Construction Permit
Source Analysis & Technical Review

Company	**Pacifico GW LLC**	Permit Numbers	**181033, PSDTX1672, and GHGPSDTX255**
City	**Fort Stockton**	Project Number	**396366**
County	**Pecos**	Regulated Entity Number	**RN112259775**
Project Type	**Initial**	Customer Reference Number	**CN606413706**
Project Reviewer	**Allison Jackson**	Received Date	**August 4, 2025**
Site Name	**GW Ranch Energy Center**		

Project Overview

Pacifico GW, LLC (Pacifico) proposes construction of 35 natural gas-fired simple cycle turbines at the GW Ranch Energy Center in Pecos County, with a nominal output of 5,000 megawatts (MW), and ancillary emission sources, such as wet surface air coolers, dewpoint heaters, emergency engines, storage tanks, and fugitive emissions. The plant will provide electricity for an on-site AI data center and will not be capable of selling or receiving power from the local utility power system. Maintenance, Startup, and Shutdown activities will be authorized under this permit.

Emission Summary

Air Contaminant	Proposed Allowable Emission Rates (tpy)
PM	998.87
PM_{10}	995.05
$PM_{2.5}$	991.42
VOC	838.00
NO_X	2,830.17
CO	5,955.13
SO_2	397.84
H_2S	0.02
H_2SO_4	60.76
NH_3	1,924.87
SF_6	0.31
GHG as CO_2e	33,204,964.44

Compliance History Evaluation - 30 TAC Chapter 60 Rules

A compliance history report was reviewed on:	August 25, 2025
Site rating & classification:	N/A
Company rating & classification:	N/A
Has the permit changed on the basis of the compliance history or rating?	No
Did the Regional Office have any comments? If so, explain.	No

Public Notice Information

Requirement	Date
Legislator letters mailed	8/12/2025
Date 1st notice published	8/28/2025
Publication Name: The Fort Stockton Pioneer	
Pollutants: carbon monoxide, nitrogen oxides, organic compounds, particulate matter including particulate matter with diameters of 10 microns or less and 2.5 microns or less, sulfur dioxide, sulfuric acid mist, GHGs, hazardous air pollutants, ammonia and hydrogen sulfide.	
Date 1st notice Alternate Language published	8/31/2025
Publication Name (Alternate Language): La Prensa Texas	
1st public notice tearsheet(s) received	9/4/2025
1st public notice affidavit(s) received	9/4/2025
1st public notice certification of sign posting/application availability received	10/3/2025
SB709 Notification mailed	9/15/2025 & 12/3/2025
Date 2nd notice published	12/11/2025
Publication Name: The Fort Stockton Pioneer	
Pollutants: carbon monoxide, nitrogen oxides, organic compounds, particulate matter including particulate matter with diameters of 10 microns or less and 2.5 microns or less, sulfur dioxide, sulfuric acid mist, GHGs, hazardous air pollutants, ammonia and hydrogen sulfide.	
Date 2nd notice published (Alternate Language)	12/14/2025
Publication Name (Alternate Language): La Prensa Texas	
2nd public notice tearsheet(s) received	12/18/2025
2nd public notice affidavit(s) received	12/18/2025
2nd public notice certification of sign posting/application availability received	1/14/2026

Federal Rules Applicability

Requirement	
Subject to NSPS?	**Yes**
Subparts **A, KKKK, IIII, JJJJ**	
Subject to NESHAP?	No, the site does not emit any air contaminants regulated under 40 CFR Part 61.
Subject to NESHAP (MACT) for source categories?	**Yes**
Subparts **A, YYYY, ZZZZ, DDDDD**	
Nonattainment review applicability:	Pecos County is in attainment or unclassified for all pollutants. Therefore, nonattainment review is not applicable.

PSD review applicability:

As a new "greenfield" site with no existing emissions, the site is an existing PSD minor source. The project emission increases are summarized in the table below. As an un-named source the "step 1" project emission increase for each pollutant is compared to the PSD named source new major source threshold of 250 tpy for each pollutant. Since at least one pollutant exceeds the new major source threshold, the remaining pollutants that did not exceed the new major source threshold are compared to their respective significant emission rate thresholds.

