- Acid Rain Unit Exemptions ..... 12
- Cross-State Air Pollution Rule (CSAPR) Trading Program Requirements ..... 12
- Cross-State Air Pollution Rule (CSAPR) Trading Program Unit Exemptions ..... 18

Attachments ..... 19
- Applicable Requirements Summary ..... 20
- Additional Monitoring Requirements ..... 28
- Permit Shield ..... 31
- New Source Review Authorization References ..... 33

Appendix A ..... 36
- Acronym List ..... 37

Appendix B ..... 38

**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.

F. For the purpose of generating discrete emission reduction credits through 30 TAC Chapter 101, Subchapter H, Division 4 (Discrete Emission Credit Banking and Trading), the permit holder shall comply with the following requirements:

(i) Title 30 TAC § 101.372 (relating to General Provisions)

(ii) Title 30 TAC § 101.373 (relating to Discrete Emission Reduction Credit Generation and Certification)

(iii) Title 30 TAC § 101.374 (relating to Mobile Discrete Emission Reduction Credit Generation and Certification)

(iv) Title 30 TAC § 101.378 (relating to Discrete Emission Credit Banking and Trading)

(v) The terms and conditions by which the emission limits are established to generate the discrete reduction credit are applicable requirements of this permit

2. The permit holder shall comply with the following sections of 30 TAC Chapter 101 (General 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. Certification of opacity readers determining opacities under Method 9 (as outlined in 40 CFR Part 60, Appendix A) to comply with opacity monitoring requirements shall be

accomplished by completing the Visible Emissions Evaluators Course, or approved agency equivalent, no more than 180 days before the opacity reading.

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 § 111.145 (relating to Construction and Demolition)

(ii) Title 30 TAC § 111.147 (relating to Roads, Streets, and Alleys)

(iii) 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)

E. Permit holder shall comply with the following requirements for steam generators:

(i) Emissions from any oil or gas fuel-fired steam generator with a heat input capacity greater than 2,500 MMBtu per hour may not exceed 0.1 pound of TSP per MMBtu of heat input, averaged over a two-hour period, as required in 30 TAC § 111.153(c) (relating to Emissions Limits for Steam Generators).

F. Outdoor burning, as stated in 30 TAC § 111.201, shall not be authorized unless the following requirements are satisfied:

(i) Title 30 TAC § 111.205 (relating to Exception for Fire Training)

(ii) Title 30 TAC § 111.207 (relating to Exception for Recreation, Ceremony, Cooking, and Warmth)

(iii) Title 30 TAC § 111.219 (relating to General Requirements for Allowable Outdoor Burning)

(iv) Title 30 TAC § 111.221 (relating to Responsibility for Consequences of Outdoor Burning)

4. Permit holder shall comply with the following 30 TAC Chapter 115, Subchapter C requirements:

A. When filling stationary gasoline storage containers with a nominal capacity less than or equal to 1,000 gallons at a Stage I motor vehicle fuel dispensing facility, the permit holder shall comply with the following requirements specified in 30 TAC Chapter 115, Subchapter C:

(i) Title 30 TAC § 115.222(3) (relating to Control Requirements), as it applies to liquid gasoline leaks, visible vapors, or significant odors

(ii) Title 30 TAC § 115.222(6) (relating to Control Requirements)

(iii) Title 30 TAC § 115.224(1) (relating to Inspection Requirements), as it applies to liquid gasoline leaks, visible vapors, or significant odors

5. The permit holder shall comply with the following requirements for units subject to any subpart of 40 CFR Part 60, unless otherwise stated in the applicable subpart:

A. Title 40 CFR § 60.7 (relating to Notification and Recordkeeping)

B. Title 40 CFR § 60.8 (relating to Performance Tests)

C. Title 40 CFR § 60.11 (relating to Compliance with Standards and Maintenance Requirements)

D. Title 40 CFR § 60.12 (relating to Circumvention)

E. Title 40 CFR § 60.13 (relating to Monitoring Requirements)

F. Title 40 CFR § 60.14 (relating to Modification)

G. Title 40 CFR § 60.15 (relating to Reconstruction)

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

6. The permit holder shall comply with the following requirements for units subject to any subpart of 40 CFR Part 61, unless otherwise stated in the applicable subpart:

A. Title 40 CFR § 61.05 (relating to Prohibited Activities)

B. Title 40 CFR § 61.07 (relating to Application for Approval of Construction or Modification)

C. Title 40 CFR § 61.09 (relating to Notification of Start-up)

D. Title 40 CFR § 61.10 (relating to Source Reporting and Request Waiver)

E. Title 40 CFR § 61.12 (relating to Compliance with Standards and Maintenance Requirements)

F. Title 40 CFR § 61.13 (relating to Emissions Tests and Waiver of Emission Tests)

G. Title 40 CFR § 61.14 (relating to Monitoring Requirements)

H. Title 40 CFR § 61.15 (relating to Modification)

I. Title 40 CFR § 61.19 (relating to Circumvention)

7. For the National Emissions Standards for Asbestos specified in 40 CFR Part 61, Subpart M, the permit holder shall comply with the following requirements:

A. For insulating materials other than spray-applied: Title 40 CFR § 61.148 (relating to Standards for Insulating Materials), for installation and reinstallation of asbestos-containing insulation).

8. The permit holder shall comply with the requirements of 30 TAC Chapter 113, Subchapter C, § 113.100 for units subject to any subpart of 40 CFR Part 63, unless otherwise stated in the applicable subpart.

9. For 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

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

**Additional Monitoring Requirements**

11. 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**

12. 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 March 2, 2026 in the application for project 39210), 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

13. 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.

14. 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**

15. 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.

16. Permit holder shall comply with the following 30 TAC Chapter 117 requirements:

    A. The permit holder shall comply with the compliance schedule as required in 30 TAC § 117.9300 for electric utilities in East and Central Texas.

17. 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**

18. Permit holders at a site subject to Title VI of the FCAA Amendments shall meet the following requirements for protection of stratospheric ozone:

A. Any on site servicing, maintenance, and repair on refrigeration and nonmotor vehicle air-conditioning appliances using ozone-depleting refrigerants 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.

**Temporary Fuel Shortages (30 TAC § 112.15)**

19. The permit holder shall comply with the following 30 TAC Chapter 112 requirements:

A. Title 30 TAC § 112.15 (relating to Temporary Fuel Shortage Plan Filing Requirements)

B. Title 30 TAC § 112.16(a), (a)(1), and (a)(2)(B) - (C) (relating to Temporary Fuel Shortage Plan Operating Requirements)

C. Title 30 TAC § 112.17 (relating to Temporary Fuel Shortage Plan Notification Procedures)

D. Title 30 TAC § 112.18 (relating to Temporary Fuel Shortage Plan Reporting Requirements)

**Permit Location**

20. 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)**

21. 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**

22. For units NB8 and NB9 (identified in the Certificate of Representation as units 8 and 9), located at the affected source identified by ORIS/Facility/Plant code 3441, 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 $SO_2$ 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. $SO_2$ 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 $SO_2$.

(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 $SO_2$ for the previous calendar year.

(iii) Each ton of $SO_2$ emitted in excess of the acid rain emissions limitations for $SO_2$ 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 $SO_2$ 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 $SO_2$ 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 $SO_2$ 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 $SO_2$ allowances allocated by the EPA in 40 CFR Part 73 is enforceable only by the EPA Administrator.

**Acid Rain Unit Exemptions**

23. As reference only information, units NB5, NB6, and NB7 have received acid rain unit exemptions and are not incorporated into an Acid Rain Permit.

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

24. For units NB8 and NB9 (identified in the Certificate of Representation as units 8 and 9), located at the site identified by Plant/ORIS/Facility code 3441, 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 unit(s) NB8 and NB9, 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.

25. 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.

**Cross-State Air Pollution Rule (CSAPR) Trading Program Unit Exemptions**

26. As reference-only information, units NB5, NB6, and NB7 (identified as units 5, 6, and 7 in the EPA Retired Unit Exemption form) have received a CSAPR retired unit exemption under 40 CFR Part 97 (CSAPR $NO_x$ and $SO_2$ Trading Programs), and are not subject to CSAPR Requirements.

## Attachments

**Applicable Requirements Summary**

**Additional Monitoring Requirements**

**Permit Shield**

**New Source Review Authorization References**

## Applicable Requirements Summary

**Unit Summary** ..... **21**

**Applicable Requirements Summary** ..... **22**

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 |
|---|---|---|---|---|---|
| AUXB | BOILERS/STEAM GENERATORS/STEAM GENERATING UNITS | N/A | 60DC | 40 CFR Part 60, Subpart Dc | No changing attributes. |
| FWP1 | SRIC ENGINES | N/A | 60IIII | 40 CFR Part 60, Subpart IIII | No changing attributes. |
| FWP1 | SRIC ENGINES | N/A | 63ZZZZ | 40 CFR Part 63, Subpart ZZZZ | No changing attributes. |
| GEN1 | SRIC ENGINES | N/A | 60IIII | 40 CFR Part 60, Subpart IIII | No changing attributes. |
| GEN1 | SRIC ENGINES | N/A | 63ZZZZ | 40 CFR Part 63, Subpart ZZZZ | No changing attributes. |
| GRP-GT1 | STATIONARY TURBINES | NB8, NB9 | 60KKKK | 40 CFR Part 60, Subpart KKKK | No changing attributes. |
| GRP-ST1 | EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS | STK-8, STK-9 | R1111 | 30 TAC Chapter 111, Visible Emissions | No changing attributes. |
| GRP-ST2 | EMISSION POINTS/STATIONARY VENTS/PROCESS VENTS | AUXB-STK, FWP1-STK, GEN1-STK | R1111 | 30 TAC Chapter 111, Visible Emissions | No changing attributes. |
| OWSEP | VOLATILE ORGANIC COMPOUND WATER SEPARATORS | N/A | R5131 | 30 TAC Chapter 115, Water Separation | No changing attributes. |
| UNLOAD-DSL | LOADING/UNLOADING OPERATIONS | N/A | R5211 | 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) |
|---|---|---|---|---|---|---|---|---|---|
| AUXB | EU | 60DC | PM | 40 CFR Part 60, Subpart Dc | § 60.40c(a) | This subpart applies to each steam generating unit constructed, reconstructed, or modified after 6/9/89 and that has a maximum design heat input capacity of 2.9-29 megawatts (MW). | None | § 60.48c(g)(1)<br>§ 60.48c(g)(2)<br>§ 60.48c(g)(3)<br>§ 60.48c(i) | [G]§ 60.48c(a) |
| AUXB | EU | 60DC | PM (Opacity) | 40 CFR Part 60, Subpart Dc | § 60.40c(a) | This subpart applies to each steam generating unit constructed, reconstructed, or modified after 6/9/89 and that has a maximum design heat input capacity of 2.9-29 megawatts (MW). | None | § 60.48c(g)(1)<br>§ 60.48c(g)(2)<br>§ 60.48c(g)(3)<br>§ 60.48c(i) | [G]§ 60.48c(a) |
| AUXB | EU | 60DC | $SO_2$ | 40 CFR Part 60, Subpart Dc | § 60.40c(a) | This subpart applies to each steam generating unit constructed, reconstructed, or modified after 6/9/89 and that has a maximum design heat input capacity of 2.9-29 megawatts (MW). | None | § 60.48c(g)(1)<br>§ 60.48c(g)(2)<br>§ 60.48c(g)(3)<br>§ 60.48c(i) | [G]§ 60.48c(a) |
| FWP1 | EU | 60IIII | CO | 40 CFR Part 60, Subpart IIII | § 60.4205(c)-Table 4<br>§ 60.4206<br>§ 60.4207(b)<br>§ 60.4211(b)<br>[G]§ 60.4211(f) | Owners and operators of emergency stationary fire pump CI ICE with a maximum engine power greater than or equal to 130 KW and less than or equal to 560 KW and a displacement of less than 30 liters per cylinder and is a 2008 model year or earlier must comply with a CO emission limit of 3.5 g/KW-hr, as listed in Table 4 to this subpart. | § 60.4209(a) | § 60.4211(b)(3)<br>§ 60.4214(b) | [G]§ 60.4214(d) |
| FWP1 | EU | 60IIII | NMHC and $NO_X$ | 40 CFR Part 60, Subpart IIII | § 60.4205(c)-Table 4 | Owners and operators of emergency stationary fire | § 60.4209(a) | § 60.4211(b)(3)<br>§ 60.4214(b) | [G]§ 60.4214(d) |

## Applicable Requirements Summary

| Unit Group Process ID No. | Unit Group Process Type | SOP Index No. | Pollutant | State Rule or Federal Regulation Name | Emission Limitation, Standard or Equipment Specification Citation | Textual Description (See Special Term and Condition 1.B.) | Monitoring And Testing Requirements | Recordkeeping Requirements (30 TAC § 122.144) | Reporting Requirements (30 TAC § 122.145) |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | § 60.4206<br>§ 60.4207(b)<br>§ 60.4211(b)<br>[G]§ 60.4211(f) | pump CI ICE with a maximum engine power greater than or equal to 130 KW and less than or equal to 560 KW and a displacement of less than 30 liters per cylinder and is a 2008 model year or earlier must comply with an NMHC+NOx emission limit of 10.5 g/KW-hr, as listed in Table 4 to this subpart. | | | |
| FWP1 | EU | 60IIII | PM | 40 CFR Part 60, Subpart IIII | § 60.4205(c)-Table 4<br>§ 60.4206<br>§ 60.4207(b)<br>§ 60.4211(b)<br>[G]§ 60.4211(f) | Owners and operators of emergency stationary fire pump CI ICE with a maximum engine power greater than or equal to130 KW and less than or equal to 560 KW and a displacement of less than 30 liters per cylinder and is a 2008 model year or earlier must comply with a PM emission limit of 0.54 g/KW-hr, as listed in Table 4 to this subpart. | § 60.4209(a) | § 60.4211(b)(3)<br>§ 60.4214(b) | [G]§ 60.4214(d) |
| FWP1 | EU | 63ZZZZ | 112(B) HAPS | 40 CFR Part 63, Subpart ZZZZ | § 63.6590(c) | Stationary RICE subject to Regulations under 40 CFR Part 60. An affected source that meets any of the criteria in paragraphs (c)(1) through (7) of this section must meet the requirements of this part by meeting the requirements of 40 CFR part 60 subpart IIII, for compression ignition engines or 40 CFR part 60 | None | None | None |

## Applicable Requirements Summary

| Unit Group Process ID No. | Unit Group Process Type | SOP Index No. | Pollutant | State Rule or Federal Regulation Name | Emission Limitation, Standard or Equipment Specification Citation | Textual Description (See Special Term and Condition 1.B.) | Monitoring And Testing Requirements | Recordkeeping Requirements (30 TAC § 122.144) | Reporting Requirements (30 TAC § 122.145) |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | subpart JJJJ, for spark ignition engines as applicable. No further requirements apply for such engines under this part. | | | |
| GEN1 | EU | 60IIII | CO | 40 CFR Part 60, Subpart IIII | § 60.4205(b)<br>§ 1039-Appendix I<br>§ 60.4202(a)(2)<br>§ 60.4206<br>§ 60.4207(b)<br>[G]§ 60.4211(a)<br>§ 60.4211(c)<br>[G]§ 60.4211(f) | Owners and operators of emergency stationary CI ICE, that are not fire pump engines, with a maximum engine power greater than or equal to 130 KW and less than or equal to 2237 KW and a displacement of less than 10 liters per cylinder and is a 2007 model year and later must comply with a CO emission limit of 3.5 g/KW-hr, as stated in 40 CFR 60.4202(a)(2) and 40 CFR 1039-Appendix I. | None | None | [G]§ 60.4214(d) |
| GEN1 | EU | 60IIII | NMHC and $NO_X$ | 40 CFR Part 60, Subpart IIII | § 60.4205(b)<br>§ 1039-Appendix I<br>§ 60.4202(a)(2)<br>§ 60.4206<br>§ 60.4207(b)<br>[G]§ 60.4211(a)<br>§ 60.4211(c)<br>[G]§ 60.4211(f) | Owners and operators of emergency stationary CI ICE, that are not fire pump engines, with a maximum engine power greater than 560 KW and less than or equal to 2237 KW and a displacement of less than 10 liters per cylinder and is a 2007 model year and later must comply with an NMHC+NOx emission limit of 6.4 g/KW-hr, as stated in 40 CFR 60.4202(a)(2) and 40 CFR 1039-Appendix I. | None | None | [G]§ 60.4214(d) |
| GEN1 | EU | 60IIII | PM | 40 CFR Part 60, Subpart IIII | § 60.4205(b)<br>§ 1039-Appendix I<br>§ 60.4202(a)(2) | Owners and operators of emergency stationary CI ICE, that are not fire pump | None | None | [G]§ 60.4214(d) |

## Applicable Requirements Summary

| Unit Group Process ID No. | Unit Group Process Type | SOP Index No. | Pollutant | State Rule or Federal Regulation Name | Emission Limitation, Standard or Equipment Specification Citation | Textual Description (See Special Term and Condition 1.B.) | Monitoring And Testing Requirements | Recordkeeping Requirements (30 TAC § 122.144) | Reporting Requirements (30 TAC § 122.145) |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | § 60.4206<br>§ 60.4207(b)<br>[G]§ 60.4211(a)<br>§ 60.4211(c)<br>[G]§ 60.4211(f) | engines, with a maximum engine power greater than or equal to 130 KW and less than or equal to 2237 KW and a displacement of less than 10 liters per cylinder and is a 2007 model year and later must comply with a PM emission limit of 0.20 g/KW-hr, as stated in 40 CFR 60.4202(a)(2) and 40 CFR 1039-Appendix I. | | | |
| GEN1 | EU | 60IIII | PM (Opacity) | 40 CFR Part 60, Subpart IIII | § 60.4205(b)<br>§ 1039.105(b)(1)<br>§ 1039.105(b)(2)<br>§ 1039.105(b)(3)<br>§ 60.4202(a)(2)<br>§ 60.4206<br>§ 60.4207(b)<br>[G]§ 60.4211(a)<br>§ 60.4211(c)<br>[G]§ 60.4211(f) | Emergency stationary CI ICE, that are not fire pump engines, with displacement < 10 lpc and not constant-speed engines, with max engine power < 2237 KW and a 2007 model year and later or max engine power > 2237 KW and a 2011 model year and later, must comply with following opacity emission limits: 20% during acceleration, 15% during lugging, 50% during peaks in either acceleration or lugging modes as stated in §60.4202(a)(1)-(2), (b)(2), and 40 CFR 1039.105(b)(1)-(3). | None | None | [G]§ 60.4214(d) |
| GEN1 | EU | 63ZZZZ | 112(B) HAPS | 40 CFR Part 63, Subpart ZZZZ | § 63.6590(c) | Stationary RICE subject to Regulations under 40 CFR Part 60. An affected source that meets any of the criteria in paragraphs (c)(1) through (7) of this section must meet the requirements | None | None | None |