The project triggers PSD review for CO, NOx, PM, PM_{10}, $PM_{2.5}$, SO_2, VOC, H_2SO_4, and GHGs as CO_2e.

Pollutant	"Step 1" Project Emissions Increase (tpy)	New Major Source Threshold (tpy)	New Major Source Threshold Exceeded?	Significant Emission Rate (tpy)	Significant Emission Rate Exceeded?	PSD Triggered?
CO	5,955.13	250	Yes	100	N/A	**Yes**
NOx	2,830.17	250	Yes	40	N/A	**Yes**
PM	998.87	250	Yes	25	N/A	**Yes**
PM_{10}	995.05	250	Yes	15	N/A	**Yes**
$PM_{2.5}$	991.42	250	Yes	10	N/A	**Yes**
SO_2	397.84	250	Yes	40	N/A	**Yes**
VOC	838.00	250	Yes	40	N/A	**Yes**
H_2SO_4	60.76	250	No	7	Yes	**Yes**
GHGs, CO_2e	33,204,964.44	N/A	N/A	75,000	Yes	**Yes**

Title V Applicability - 30 TAC Chapter 122 Rules

Requirement

Title V applicability: The site will be a major source with respect to the Federal Operating Permits Program (Title V program). Pacifico will submit an initial permit application for a Federal Operating Permit prior to start of operation of the power plant.

Periodic Monitoring (PM) applicability: The site will be a major source for Title V and is subject to the 30 TAC 122 periodic monitoring requirements. The following provisions for monitoring related to this project are included in the special conditions:

- Quarterly visible emissions observations and/or continuous opacity monitoring
- Recordkeeping of the hours of operation for the emergency generator, supplemental engines, and firewater pumps
- 28AVO for fugitive components in contact with ammonia
- AVO checks for components in contact with natural gas
- Stack testing for NOx, CO, VOC, PM_{10}, SO_2, NH_3, and O_2 for the gas turbines
- CEMS for NOx, CO, NH_3 and O_2 from each gas turbine
- Fuel consumption of each CTG
- Fuel consumption of each emergency engine and firewater pump
- NH_3 slip testing
- Cooling water tested once per week for each cooling tower
- Records of startups, shutdown, and other planned maintenance activities dates and durations
- Recordkeeping of tank service and throughput updated monthly

Compliance Assurance Monitoring (CAM) applicability: CAM is applicable to the gas turbines at this site for NOx and CO because each turbine has the pre-control potential-to-emit above the major source thresholds for NOx and CO, and a control device is used to achieve compliance with the emission limitations. NOx emissions are controlled by the SCR, while CO emissions are controlled by the oxidation catalyst. CAM is addressed through use of a NO_x and CO CEMS to demonstrate continuous compliance with those pollutants.

Process Description/ Project scope

Pacifico proposes construction of 35 natural gas-fired simple cycle turbines at the GW Ranch Energy Center in Pecos County, with a nominal output of 5,000 megawatts (MW). Of the 35 turbines, 21 will be Siemens SGT-800 turbines and 14 will be large frame turbines of an undecided manufacturer. The large frame turbines will be Doosan Enerbility H-Class DGT6-300H S2, GE H-Class 7HA.03, Mitsubishi J-Class M501JAC, or Siemens HL-Class SGT6-9000HL. Pacifico used an “envelope” approach when determining emission rates for each large frame turbine. For each pollutant, the highest expected emission rate from each operating scenario across the 4 large frame turbine options establishes an upper bound or “envelope” of potential emissions for the sources and pollutants to be permitted, representing the highest possible operating and emissions scenario to allow for selection of a turbine OEM in the future that meets the proposed permit emission limits and operating specifications.

3.1 Combustion Turbine Generators

The main components of the CTGs consist of a compressor, combustor, turbine, and generator. Filtered ambient air is drawn into the compressor section of the CTG. During periods of warm to hot ambient temperatures, the temperature of the inlet air to the CTG may be lowered by using dry air inlet coolers to increase the mass air flow through the turbine and maintain turbine power output. There are no air emissions associated with the dry inlet air coolers. The plant will also install up to 19 hybrid WSAC, which are closed-loop evaporative cooling and condensing systems that provide indirect cooling of the CTG lube oil systems, hydraulic oil systems, and generators.

Natural gas is mixed with the compressed inlet air and combusted in the combustor section of the CTG. Dry low-NOx (DLN) combustors are used to reduce the NOx emissions generated in the combustion process. Hot exhaust gases then enter the expansion turbine where the gases expand across the turbine, which generates torque that causes rotation of the turbine shaft. The shaft drives the compressor section of the unit and spins a dedicated electric generator, producing electricity. A conventional SCR system, using a 19-percent solution of aqueous ammonia as the reagent, will be used to control NOX emissions from the turbines. The systems will be comprised of aqueous ammonia storage and handling equipment, ammonia injection grids, and catalysts beds. The ammonia injection grids and the SCR catalyst beds will be installed in a transition section between the turbine and exhaust stack. The turbines will be equipped with an oxidation catalyst system to minimize CO, VOC, and organic HAP emissions. The oxidation catalyst system will be comprised of catalyst bed modules and will be installed at the location where exhaust temperatures will optimize CO and VOC reduction reactions.

3.2 CTG Startup and Shutdown Activities

During planned SUSD periods, emissions may be released from the combustion turbines at higher rates than during normal operations. During startup, higher NOX and CO emissions may be produced when the turbines are outside the temperatures and performance mode where the catalytic control systems can be used. Additionally, higher CO and VOC emissions during SUSD may result due to less complete combustion as the CTG transitions to its normal operating mode. As such, this application includes proposed SUSD emissions rates for NOX, CO, and VOC emissions from the CTG sources. To ensure operational independence, the Project will incorporate black-start capability, enabled by the supplemental engine generators and, where feasible, the BESS system. In a black-start and initial plant startup scenario, the supplemental generator will be activated to feed power to the first CTG, which ramps up to the MECL sufficient for startup of the next CTG in sequence. This sequence is repeated until all CTGs are online and operating in normal mode. Given the periodic SUSD activities and startup sequencing, the air dispersion modeling has evaluated the following two scenarios for SUSD events:

- No more than two (2) large-frame CTG units and 10 Siemens SGT-800 CTG units will be in SU mode during a 1-hour period. The remaining 12 large-frame CTG units and 11 Siemens SGT-800 CTG units are operating in normal mode.
- No more than three (3) large-frame CTG units will be in SU mode during a 1-hour period. The remaining 11 large-frame and 21 Siemens SGT-800 CTG units are operating in normal mode.

3.3 Supplemental Generators

The Project will include two (2) supplemental generators that will be used for supplemental power generation, as needed, and to support the CTG startup activities and charging the BESS. The supplemental generators are two (2) Wartsila 18V50SG, which is a four-stroke, spark ignited engine generating set, and will be fired exclusively with pipeline quality natural gas. The supplemental generators are rated at a nominal capability of 18.8 MW of electrical power each, and the annual emissions are based on approximately 1,000 hours per year of supplemental power generation.

3.4 Natural Gas-Fired Dew Point Heaters

Nineteen (19) natural gas-fired auxiliary fuel gas heaters will be operated to heat the incoming natural gas fuel to prevent freezing of the gas regulating valves under certain gas operating conditions, and to ensure moisture does not form in the inlet gas lines. The heaters will be fired exclusively with pipeline quality natural gas and will use ultra-low NOx burners to control NOx emissions. Two sizes of heaters will be used, as follows:

- Five (5) dew point heaters with a nominal heat input capacity of 8.8 MMBtu/hr each will be used to support the Siemens SGT-800 combustion turbine operations; and
- Fourteen (14) dew point heaters with a nominal heat input capacity of 11.1 MMBtu/hr each will be used to support the large-frame (H-Class, HL-Class, or J-Class) combustion turbine operations.