## Applicable Requirements Summary

| Unit Group Process ID No. | Unit Group Process Type | SOP Index No. | Pollutant | State Rule or Federal Regulation Name | Emission Limitation, Standard or Equipment Specification Citation | Textual Description (See Special Term and Condition 1.B.) | Monitoring And Testing Requirements | Recordkeeping Requirements (30 TAC § 122.144) | Reporting Requirements (30 TAC § 122.145) |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | of this part by meeting the requirements of 40 CFR part 60 subpart IIII, for compression ignition engines or 40 CFR part 60 subpart JJJJ, for spark ignition engines as applicable. No further requirements apply for such engines under this part. | | | |
| GRP-GT1 | EU | 60KKKK | $NO_X$ | 40 CFR Part 60, Subpart KKKK | § 60.4320(a)-Table 1<br>§ 60.4320(a)<br>§ 60.4320(b)<br>§ 60.4333(a)<br>§ 60.4333(b)(1)<br>§ 60.4335(b)(1)<br>[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 96 ppm at 15 percent $O_2$. | § 60.4333(b)(1)<br>§ 60.4335(b)(1)<br>[G]§ 60.4345<br>§ 60.4350(a)<br>§ 60.4350(b)<br>§ 60.4350(d)<br>§ 60.4350(e)<br>§ 60.4350(f)<br>§ 60.4350(h)<br>[G]§ 60.4400(a)<br>§ 60.4400(b)<br>§ 60.4400(b)(1)<br>§ 60.4400(b)(2)<br>§ 60.4400(b)(4)<br>§ 60.4400(b)(5)<br>§ 60.4400(b)(6)<br>[G]§ 60.4405 | [G]§ 60.4345<br>§ 60.4350(b) | [G]§ 60.4345<br>§ 60.4350(d)<br>§ 60.4375(a)<br>§ 60.4380<br>[G]§ 60.4380(b)<br>§ 60.4395 |
| GRP-GT1 | EU | 60KKKK | $SO_2$ | 40 CFR Part 60, Subpart KKKK | § 60.4330(a)(2)<br>§ 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 SO2/J (0.060 lb SO2/MMBtu) heat input. If your turbine simultaneously fires multiple fuels, each fuel must meet this requirement. | § 60.4365<br>§ 60.4365(a)<br>§ 60.4415(a)<br>§ 60.4415(a)(2)<br>§ 60.4415(a)(2)(ii) | § 60.4365(a) | § 60.4375(a) |

## Applicable Requirements Summary

| Unit Group Process ID No. | Unit Group Process Type | SOP Index No. | Pollutant | State Rule or Federal Regulation Name | Emission Limitation, Standard or Equipment Specification Citation | Textual Description (See Special Term and Condition 1.B.) | Monitoring And Testing Requirements | Recordkeeping Requirements (30 TAC § 122.144) | Reporting Requirements (30 TAC § 122.145) |
|---|---|---|---|---|---|---|---|---|---|
| GRP-ST1 | EP | R1111 | Opacity | 30 TAC Chapter 111, Visible Emissions | § 111.111(a)(1)(C)<br>§ 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)<br>** See Periodic Monitoring Summary | None | None |
| GRP-ST2 | EP | R1111 | Opacity | 30 TAC Chapter 111, Visible Emissions | § 111.111(a)(1)(B)<br>§ 111.111(a)(1)(E) | Visible emissions from any stationary vent shall not exceed an opacity of 20% averaged over a six minute period for any source on which construction was begun after January 31, 1972. | [G]§ 111.111(a)(1)(F)<br>** See Periodic Monitoring Summary | None | None |
| OWSEP | EU | R5131 | VOC | 30 TAC Chapter 115, Water Separation | § 115.137(b)(3) | Any separator which separates materials having a true vapor pressure < 1.5 psia (10.3 kPa) obtained from any equipment is exempt from §115.132(b). | [G]§ 115.135(b)<br>§ 115.136(b)(1)<br>§ 115.136(b)(3)<br>§ 115.136(b)(4) | § 115.136(b)(1)<br>§ 115.136(b)(3)<br>§ 115.136(b)(4) | None |
| UNLOAD-DSL | EU | R5211 | VOC | 30 TAC Chapter 115, Loading and Unloading of VOC | § 115.217(b)(2)<br>§ 115.212(b)(2)<br>§ 115.214(b)(1)(B)<br>§ 115.214(b)(1)(D)<br>§ 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)<br>§ 115.214(b)(1)(A)(i)<br>§ 115.215<br>§ 115.215(4) | § 115.216<br>§ 115.216(2)<br>§ 115.216(3)(B) | None |

## Additional Monitoring Requirements

**Periodic Monitoring Summary ..... 29**

## Periodic Monitoring Summary

| **Unit/Group/Process Information** | |
|---|---|
| ID No.: GRP-ST1 | |
| Control Device ID No.: N/A | Control Device Type: N/A |
| **Applicable Regulatory Requirement** | |
| Name: 30 TAC Chapter 111, Visible Emissions | SOP Index No.: R1111 |
| Pollutant: Opacity | Main Standard: § 111.111(a)(1)(C) |
| **Monitoring Information** | |
| Indicator: Visible Emissions | |
| Minimum Frequency: once per week | |
| Averaging Period: N/A | |
| Deviation Limit: There shall be no visible emissions. If visible emissions are observed, the permit holder shall report a deviation or perform Test Method 9 and opacity shall not exceed 15%. | |
| Periodic Monitoring Text: Visible emissions observations shall be made and recorded. Note that to properly determine the presence of visible emissions, all sources must be in clear view of the observer. The observer shall be at least 15 feet, but not more than 0.25 miles, away from the emission source during the observation. The observer shall select a position where the sun is not directly in the observer's eyes. If the observations cannot be conducted due to weather conditions, the date, time, and specific weather conditions shall be recorded. When condensed water vapor is present within the plume, as it emerges from the emissions outlet, observations must be made beyond the point in the plume at which condensed water vapor is no longer visible. When water vapor within the plume condenses and becomes visible at a distance from the emissions outlet, the observation shall be evaluated at the outlet prior to condensation of water vapor.<br><br>If visible emissions are observed, the permit holder shall report a deviation. As an alternative, the permit holder may determine the opacity consistent with Test Method 9, as soon as practicable, but no later than 24 hours after observing visible emissions. If the result of the Test Method 9 is opacity above the opacity limit in the applicable requirement, the permit holder shall report a deviation. | |

## Periodic Monitoring Summary

| **Unit/Group/Process Information** | |
|---|---|
| ID No.: GRP-ST2 | |
| Control Device ID No.: N/A | Control Device Type: N/A |
| **Applicable Regulatory Requirement** | |
| Name: 30 TAC Chapter 111, Visible Emissions | SOP Index No.: R1111 |
| Pollutant: Opacity | Main Standard: § 111.111(a)(1)(B) |
| **Monitoring Information** | |
| Indicator: Visible Emissions | |
| Minimum Frequency: once per calendar quarter | |
| Averaging Period: N/A | |
| Deviation Limit: Opacity greater than 20% averaged over a six-minute period will be reported as a deviation. | |
| Periodic Monitoring Text: Visible emissions observations shall be made and recorded. Note that to properly determine the presence of visible emissions, all sources must be in clear view of the observer. The observer shall be at least 15 feet, but not more than 0.25 miles, away from the emission source during the observation. The observer shall select a position where the sun is not directly in the observer's eyes. If the observations cannot be conducted due to weather conditions, the date, time, and specific weather conditions shall be recorded. When condensed water vapor is present within the plume, as it emerges from the emissions outlet, observations must be made beyond the point in the plume at which condensed water vapor is no longer visible. When water vapor within the plume condenses and becomes visible at a distance from the emissions outlet, the observation shall be evaluated at the outlet prior to condensation of water vapor.<br><br>If visible emissions are observed, the permit holder shall report a deviation. As an alternative, the permit holder may determine the opacity consistent with Test Method 9, as soon as practicable, but no later than 24 hours after observing visible emissions. If the result of the Test Method 9 is opacity above the opacity limit in the applicable requirement, the permit holder shall report a deviation. | |

## Permit Shield

**Permit Shield ..... 32**

## 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 |
|---|---|---|---|
| AUXB | N/A | 30 TAC Chapter 117, Subchapter E, Division 1 | Unit placed into service after December 31, 1995. |
| AUXB | N/A | 40 CFR Part 60, Subpart TTTT | The boiler did not commence construction or modification after January 8, 2014, and did not commence reconstruction after June 18, 2014. |
| GRP-GT1 | NB8, NB9 | 30 TAC Chapter 117, Subchapter E, Division 1 | Unit placed into service after December 31, 1995. |
| GRP-GT1 | NB8, NB9 | 40 CFR Part 60, Subpart TTTT | The stationary combustion turbines did not commence construction or modification after January 8, 2014 did not commence reconstruction after June 18, 2014. |
| GRP-GT1 | NB8, NB9 | 40 CFR Part 63, Subpart YYYY | This site is not a major source of HAP emissions |
| GRP-ST1 | STK-8, STK-9 | 30 TAC Chapter 115, Vent Gas Controls | Unit not used as a control device for any vent gas stream which is subject to this division and which originates from a non-combustion source. |
| GRP-ST2 | AUXB-STK, FWP1-STK, GEN1-STK | 30 TAC Chapter 115, Vent Gas Controls | Unit not used as a control device for any vent gas stream which is subject to this division and which originates from a non-combustion source. |
| TK-OWSEP | N/A | 40 CFR Part 60, Subpart Kb | Capacity of storage vessel less than 19,800 gallons. |
| TKDIESEL1 | N/A | 30 TAC Chapter 115, Storage of VOCs | Contains a VOC with a true vapor pressure less than 1.5 psia at storage conditions. |

## New Source Review Authorization References

**New Source Review Authorization References ..... 34**

**New Source Review Authorization References by Emission Unit ..... 35**

## 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.: PSDTX1091 | Issuance Date: 12/15/2021 |
| **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.: 81594 | Issuance Date: 12/15/2021 |
| **Permits By Rule (30 TAC Chapter 106) for the Application Area** | |
| Number: 106.227 | Version No./Date: 09/04/2000 |
| Number: 106.261 | Version No./Date: 09/04/2000 |
| Number: 106.262 | Version No./Date: 09/04/2000 |
| Number: 106.263 | Version No./Date: 11/01/2001 |
| Number: 106.265 | Version No./Date: 09/04/2000 |
| Number: 106.355 | Version No./Date: 11/01/2001 |
| 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: 106.532 | 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** |
|---|---|---|
| AUXB | AUXILIARY BOILER | 81594, PSDTX1091 |
| AUXB-STK | AUXILIARY BOILER STACK | 81594, PSDTX1091 |
| FWP1 | DIESEL ENGINE DRIVEN FIRE WATER PUMP NO. 1 | 81594, PSDTX1091 |
| FWP1-STK | DIESEL ENGINE DRIVEN FIRE WATER PUMP NO. 1 STACK | 81594, PSDTX1091 |
| GEN1 | DIESEL ENGINE DRIVEN EMERGENCY GENERATOR NO. 1 | 81594, PSDTX1091 |
| GEN1-STK | DIESEL ENGINE EMERGENCY GENERATOR NO. 1 STACK | 81594, PSDTX1091 |
| NB8 | COMBUSTION TURBINE AND DUCT FIRED HRSG NO. 8 | 81594, PSDTX1091 |
| NB9 | COMBUSTION TURBINE AND DUCT FIRED HRSG NO. 9 | 81594, PSDTX1091 |
| OWSEP | OIL/WATER SEPARATOR | 106.532/09/04/2000 |
| STK-8 | COMBINED CYCLE NO. 8 STACK | 81594, PSDTX1091 |
| STK-9 | COMBINED CYCLE NO. 9 STACK | 81594, PSDTX1091 |
| TK-OWSEP | OIL/WATER SEPARATOR STORAGE TANK | 106.472/09/04/2000 |
| TKDIESEL1 | DIESEL STORAGE TANK NO. 1 | 81594, PSDTX1091 |
| UNLOAD-DSL | 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 ..... 37**

## 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)
$H_2S$ ..... 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
RO ..... Responsible Official
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 ..... 39**

# Major NSR Summary Table

| Permit Numbers 81594 and PSDTX1091 | | | | | Issuance Date: December 15, 2021 | | |
|---|---|---|---|---|---|---|---|
| Emission Point No. (1) | Source Name (2) | Air Contaminant Name (3) | Emission Rates | | Monitoring and Testing Requirements | Recordkeeping Requirements | Reporting Requirements |
| | | | lb/hr | TPY (4) | Special Condition/Application Information | Special Condition/Application Information | Special Condition/Application Information |
| **Combined Cycle Operations** | | | | | | | |
| NB8 | CTG and DB HRSG No. 8 **(5)** Combined Cycle | $NO_x$ | 49.0 | 201.48 | 2, 8, 9, 13, 15, 16, 17, 18, 24 | 2, 15, 16, 18, 19, 20, 24 | 2, 15, 16, 21, 24 |
| | | $NO_x$ (MSS) | 270.0 | | | | |
| | | CO | 29.7 | 242.80 | | | |
| | | CO (MSS) | 1920.0 | | | | |
| | | VOC | 13.8 | 56.50 | | | |
| | | VOC (MSS) | 114.0 | | | | |
| | | PM | 36.8 | 104.24 | | | |
| | | $PM_{10}$ | 36.8 | 104.24 | | | |
| | | $SO_2$ | 18.1 | 6.13 | | | |
| | | $H_2SO_4$ | 10.0 | 3.30 | | | |
| | | $NH_3$ | 18.0 | 74.46 | | | |
| NB9 | CTG and DB HRSG No. 9 **(5)** Combined Cycle | $NO_x$ | 49.0 | 201.48 | 2, 8, 9, 13, 15, 16, 17, 18, 24 | 2, 15, 16, 18, 19, 20, 24 | 2, 15, 16, 21, 24 |
| | | $NO_x$ (MSS) | 270.0 | | | | |
| | | CO | 29.7 | 242.80 | | | |
| | | CO (MSS) | 1920.0 | | | | |
| | | VOC | 13.8 | 56.50 | | | |

# Major NSR Summary Table

| Permit Numbers 81594 and PSDTX1091 | | | | | Issuance Date: December 15, 2021 | | |
|---|---|---|---|---|---|---|---|
| **Emission Point No. (1)** | **Source Name (2)** | **Air Contaminant Name (3)** | **Emission Rates** | | **Monitoring and Testing Requirements** | **Recordkeeping Requirements** | **Reporting Requirements** |
| | | | **lb/hr** | **TPY (4)** | **Special Condition/Application Information** | **Special Condition/Application Information** | **Special Condition/Application Information** |
| | | VOC (MSS) | 114.0 | | | | |
| | | PM | 36.8 | 104.24 | | | |
| | | $PM_{10}$ | 36.8 | 104.24 | | | |
| | | $SO_2$ | 18.1 | 6.13 | | | |
| | | $H_2SO_4$ | 10.0 | 3.30 | | | |
| | | $NH_3$ | 18.0 | 74.46 | | | |
| NB8<br>NB9 | Annual Emission<br>CTG and DB<br>HRSG<br>Combined | $NO_x$ | - | 402.96 | 2, 9, 13, 15, 16, 17, 18, 24 | 2, 15, 16, 18, 19, 20, 24 | 2, 15, 16, 21, 24 |
| | | CO | - | 324.50 | | | |
| | | VOC | - | 113.00 | | | |
| | | PM | - | 208.49 | | | |
| | | $PM_{10}$ | - | 208.49 | | | |
| | | $SO_2$ | - | 12.26 | | | |
| | | $H_2SO_4$ | - | 6.60 | | | |
| | | $NH_3$ | - | 148.92 | | | |
| AUXB | Auxiliary Boiler **(6)** | $NO_x$ | 1.94 | 1.94 | 2, 8, 17 | 2, 19 | 2 |
| | | CO | 2.00 | 2.00 | | | |
| | | VOC | 0.22 | 0.22 | | | |

# Major NSR Summary Table

| Permit Numbers 81594 and PSDTX1091 | | | | | Issuance Date: December 15, 2021 | | |
|---|---|---|---|---|---|---|---|
| **Emission Point No. (1)** | **Source Name (2)** | **Air Contaminant Name (3)** | **Emission Rates** | | **Monitoring and Testing Requirements** | **Recordkeeping Requirements** | **Reporting Requirements** |
| | | | **lb/hr** | **TPY (4)** | **Special Condition/Application Information** | **Special Condition/Application Information** | **Special Condition/Application Information** |
| | | PM | 0.38 | 0.38 | | | |
| | | $PM_{10}$ | 0.38 | 0.38 | | | |
| | | $SO_2$ | 0.03 | 0.03 | | | |
| **Simple Cycle Operations** | | | | | | | |
| NB8A | CTG No. 8 **(5)** Simple Cycle | $NO_x$ | 63.00 | - | 2, 8, 9, 13, 15, 16, 17, 18, 24 | 2, 15, 16, 18, 19, 20, 24 | 2, 15, 16, 21, 24 |
| | | $NO_x$ (MSS) | 97.40 | - | | | |
| | | CO | 32.00 | - | | | |
| | | CO (MSS) | 187.10 | - | | | |
| | | VOC | 3.00 | - | | | |
| | | VOC (MSS) | 14.40 | - | | | |
| | | PM | 18.00 | - | | | |
| | | $PM_{10}$ | 18.00 | - | | | |
| | | $PM_{2.5}$ | 18.00 | - | | | |
| | | $SO_2$ | 13.10 | - | | | |
| | | $H_2SO_4$ | 1.00 | | | | |
| NB9A | CTG No. 9 **(5)** Simple Cycle | $NO_x$ | 63.00 | - | 2, 8, 9, 13, 15, 16, 17, 18, 24 | 2, 15, 16, 18, 19, 20, 24 | 2, 15, 16, 21, 24 |
| | | $NO_x$ (MSS) | 97.40 | - | | | |

# Major NSR Summary Table

| Permit Numbers 81594 and PSDTX1091 | | | | | Issuance Date: December 15, 2021 | | |
|---|---|---|---|---|---|---|---|
| Emission Point No. (1) | Source Name (2) | Air Contaminant Name (3) | Emission Rates | | Monitoring and Testing Requirements | Recordkeeping Requirements | Reporting Requirements |
| | | | lb/hr | TPY (4) | Special Condition/Application Information | Special Condition/Application Information | Special Condition/Application Information |
| | | CO | 32.00 | - | | | |
| | | CO (MSS) | 187.10 | - | | | |
| | | VOC | 3.00 | - | | | |
| | | VOC (MSS) | 14.40 | - | | | |
| | | PM | 18.00 | - | | | |
| | | $PM_{10}$ | 18.00 | - | | | |
| | | $PM_{2.5}$ | 18.00 | - | | | |
| | | $SO_2$ | 13.10 | - | | | |
| | | $H_2SO_4$ | 1.00 | - | | | |
| NB8A<br>NB9A | CTG Nos. 8 and 9 Annual Emission - Simple Cycle | $NO_x$ | - | 69.88 | 2, 9, 13, 15,16, 17, 18, 24 | 2, 15, 16, 18, 19, 20, 24 | 2, 15, 16, 21, 24 |
| | | CO | - | 63.02 | | | |
| | | VOC | - | 5.28 | | | |
| | | PM | - | 18.00 | | | |
| | | $PM_{10}$ | - | 18.00 | | | |
| | | $PM_{2.5}$ | - | 18.00 | | | |
| | | $SO_2$ | - | 2.62 | | | |
| | | $H_2SO_4$ | - | 0.20 | | | |