3.5 Emergency Engines

The Project will include fifteen (15) ULSD emergency generator engines to provide electric power during emergencies. The emergency generator sets have a standby rating of 3,000 kW (4,023 HP), each certified to EPA Tier 2 emission standards. The engines will be operated for a maximum of 100 hours per year per engine for non-emergency purposes, including maintenance and readiness testing. The Project will include two (2) ULSD engine-driven emergency fire suppression system pumps to provide fire protection for the plant. The fire system pump engines have a standby rating of 227 kW (305 HP), each certified to EPA Tier 3 emission standards. The engines will be operated for a maximum of 100 hours per year per engine for maintenance and readiness testing.

3.6 ULSD Storage Tanks

The Project will include four (4) ULSD storage tanks with a capacity of 25,000 gallons each, and three (3) ULSD storage tanks with a capacity of 12,000 gallons each to store diesel fuel for emergency generator engines and firewater pumps.

3.7 Hybrid Wet Surface Air Coolers (WSAC)

The Project will utilize hybrid WSAC systems as part of the closed loop auxiliary cooling water system, which provides for indirect cooling of the CTG lube oil systems, hydraulic oil systems, and generators. The auxiliary cooling system consists of pumps that circulate the closed-loop cooling medium (water/glycol mixture) through the tube-side of a WSAC with wet/dry heat exchanger coils where the heat is rejected to the air when the WSAC is operated in “dry-mode” or assisted with evaporation of spray water when operated in “wet-mode.” The cooling medium passing through the heat exchanger coils cools the lube and hydraulic oil and generator coolers, and is returned to the auxiliary cooling water pump suction. Auxiliary cooling water flows through the wet/dry heat exchanger coils; when the ambient dry bulb temperature is low, the auxiliary cooling water is directly cooled by air, and when the ambient temperature is high, the WSAC will spray water over the heat exchanger tube bundles and provide additional heat rejection from evaporation of the spray water. The WSAC systems use electric motor-driven fans to move air over the tube bundles during “dry-mode” operation. During “wet mode” operation, water is sprayed over the tube bundles to increase cooling through evaporation. The heat removed from the CTG auxiliaries will be discharged to the atmosphere by heating the air and evaporating some of the cooling water. High efficiency drift eliminators will reduce drift (the fine mist of water droplets entrained in the warm air leaving the WSAC systems) to 0.001-percent of the circulating water flow. The WSAC systems are considered hybrid cooling systems because they have the ability to operate in dry mode, without water spray, during the cooler months. The WSAC will be operating in wet mode when ambient temperatures are above 65F.

- Five (5) WSAC units with drift eliminators will be used to support the Siemens SGT-800 combustion turbine operations; and
- Fourteen (14) WSAC units with drift eliminators will be used to support the large-frame (H-Class, HL-Class, or J-Class) combustion turbine operations.

Additionally, dry inlet-air coolers (non-water based) will be used to cool the inlet air of the gas turbines in order to improve the combustion turbine power output and heat rate. There are no emissions associated with the dry inlet air coolers.

3.8 Combustion Lube Oil Recirculation System Vents
The combustion turbines will be equipped with dedicated closed-loop lube oil recirculation systems to lubricate the moving parts. Lubricating oil will be circulated through the turbine's machinery from the oil sump, and the heating of recirculating lube oil in the turbine and generator housings will create oil vapor and oil droplets in the oil reservoir compartments. Emissions of condensed lube oil droplets from the lube oil systems will be exhausted through vapor extraction vents serving the units, and these emissions will be controlled with mist eliminators.

3.9 Natural Gas System
Natural gas will be delivered to the site via pipeline, metered, and piped to the CTGs. Fugitive emissions from the natural gas piping components (i.e., valves, flanges) include emissions of methane (CH4), ethane (C2H6), VOC, and carbon dioxide (CO2) due to potential equipment leaks.