# Major NSR Summary Table

| Permit Numbers 81594 and PSDTX1091 | | | | | Issuance Date: December 15, 2021 | | |
|---|---|---|---|---|---|---|---|
| **Emission Point No. (1)** | **Source Name (2)** | **Air Contaminant Name (3)** | **Emission Rates** | | **Monitoring and Testing Requirements** | **Recordkeeping Requirements** | **Reporting Requirements** |
| | | | **lb/hr** | **TPY (4)** | **Special Condition/Application Information** | **Special Condition/Application Information** | **Special Condition/Application Information** |
| FGH1 | Fuel Gas Heater No.1 | $NO_x$ | 0.65 | 0.36 | 2, 8, 17, 24 | 2, 19, 24 | 2, 24 |
| | | CO | 0.67 | 0.37 | | | |
| | | VOC | 0.10 | 0.05 | | | |
| | | PM | 0.13 | 0.07 | | | |
| | | $PM_{10}$ | 0.13 | 0.07 | | | |
| | | $PM_{2.5}$ | 0.13 | 0.07 | | | |
| | | $SO_2$ | 0.13 | 0.01 | | | |
| | | $H_2SO_4$ | 0.01 | <0.01 | | | |
| FGH2 | Fuel Gas Heater No.2 | $NO_x$ | 0.65 | 0.36 | 2, 8, 17, 24 | 2, 19, 24 | 2, 24 |
| | | CO | 0.67 | 0.37 | | | |
| | | VOC | 0.10 | 0.05 | | | |
| | | PM | 0.13 | 0.07 | | | |
| | | $PM_{10}$ | 0.13 | 0.07 | | | |
| | | $PM_{2.5}$ | 0.13 | 0.07 | | | |
| | | $SO_2$ | 0.13 | 0.01 | | | |
| | | $H_2SO_4$ | 0.01 | <0.01 | | | |
| **Ancillary Facilities** | | | | | | | |

# Major NSR Summary Table

| Permit Numbers 81594 and PSDTX1091 | | | | | Issuance Date: December 15, 2021 | | |
|---|---|---|---|---|---|---|---|
| Emission Point No. (1) | Source Name (2) | Air Contaminant Name (3) | Emission Rates | | Monitoring and Testing Requirements | Recordkeeping Requirements | Reporting Requirements |
| | | | lb/hr | TPY (4) | Special Condition/Application Information | Special Condition/Application Information | Special Condition/Application Information |
| GEN1 | Emergency Generator No. 1 | $NO_x$ | 26.81 | 1.39 | 2, 3, 8, 10 | 2, 3, 19, 20 | 2, 3 |
| | | CO | 2.54 | 0.13 | | | |
| | | VOC | 0.60 | 0.03 | | | |
| | | PM | 0.25 | 0.01 | | | |
| | | $PM_{10}$ | 0.02 | 0.01 | | | |
| | | $SO_2$ | 0.33 | 0.02 | | | |
| FWP | Fire Water Pump No. 1 | $NO_x$ | 1.79 | 0.09 | 2, 3, 8, 10 | 2, 3, 19, 20 | 2, 3 |
| | | CO | 1.51 | 0.08 | | | |
| | | VOC | 0.71 | 0.04 | | | |
| | | PM | 0.08 | <0.01 | | | |
| | | $PM_{10}$ | 0.08 | <0.01 | | | |
| | | $SO_2$ | 0.59 | 0.03 | | | |
| TK-DIESEL 1 | Diesel Storage Tank No. 1 | VOC | 0.91 | <0.01 | | 19 | |
| TK1 | Storage Tank No. 1 | NaOH | 0.09 | <0.01 | | 19 | |
| TK2 | Storage Tank No. 2 | $H_2SO_4$ | <0.01 | <0.01 | | 19 | |
| TK3A | Storage Tank No. 3A | Trisodium phosphate | <0.01 | <0.01 | | 19 | |

# Major NSR Summary Table

| Permit Numbers 81594 and PSDTX1091 | | | | | Issuance Date: December 15, 2021 | | |
|---|---|---|---|---|---|---|---|
| Emission Point No. (1) | Source Name (2) | Air Contaminant Name (3) | Emission Rates | | Monitoring and Testing Requirements | Recordkeeping Requirements | Reporting Requirements |
| | | | lb/hr | TPY (4) | Special Condition/Application Information | Special Condition/Application Information | Special Condition/Application Information |
| TK3B | Storage Tank No. 3B | Trisodium phosphate | <0.01 | <0.01 | | 19 | |
| TK4 | Storage Tank No. 4 | $NH_4OH$ | 0.48 | 0.07 | | 19 | |
| TK5 | Storage Tank No. 5A | Sodium bisulfate | <0.01 | <0.01 | | 19 | |
| TK6 | Storage Tank No. 6 | 1-Hydroxyethane-1, 1-Diphosphonic Acid | 0.02 | <0.01 | | 19 | |
| TOMV1 | Turbine Oil Mist Vents | VOC | 0.01 | 0.04 | | 19 | |
| TOMV2 | Turbine Oil Mist Vents | VOC | 0.01 | 0.04 | | 19 | |
| TOMV3 | Turbine Oil Mist Vents | VOC | 0.01 | 0.02 | | 19 | |
| AMFUG | Aqueous Ammonia Handling and Fugitives (7) | $NH_3$ | 0.02 | 0.10 | 13 | 19, 20 | |
| NGFUG | Natural Gas Fugitives (7) | VOC | 0.13 | 0.56 | | 19 | |

(1) Emission point identification – either specific equipment designation or emission point number from plot plan.
(2) Specific point source name. For fugitive sources, use area name or fugitive source name.
(3) $NO_x$ - total oxides of nitrogen
CO - carbon monoxide
VOC - volatile organic compounds as defined in Title 30 Texas Administrative Code § 101.1
PM - total particulate matter, suspended in the atmosphere, including $PM_{10}$ and $PM_{2.5}$
$PM_{10}$ - total particulate matter equal to or less than 10 microns in diameter, including $PM_{2.5}$
$PM_{2.5}$ - particulate matter equal to or less than 2.5 microns in diameter
$SO_2$ - sulfur dioxide
$H_2SO_4$ - sulfuric acid

$NaOH$ - sodium hydroxide
$Na_3PO_4$ - trisodium phosphate
$NaHSO_3$ - sodium bisulfite
$NH_3$ - ammonia
$NH_4OH$ - ammonium hydroxide
MSS - maintenance, startup, and shutdown

(4) Compliance with annual emission limits (tons per year) is based on a 12-month rolling period.
(5) Planned MSS for all pollutants are authorized even if not specially identified as MSS. During any clock hour that includes one or minutes of planned MSS that pollutants maximum hour emission rate shall apply during that clock hour.
(6) EPN: AUXB is limited to 2000 hour of operation per year.
(7) Emission rate is an estimate and is enforceable through compliance with the applicable special condition(s) and permit application representations.

# Texas Commission on Environmental Quality
# Air Quality Permit

*A Permit Is Hereby Issued To*
**Nueces Bay, LLC**
*Authorizing the Construction and Operation of*
**Nueces Bay Power Station**
*Located at* **Corpus Christi, Nueces County, Texas**
*Latitude 27° 49′ 6″ Longitude −97° 25′ 12″*

Permits: 81594 and PSDTX1091

Revision Date: December 15, 2021

Expiration Date: July 19, 2027

For the Commission

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

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

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

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

# Common Acronyms in Air Permits

°C = Temperature in degrees Celsius
°F = Temperature in degrees Fahrenheit
°K = Temperature in degrees Kelvin
µg = microgram
$\mu g/m^3$ = microgram per cubic meter
acfm = actual cubic feet per minute
AMOC = alternate means of control
AOS = alternative operating scenario
AP-42 = Air Pollutant Emission Factors, 5th edition
APD = Air Permits Division
API = American Petroleum Institute
APWL = air pollutant watch list
BPA = Beaumont/ Port Arthur
BACT = best available control technology
BAE = baseline actual emissions
bbl = barrel
bbl/day = barrel per day
bhp = brake horsepower
BMP = best management practices
Btu = British thermal unit
Btu/scf = British thermal unit per standard cubic foot or feet
CAA = Clean Air Act
CAM = compliance-assurance monitoring
CEMS = continuous emissions monitoring systems
cfm = cubic feet (per) minute
CFR = Code of Federal Regulations
CN = customer ID number
CNG = compressed natural gas
CO = carbon monoxide
COMS = continuous opacity monitoring system
CPMS = continuous parametric monitoring system
DFW = Dallas/ Fort Worth (Metroplex)
DE = destruction efficiency
DRE = destruction and removal efficiency
dscf = dry standard cubic foot or feet
dscfm = dry standard cubic foot or feet per minute
ED = (TCEQ) Executive Director
EF = emissions factor
EFR = external floating roof tank
EGU = electric generating unit
EI = Emissions Inventory
ELP = El Paso
EPA = (United States) Environmental Protection Agency
EPN = emission point number
ESL = effects screening level
ESP = electrostatic precipitator
FCAA = Federal Clean Air Act
FCCU = fluid catalytic cracking unit
FID = flame ionization detector
FIN = facility identification number
ft = foot or feet
ft/sec = foot or feet per second
g = gram
gal/wk = gallon per week
gal/yr = gallon per year
GLC = ground level concentration
$GLC_{max}$ = maximum (predicted) ground-level concentration
gpm = gallon per minute
gr/1000scf = grain per 1000 standard cubic feet
gr/dscf = grain per dry standard cubic feet
$H_2CO$ = formaldehyde
$H_2S$ = hydrogen sulfide
$H_2SO_4$ = sulfuric acid
HAP = hazardous air pollutant as listed in § 112(b) of the Federal Clean Air Act or Title 40 Code of Federal Regulations Part 63, Subpart C
HC = hydrocarbons
HCl = hydrochloric acid, hydrogen chloride
Hg = mercury
HGB = Houston/Galveston/Brazoria
hp = horsepower
hr = hour
IFR = internal floating roof tank
in $H_2O$ = inches of water
in Hg = inches of mercury
IR = infrared
ISC3 = Industrial Source Complex, a dispersion model
ISCST3 = Industrial Source Complex Short-Term, a dispersion model
K = Kelvin; extension of the degree Celsius scaled-down to absolute zero
LACT = lease automatic custody transfer
LAER = lowest achievable emission rate
lb = pound
hp = horsepower
hr = hour lb/day = pound per day
lb/hr = pound per hour
lb/MMBtu = pound per million British thermal units
LDAR = Leak Detection and Repair (Requirements)
LNG = liquefied natural gas
LPG = liquefied petroleum gas
LT/D = long ton per day
m = meter
$m^3$ = cubic meter
m/sec = meters per second
MACT = maximum achievable control technology
MAERT = Maximum Allowable Emission Rate Table
MERA = Modeling and Effects Review Applicability
mg = milligram
mg/g = milligram per gram
mL = milliliter
MMBtu = million British thermal units
MMBtu/hr = million British thermal units per hour
MSDS = material safety data sheet
MSS = maintenance, startup, and shutdown
MW = megawatt
NAAQS = National Ambient Air Quality Standards
NESHAP = National Emission Standards for Hazardous Air Pollutants
NGL = natural gas liquids
NNSR = nonattainment new source review
$NO_x$ = total oxides of nitrogen