3.10 Ammonia SCR Delivery System
Aqueous ammonia at a concentration of 19-percent will be stored in pressurized tanks that will be designed to maintain sufficient pressure to prevent a loss of ammonia to the atmosphere during normal operations. The system will be equipped with pressure relief valves for safety reasons to prevent an over-pressure condition. Aqueous ammonia will be delivered by tanker truck to the pressurized tanks. During filling of the tank, ammonia vapors will be returned to the tanker truck as the storage tank is filled. Piping and fittings associated with the tank and other components of the system delivering ammonia to the SCR system will be sources of fugitive emissions.

3.11 Maintenance Activities
Pacifico may perform the following planned maintenance activities on the turbines, which are inherently low emitting (ILE) activities that may generate fugitive emissions:

- Air intake filter maintenance;
- Continuous emissions monitoring system (CEMS) calibrations;
- Inspection, repair, replacement, adjusting, testing, and calibration of analytical equipment and process instrumentation including site glasses, meters, gauges;
- Management of sludge;
- Small equipment maintenance – low vapor pressure VOC;
- Small equipment maintenance – ammonia;
- Gaseous fuel venting during turbine shutdown/maintenance and small equipment and fugitive component repair/replacement; and
- Online and off-line turbine washing.

Emissions from the planned ILE maintenance activities associated with equipment are identified as EPN: MSSFUG. Pacifico may also perform combustion turbine optimization, tuning and testing; and online turbine washing, which are planned maintenance activities that release emissions from the CTG stacks. Maximum hourly and total annual emissions associated with combustion turbine optimization, tuning and testing; and online turbine washing are no higher than the emission rates requested in this application for normal or planned SUSD operations, and are already included in the MAERT estimated for the combustion turbines.

3.12 Sulfur Hexafluoride Insulated Equipment
Certain electrical equipment such as generator circuit breakers and high voltage breakers associated with the units will be insulated with sulfur hexafluoride (SF6). Sulfur hexafluoride (SF6) is a colorless, odorless, non-flammable gas. It is a synthetic fluorinated compound that has an extremely stable molecular structure. The unique chemical properties of SF6 make it an efficient electrical insulator. The gas is used for electrical insulation, arc quenching, and current interruption in high-voltage electrical equipment. Sulfur hexafluoride (SF6) is only used in sealed and safe systems, which under normal

circumstances do not leak gas. The circuit breakers associated with the units are estimated to contain 124,600 pounds of SF6. The circuit breakers will have a low-pressure alarm and a low-pressure lockout. The alarm will alert operating personnel of any leakage in the system and the lockout prevents any operation of the breaker in the event there is a lack of "quenching and cooling" SF6 gas.

Best Available Control Technology

Source Name	EPN	Best Available Control Technology Description
Natural Gas Piping Fugitives	NGFUG	**VOC/H_2S:** Equipment leak fugitives for metering, compression, and piping components in natural gas service were estimated using the Oil and Gas Production Operation average emission factors. The uncontrolled site-wide VOC emissions from fugitive sources are less than 10 tpy. No LDAR monitoring is required.
SCR Delivery System Fugitives	NH3FUG	**NH_3:** For the SCR system, the ammonia leakage is estimated using SOCMI factors for sources without ethylene. Pacifico implements a 28AVO fugitive inspection program to reduce fugitive emissions from the SCR system. AVO checks are made daily.
Wet Surface Air Coolers 1-19	CO-1 through CO-19	**PM/PM_{10}/$PM_{2.5}$:** 0.001% drift rate through the use of drift eliminators.
Siemens SGT-800 Turbines 1-21	CT-1A through CT-21A	Hourly emission rates for each pollutant are derived from the unit load and ambient temperature resulting in the highest hourly emissions for each CT. Good combustion practices are used. Maximum annual emission rates for routine normal operations, excluding startup and shutdown periods, were calculated assuming 8,760 hours/year/turbine firing natural gas. Turbines meet the following emission limits: **NO_X:** 2.5 ppmvd @ 15% O_2 on a rolling 3-hr average. The turbines are equipped with Dry Low NOx burners (DLNB) and SCR as post-combustion control. **CO:** 5.0 ppmvd @ 15% O_2 on a rolling 3-hr average. The turbines are equipped with an oxidation catalyst is used for post-combustion control. **VOC:** 2.0 ppmvd @ 15% O_2 on a rolling 3-hr average, achieved through use of an oxidation catalyst as post-combustion control and use of good combustion practices. **SO_2:** The sulfur content of natural gas is 0.5 grain per 100 standard cubic feet (gr/100 scf). **H_2SO_4:** Use of pipeline-quality natural gas with sulfur content of natural gas is 0.5 grain per 100 standard cubic feet (gr/100 scf) and the application of good combustion practices **PM/PM_{10}/$PM_{2.5}$:** Use of pipeline-quality natural gas the application of good combustion practices, which is