NSPS = New Source Performance Standards
PAL = plant-wide applicability limit
PBR = Permit(s) by Rule
PCP = pollution control project
PEMS = predictive emission monitoring system
PID = photo ionization detector
PM = periodic monitoring
PM = total particulate matter, suspended in the atmosphere, including $PM_{10}$ and $PM_{2.5}$, as represented
$PM_{2.5}$ = particulate matter equal to or less than 2.5 microns in diameter
$PM_{10}$ = total particulate matter equal to or less than 10 microns in diameter, including $PM_{2.5}$, as represented
POC = products of combustion
ppb = parts per billion
ppm = parts per million
ppmv = parts per million (by) volume
psia = pounds (per) square inch, absolute
psig = pounds (per) square inch, gage
PTE = potential to emit
RA = relative accuracy
RATA = relative accuracy test audit
RM = reference method
RVP = Reid vapor pressure
scf = standard cubic foot or feet
scfm = standard cubic foot or feet (per) minute
SCR = selective catalytic reduction
SIL = significant impact levels
SNCR = selective non-catalytic reduction
$SO_2$ = sulfur dioxide
SOCMI = synthetic organic chemical manufacturing industry
SRU = sulfur recovery unit
TAC = Texas Administrative Code
TCAA = Texas Clean Air Act
TCEQ = Texas Commission on Environmental Quality
TD = Toxicology Division
TLV = threshold limit value
TMDL = total maximum daily load
tpd = tons per day
tpy = tons per year
TVP = true vapor pressure
VOC = volatile organic compounds as defined in Title 30 Texas Administrative Code § 101.1
VRU = vapor recovery unit or system

## Special Conditions

Permit Numbers 81594 and PSDTX1091

1. This permit covers only those sources of emissions listed in the attached table entitled "Emission Sources - Maximum Allowable Emission Rates," and those sources are limited to the emission limits and other conditions specified in that attached table. Compliance with the annual emission limits shall be based on a rolling 12-month year rather than the calendar year. This permit authorizes maintenance, start-up, shutdown, and maintenance (MSS) activities which comply with the emission limits in the maximum allowable emission rates table (MAERT).

### Federal Applicability

2. These facilities shall comply with applicable requirements of the U.S. Environmental Protection Agency (EPA) regulations in Title 40 Code of Federal Regulations Part 60 on Standards of Performance for New Stationary Sources promulgated for:

   A. Subpart A: General Conditions.

   B. Subpart Dc: Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units. (Auxiliary Boiler) **(7/08)**

   C. Subpart IIII: Standards of Performance for Stationary Compression Ignition Internal Combustion Engines. **(7/21)**

   D. Subpart KKKK: Standards of Performance for Stationary Gas Turbines. (CTGs and DBs)

   E. 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.

3. These facilities shall comply with applicable requirements of the EPA regulations on National Standards for Hazardous for Source Categories, Title 40 Code of Federal Regulations Part 63 (40 CFR Part 63): **(7/21)**

   A. Subpart A: General Provisions.

   B. Subpart ZZZZ: National Emission Standards for HAPs for Stationary Reciprocating Internal Combustion Engines (RICE)

### Combined Cycle Emission Standard/Operating Specifications

4. The turbines (EPNs: NB8 and NB9) shall not exceed the following emission limits expressed in parts per million by volume dry (ppmvd) at 15% oxygen ($O_2$) subject to the following specifications:

| Pollutant | Concentration | Averaging Time |
|---|---|---|
| $NO_x$ | 5 | Rolling 3-hr average |
| CO | 5 | Rolling 3-hr average |
| VOC | 4 | Rolling 3-hr average |
| Ammonia ($NH_3$) | 5 | Rolling 3-hr average |

   A. These concentration limits apply over each turbine's normal operating range as tested according to the Initial Determination of Compliance, excluding start-up and shutdown periods. **(7/21)**

B. Startup and Shutdown definitions

(1) A cold start-up event is defined as a start-up after a unit has received no fuel flow for a period of 24 hours or more. Cold start-up events shall not exceed six hours in duration per unit.

(2) A warm start-up or shutdown event is defined as a start-up which is not a cold start-up. Warm start-up events shall not exceed four hours in duration per unit.

(3) Shutdown events shall not exceed two hours in duration per unit.

C. Reduced load operation below the lower operating range tested according to the Initial Demonstration of Compliance not associated with start-up, shutdown, upset, or maintenance is authorized provided that the $NO_x$ and CO maximum pounds per hour (lb/hr) emission rates for $NO_x$ and CO specified in the MAERT are not exceeded. **(7/21)**

5. The heat recovery steam generating (HRSG) duct burners shall each be limited to a maximum heat input capacity of 768 million British thermal units per hour (MMBtu/hr) on a three-hour rolling basis based on the high heating value of the fuel-fired.

**Simple Cycle Emission Standards/Operating Specifications (7/21)**

6. The turbines (EPNs: NB8A and NB9A) shall not exceed the following emission limits expressed in parts per million by volume dry (ppmvd) at 15% oxygen ($O_2$) subject to the following specifications:

| Pollutant | Concentration | Averaging Time |
|---|---|---|
| $NO_x$ | 9 | Rolling 3-hr average |
| CO | 8 | Rolling 3-hr average |
| VOC | 1.5 | Rolling 3-hr average |

A. These concentration limits apply over each turbine's normal operating range as tested according to the Initial Demonstration of Compliance, excluding start-up and shutdown periods.

B. Startup and Shutdown Specification

(1) A start-up shall not exceed one hour in duration per event.

(2) Shutdown events shall not exceed one hours in duration per unit.

C. Reduced load operation below the lower operating range tested according to Initial Demonstration of Compliance not associated with start-up, shutdown, upset, or maintenance is authorized. The emission from reduced load shall not exceed the normal hourly emission rates in the MAERT.

7. The turbines shall not exceed a combined 3,878,000 MMBtu/yr of simple cycle operation on a rolling 12-month average.

**Operating and Fuel Specifications (7/21)**

8. Opacity of emissions from any one stack authorized by this permit shall not exceed 5% averaged over a six-minute period. During periods of start-up or shutdown, the opacity shall not exceed 15%

over a six-minute period. The permit holder shall demonstrate compliance with this Special Condition in accordance with the following procedures:

A. Visible emission observations shall be conducted and recorded at least once during each calendar quarter while the facilities are in operation, unless the emission unit is not operating for the entire calendar quarter.

B. This determination shall be made by first observing for visible emissions while each facility is in operation. Observations shall be made at least 15 feet and no more than 0.25 miles from the emission point(s). Up to three emissions points may be read concurrently, provided that all three emissions points are within a 70-degree viewing sector or angle in front of the observer such that the proper sun position (at the observer's back) can be maintained for all three emission points. A certified opacity reader is not required for these visible emission observations.

C. If visible emissions are observed from an emission point, then the opacity shall be determined and documented within 24 hours for that emission point using Title 40 Code of Federal Regulations Part 60 (40 CFR Part 60), Appendix A, Reference Method 9.

D. If the opacity limitations of this Special Condition are exceeded, corrective action to eliminate the source of visible emissions shall be taken promptly and documented within one week of first observation.

9. Fuel for the gas turbines, DBs, auxiliary Boiler, and heaters shall be limited to firing pipeline-quality, sweet natural gas containing no more than 2.5 grains total sulfur per 100 dry standard cubic feet (dscf) on an hourly basis, and 0.5 grain total sulfur per 100 dscf on an annual basis. **(7/21)**

10. The Emergency Generator (EPN: GEN1) and the Fire Water Pump (EPN: FWP1) shall be limited to the following:

A. Each shall be limited to a maximum of 104 hours of non-emergency operation for testing and maintenance annually.

B. Diesel fuel containing no more than 0.05 weight percent sulfur.

11. Upon request by the Executive Director of the Texas Commission on Environmental Quality (TCEQ) or any air pollution control program having jurisdiction, the holder of this permit shall provide a sample and/or an analysis of the fuel-fired or shall allow air pollution control agency representatives to obtain a sample for analysis.

**AQUEOUS AMMONIA ($NH_3$)**

12. The permit holder shall maintain prevention and protection measures for the $NH_3$ storage system which includes (but is not limited to) the following: the $NH_3$ storage tank area will be marked and secured so as to protect the $NH_3$ storage tank from accidents that could cause a rupture.

13. The permit holder shall maintain the piping and valves in $NH_3$ service as follows:

A. All operating practices and procedures relating to the handling and storage of $NH_3$ shall conform to the safety recommendations specified for that compound by guidelines of the American National Standards Institute and the Compressed Gas Association.

B. Audio, olfactory, and visual checks for $NH_3$ leaks within the operating area shall be made once per day.

C. As soon as practicable, following the detection of a leak, plant personnel shall take one or more of the following actions:

(1) Locate and isolate the leak, if necessary.

(2) Commence repair or replacement of the leaking component.

(3) Use a leak collection or containment system to control the leak until repair or replacement can be made if immediate repair is not possible.

**INITIAL DETERMINATION OF COMPLIANCE**

14. 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 Corpus Christi Regional Director.

15. 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: NB8, NB9, NB8A, and NB9A. 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. **(7/21)**

Fuel sampling using the methods and procedures of 40 CFR § 60.334(h) may be conducted in lieu of stack sampling for $SO_2$. If fuel sampling is used, compliance with New Source Performance Standards (NSPS), Subpart KKKK $SO_2$ limits shall be based on 100% conversion of the sulfur in the fuel to $SO_2$. Any deviations from those procedures must be approved by the Executive Director of the TCEQ prior to sampling. The TCEQ Executive Director or designated representative shall be afforded the opportunity to observe all such sampling.

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

A. The TCEQ Corpus Christi Regional Office shall be contacted as soon as testing is scheduled but not less than 30 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 Corpus Christi Regional Director shall approve or disapprove of any deviation from specified sampling procedures.

Requests to waive testing for any air contaminant specified in this condition shall be submitted to the TCEQ Office of Air, Air Permits Division. Test waivers and alternate or equivalent procedure proposals for NSPS testing which must have EPA approval shall be submitted to the TCEQ Regional Director.

B. Air contaminants and diluents from the turbines to be sampled and analyzed include (but are not limited to) $NO_x$, CO, volatile organic compounds, $SO_2$, $NH_3$, formaldehyde, opacity, and $O_2$. [As noted above, fuel sampling using the methods and procedures of 40 CFR § 60.334(h) may be conducted in lieu of stack sampling for $SO_2$].

C. Each turbine shall be tested at the lower and upper expected operating range for the atmospheric conditions which exist during testing. Each tested turbine load shall be identified in the sampling report. The permit holder shall present at the pretest meeting the manner in which stack sampling will be executed in order to demonstrate compliance with emission standards found in 40 CFR Part 60, Subpart KKKK.

D. Sampling as required by this condition shall occur within 60 days after achieving the maximum production 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 EPA.

E. Within 60 days after the completion of the testing and sampling required herein, two copies of the sampling reports shall be distributed as follows:

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

(2) One copy to the TCEQ Corpus Christi Regional Office.

F. Initial demonstration of compliance was completed on the following: **(7/21)**

(1) Combined cycle operations: EPNs: NB8 and NB9 – March 2010.

**CONTINUOUS DETERMINATION OF COMPLIANCE**

16. The holder of this permit shall install, calibrate, maintain, and operate a continuous emission monitoring system (CEMS) to measure and record the concentrations of $NO_x$, CO, and diluent gases ($O_2$ or carbon dioxide [$CO_2$]) from EPNs: NB8, NB9, NB8A, and NB9A. **(7/21)**

A. The CEMS data shall be used to determine continuous compliance with the $NO_x$ and CO emission limitations in Special Conditions and the attached MAERT.

B. The CEMS shall be operated according to the methods and procedures as set out in 40 CFR § 60.4345. Reporting of monitoring data shall be in accordance with methods and procedures as set out in 40 CFR § 60.7.

C. Compliance with the continuous emissions monitor requirements above can be demonstrated by meeting the requirements of 40 CFR Part 75 provided that the holder of this permit demonstrates compliance with all applicable NSPS regulations.

17. The permit holder shall additionally install, calibrate, maintain, and operate continuous monitoring systems to monitor and record the average hourly natural gas consumption of the CTGs (EPNs:

NB8, NB9, NB8A, and NB9A). The permit holder shall comply with the initial certification and quality assurances as specified in 40 CFR Part 75, Appendix D. **(12/21)**

18. The $NH_3$ concentration in Exhaust Stack EPNs: NB8 and NB9 shall be tested or calculated according to one of the methods listed below and shall be tested or calculated according to frequency listed below. Testing for $NH_3$ slip is only required on days when the SCR unit is in operation. **(7/21)**

    A. The holder of this permit may install, calibrate, maintain, and operate a CEMS to measure and record the concentrations of $NH_3$. The $NH_3$ concentrations shall be corrected and reported in accordance with limitations in this permit.

    B. As an approved alternative to sorbent or stain tube testing or an $NH_3$ CEMS, the permit holder may install and operate a second $NO_x$ CEMS probe located upstream of the SCR, which may be used in association with the SCR efficiency and $NH_3$ injection rate to estimate $NH_3$ slip. This condition shall not be construed to set a minimum $NO_x$ reduction efficiency on the SCR unit. These results shall be recorded and used to determine compliance with the limitations in this permit.

    C. As an approved alternative to sorbent or stain tube testing, $NH_3$ CEMS, or a second $NO_x$ CEMS, the permit holder may install and operate a dual stream system of $NO_x$ CEMS at the exit of the SCR. One of the exhaust streams would be routed, in an unconverted state, to one $NO_x$ CEMS, and the other exhaust stream would be routed through a $NH_3$ converter to convert $NH_3$ to $NO_x$ and then to a second $NO_x$ CEMS. The $NH_3$ slip concentration shall be calculated from the delta between the two $NO_x$ CEMS readings (converted and unconverted). These results shall be recorded and used to determine compliance with the limitations in the permit

    D. Any other method used for measuring $NH_3$ slip shall require prior approval from the TCEQ Corpus Christi Regional Office.

**RECORDKEEPING REQUIREMENTS**

19. The following records shall be kept at the plant for the life of the permit. All records required in this permit shall be made available at the request of personnel from the TCEQ, EPA, or any air pollution control agency with jurisdiction.

    A. A copy of this permit.

    B. Permit application dated April 2007 and subsequent representations submitted to the TCEQ.

    C. A complete copy of the testing reports and records of the initial performance testing completed to demonstrate initial compliance.

    D. Stack sampling results or other air emissions testing (other than CEMS data) that may be conducted on units authorized under this permit after the date of issuance of this permit.

20. The following information shall be maintained by the holder of this permit in a form suitable for inspection for a period of five years after collection and shall be made immediately available upon request to representatives of the TCEQ, EPA, or any local air pollution control program having jurisdiction:

A. The $NO_x$, CO, and diluent gases, $O_2$ or $CO_2$, CEMS emissions data to demonstrate compliance with the emission rates listed in the MAERT.

B. Raw data files of all CEMS data including calibration checks and adjustments and maintenance performed on these systems.

C. Records of the hours of operation of the emergency generator and fire water pump.

D. Records of fuel sampling conducted pursuant to 40 CFR Part 60, Subpart KKKK.

E. Records of $NH_3$ emissions sampling and calculations.

F. Written records of any accidental releases, spills, or venting of $NH_3$ and the corrective action taken.

G. Written records of maintenance performed to any piping and valves in $NH_3$ service.

H. Records to identify the times when emissions data have been excluded from the calculation of average concentration for purposes of demonstrating compliance with the emissions limitations because of reduced load operation due to start-up or shutdown along with the justification for excluding data. **(7/21)**

**REPORTING**

21. The holder of this permit shall submit to the TCEQ Corpus Christi Regional Office and the Air Enforcement Branch of the EPA in Dallas semiannual 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.

**START-UP AND SHUTDOWN**

22. The holder of this permit shall operate the turbines and associated air pollution control equipment in accordance with good air pollution control practice to minimize emissions during start-up and shutdown, by operating in accordance with a written start-up and shutdown plan.

**EMISSION REDUCTIONS FOR NETTING**

23. This permit is conditioned on the emission reductions identified in Table PSD-3 of the permit application submitted in April 2007 and the subsequent submittal dated May 2007. The Unit 6 Boiler (EPN: 6) and Unit 7 Boiler (EPN: 7) shall each be permanently shutdown no later than commencement of operation of the two new Combustion Turbines (EPNs: NB8 and NB9), plus a reasonable shakedown period, not to exceed 180 days.

24. The amendment application, PI-1 dated December 11, 2020, was determined not to be subject to major new source review by identifying projected actual emission rates for one or more facilities potentially affected by the project. Actual emissions from these facilities shall be monitored, recorded and reports made in accordance with 30 TAC § 116.127." **(7/21)**

| Source | EPN | Projected Actual Emission, tpy | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | $NO_x$ | CO | VOC | PM | $PM_{10}$ | $PM_{2.5}$ | $SO_2$ | $H_2SO_4$ |
| CTG1 – CC | NB8 | 152.44 | 57.36 | 33.72 | 89.84 | 89.84 | 89.84 | 5.96 | 2.84 |
| CTG2 – CC | NB9 | | | | | | | | |
| CTG1 – SC | NB8A | 69.88 | 63.02 | 5.28 | 18.00 | 18.00 | 18.00 | 13.10 | 1.00 |
| CTG2 – SC | NB9A | | | | | | | | |
| Fuel Gas Heater 1 | FGH1 | 0.72 | 0.74 | 0.10 | 0.14 | 0.14 | 0.14 | 0.02 | 0.01 |
| Fuel Gas Heater 2 | FGH2 | | | | | | | | |

**Additional Provisions (7/21)**

25. The performance specifications of Special Condition No. 6 and the MAERT do not apply during combustion shakedown. Shakedown is defined as the period beginning with initial startup and ending no later than initial demonstration of compliance, during which the permit holder conducts operational and contractual testing and tuning to ensure the safe, efficient and reliable operation of the plant. The shakedown period shall not exceed the time period for performance testing as specified in 40 CFR § 60.8.

Date: December 15, 2021

Emission Sources - Maximum Allowable Emission Rates

Permit Numbers 81594 and PSDTX1091

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

Air Contaminants Data

| Emission Point No. (1) | Source Name (2) | Air Contaminant Name (3) | Emission Rates (4) | |
|---|---|---|---|---|
| | | | lbs/hour | TPY |
| **Combined Cycle Operations** | | | | |
| NB8 | CTG and DB HRSG No. 8 **(5)** Combined Cycle | $NO_x$ | 49.0 | 201.48 |
| | | $NO_x$ (MSS) | 270.0 | |
| | | CO | 29.7 | 242.80 |
| | | CO (MSS) | 1920.0 | |
| | | VOC | 13.8 | 56.50 |
| | | VOC (MSS) | 114.0 | |
| | | PM | 36.8 | 104.24 |
| | | $PM_{10}$ | 36.8 | 104.24 |
| | | $SO_2$ | 18.1 | 6.13 |
| | | $H_2SO_4$ | 10.0 | 3.30 |
| | | $NH_3$ | 18.0 | 74.46 |

Emission Sources - Maximum Allowable Emission Rates

| Emission Point No. (1) | Source Name (2) | Air Contaminant Name (3) | Emission Rates (4) | |
|---|---|---|---|---|
| | | | lbs/hour | TPY |
| NB9 | CTG and DB HRSG No. 9 **(5)** Combined Cycle | $NO_x$ | 49.0 | 201.48 |
| | | $NO_x$ (MSS) | 270.0 | |
| | | CO | 29.7 | 242.80 |
| | | CO (MSS) | 1920.0 | |
| | | VOC | 13.8 | 56.50 |
| | | VOC (MSS) | 114.0 | |
| | | PM | 36.8 | 104.24 |
| | | $PM_{10}$ | 36.8 | 104.24 |
| | | $SO_2$ | 18.1 | 6.13 |
| | | $H_2SO_4$ | 10.0 | 3.30 |
| | | $NH_3$ | 18.0 | 74.46 |
| NB8<br>NB9 | Annual Emission CTG and DB HRSG Combined | $NO_x$ | - | 402.96 |
| | | CO | - | 324.50 |
| | | VOC | - | 113.00 |
| | | PM | - | 208.49 |
| | | $PM_{10}$ | - | 208.49 |
| | | $SO_2$ | - | 12.26 |
| | | $H_2SO_4$ | - | 6.60 |
| | | $NH_3$ | - | 148.92 |

Emission Sources - Maximum Allowable Emission Rates

| Emission Point No. (1) | Source Name (2) | Air Contaminant Name (3) | Emission Rates (4) | |
|---|---|---|---|---|
| | | | lbs/hour | TPY |
| AUXB | Auxiliary Boiler **(6)** | $NO_x$ | 1.94 | 1.94 |
| | | CO | 2.00 | 2.00 |
| | | VOC | 0.22 | 0.22 |
| | | PM | 0.38 | 0.38 |
| | | $PM_{10}$ | 0.38 | 0.38 |
| | | $SO_2$ | 0.03 | 0.03 |
| **Simple Cycle Operations** | | | | |
| NB8A | CTG No. 8 **(5)** Simple Cycle | $NO_x$ | 63.00 | - |
| | | $NO_x$ (MSS) | 97.40 | - |
| | | CO | 32.00 | - |
| | | CO (MSS) | 187.10 | - |
| | | VOC | 3.00 | - |
| | | VOC (MSS) | 14.40 | - |
| | | PM | 18.00 | - |
| | | $PM_{10}$ | 18.00 | - |
| | | $PM_{2.5}$ | 18.00 | - |
| | | $SO_2$ | 13.10 | - |
| | | $H_2SO_4$ | 1.00 | |

Emission Sources - Maximum Allowable Emission Rates

| Emission Point No. (1) | Source Name (2) | Air Contaminant Name (3) | Emission Rates (4) | |
|---|---|---|---|---|
| | | | lbs/hour | TPY |
| NB9A | CTG No. 9 **(5)** Simple Cycle | $NO_x$ | 63.00 | - |
| | | $NO_x$ (MSS) | 97.40 | - |
| | | CO | 32.00 | - |
| | | CO (MSS) | 187.10 | - |
| | | VOC | 3.00 | - |
| | | VOC (MSS) | 14.40 | - |
| | | PM | 18.00 | - |
| | | $PM_{10}$ | 18.00 | - |
| | | $PM_{2.5}$ | 18.00 | - |
| | | $SO_2$ | 13.10 | - |
| | | $H_2SO_4$ | 1.00 | - |
| NB8A<br>NB9A | CTG Nos. 8 and 9 Annual Emission - Simple Cycle | $NO_x$ | - | 69.88 |
| | | CO | - | 63.02 |
| | | VOC | - | 5.28 |
| | | PM | - | 18.00 |
| | | $PM_{10}$ | - | 18.00 |
| | | $PM_{2.5}$ | - | 18.00 |
| | | $SO_2$ | - | 2.62 |
| | | $H_2SO_4$ | - | 0.20 |

Emission Sources - Maximum Allowable Emission Rates

| Emission Point No. (1) | Source Name (2) | Air Contaminant Name (3) | Emission Rates (4) | |
|---|---|---|---|---|
| | | | lbs/hour | TPY |
| FGH1 | Fuel Gas Heater No.1 | $NO_x$ | 0.65 | 0.36 |
| | | CO | 0.67 | 0.37 |
| | | VOC | 0.10 | 0.05 |
| | | PM | 0.13 | 0.07 |
| | | $PM_{10}$ | 0.13 | 0.07 |
| | | $PM_{2.5}$ | 0.13 | 0.07 |
| | | $SO_2$ | 0.13 | 0.01 |
| | | $H_2SO_4$ | 0.01 | <0.01 |
| FGH2 | Fuel Gas Heater No.2 | $NO_x$ | 0.65 | 0.36 |
| | | CO | 0.67 | 0.37 |
| | | VOC | 0.10 | 0.05 |
| | | PM | 0.13 | 0.07 |
| | | $PM_{10}$ | 0.13 | 0.07 |
| | | $PM_{2.5}$ | 0.13 | 0.07 |
| | | $SO_2$ | 0.13 | 0.01 |
| | | $H_2SO_4$ | 0.01 | <0.01 |
| **Ancillary Facilities** | | | | |
| GEN1 | Emergency Generator No. 1 | $NO_x$ | 26.81 | 1.39 |
| | | CO | 2.54 | 0.13 |
| | | VOC | 0.60 | 0.03 |
| | | PM | 0.25 | 0.01 |
| | | $PM_{10}$ | 0.02 | 0.01 |
| | | $SO_2$ | 0.33 | 0.02 |

Emission Sources - Maximum Allowable Emission Rates

| Emission Point No. (1) | Source Name (2) | Air Contaminant Name (3) | Emission Rates (4) | |
|---|---|---|---|---|
| | | | lbs/hour | TPY |
| FWP | Fire Water Pump No. 1 | $NO_x$ | 1.79 | 0.09 |
| | | CO | 1.51 | 0.08 |
| | | VOC | 0.71 | 0.04 |
| | | PM | 0.08 | <0.01 |
| | | $PM_{10}$ | 0.08 | <0.01 |
| | | $SO_2$ | 0.59 | 0.03 |
| TK-DIESEL 1 | Diesel Storage Tank No. 1 | VOC | 0.91 | <0.01 |
| TK1 | Storage Tank No. 1 | NaOH | 0.09 | <0.01 |
| TK2 | Storage Tank No. 2 | $H_2SO_4$ | <0.01 | <0.01 |
| TK3A | Storage Tank No. 3A | Trisodium phosphate | <0.01 | <0.01 |
| TK3B | Storage Tank No. 3B | Trisodium phosphate | <0.01 | <0.01 |
| TK4 | Storage Tank No. 4 | $NH_4OH$ | 0.48 | 0.07 |
| TK5 | Storage Tank No. 5A | Sodium bisulfate | <0.01 | <0.01 |
| TK6 | Storage Tank No. 6 | 1-Hydroxyethane-1, 1-Diphosphonic Acid | 0.02 | <0.01 |
| TOMV1 | Turbine Oil Mist Vents | VOC | 0.01 | 0.04 |
| TOMV2 | Turbine Oil Mist Vents | VOC | 0.01 | 0.04 |
| TOMV3 | Turbine Oil Mist Vents | VOC | 0.01 | 0.02 |
| AMFUG | Aqueous Ammonia Handling and Fugitives (7) | $NH_3$ | 0.02 | 0.10 |
| NGFUG | Natural Gas Fugitives (7) | VOC | 0.13 | 0.56 |

(1) Emission point identification – either specific equipment designation or emission point number from plot plan.
(2) Specific point source name. For fugitive sources, use area name or fugitive source name.
(3) $NO_x$ - total oxides of nitrogen
CO - carbon monoxide
VOC - volatile organic compounds as defined in Title 30 Texas Administrative Code § 101.1
PM - total particulate matter, suspended in the atmosphere, including $PM_{10}$ and $PM_{2.5}$

Emission Sources - Maximum Allowable Emission Rates

| | | |
|---|---|---|
| $PM_{10}$ | - | total particulate matter equal to or less than 10 microns in diameter, including $PM_{2.5}$ |
| $PM_{2.5}$ | - | particulate matter equal to or less than 2.5 microns in diameter |
| $SO_2$ | - | sulfur dioxide |
| $H_2SO_4$ | - | sulfuric acid |
| NaOH | - | sodium hydroxide |
| $Na_3PO_4$ | - | trisodium phosphate |
| $NaHSO_3$ | - | sodium bisulfite |
| $NH_3$ | - | ammonia |
| $NH_4OH$ | - | ammonium hydroxide |
| MSS | - | maintenance, startup, and shutdown |

(4) Compliance with annual emission limits (tons per year) is based on a 12-month rolling period.
(5) Planned MSS for all pollutants are authorized even if not specially identified as MSS. During any clock hour that includes one or minutes of planned MSS that pollutants maximum hour emission rate shall apply during that clock hour.
(6) EPN: AUXB is limited to 2000 hour of operation per year.
(7) Emission rate is an estimate and is enforceable through compliance with the applicable special condition(s) and permit application representations.

Date: July 6, 2021