		the same as the TCEQ Tier I BACT guidelines for simple cycle natural gas fired turbines. Opacity is limited to 5% during routine operations and 15% during MSS actitivies. The applicant noted that no add-on control technologies are listed in the TCEQ guidelines or EPA RBLC database to meet BACT for particulate matter emissions from natural gas combustion turbines. **NH_3:** 10.0 ppmvd @ 15% O_2 on a rolling 3-hr average and 5.0 ppmvd @15% O_2 on a rolling annual basis. Emissions of NH_3 originate from NH_3 slip from the SCR system. Good management practices and operation of the SCR are used. **GHG as CO_2e:** The CTs are exclusively fired with pipeline quality natural gas. The total gross thermal efficiency for the CTs is 117 lb CO_2/MMBtu,. This standard is on a 12-month rolling average. These turbines are not subject to NSPS TTTT or NSPS TTTTa, therefore the total gross thermal efficiency requirements of these subparts are not applicable. **MSS:** During startup or shutdown periods, higher NOx emissions may be produced during the transition of the combustors from the diffusion flame mode to full low-NOx (lean premix) operation. Higher VOC and CO emissions are expected during startup/shutdown due to incomplete combustion as the unit transitions to the lean premix operating mode. During startup, higher-than-normal opacity may be experienced. Planned startups and shutdowns emissions were calculated using 52 startup events/turbine and 52 shutdown events/turbine. Pacifico based these hours are based on limiting an individual startups and shutdowns to 60 minutes each. Opacity will not exceed 15 percent during startup or shutdown periods. The proposed BACT for the turbines meet the TCEQ Tier I guidelines and is consistent with the RBLC searches.
Large Frame Combustion Turbines 1-14	CT-1B through CT-14B	Hourly emission rates for each pollutant are derived from the unit load and ambient temperature resulting in the highest hourly emissions for each CT. Good combustion practices are used. Maximum annual emission rates for routine normal operations, excluding startup and shutdown periods, were calculated assuming 8,760 hours/year/turbine firing natural gas. Turbines meet the following emission limits: **NO_X:** 2.5 ppmvd @ 15% O_2 on a rolling 3-hr average.

		The turbines are equipped with Dry Low NOx burners (DLNB) and SCR as post-combustion control. **CO:** 9.0 ppmvd @ 15% O_2 on a rolling 3-hr average. The turbines are equipped with an oxidation catalyst is used for post-combustion control. **VOC:** 2.0 ppmvd @ 15% O_2 on a rolling 3-hr average, achieved through use of an oxidation catalyst as post-combustion control and use of good combustion practices. **SO_2:** The sulfur content of natural gas is 0.5 grain per 100 standard cubic feet (gr/100 scf). **H_2SO_4:** Use of pipeline-quality natural gas with sulfur content of natural gas is 0.5 grain per 100 standard cubic feet (gr/100 scf) and the application of good combustion practices **PM/PM_{10}/$PM_{2.5}$:** Use of pipeline-quality natural gas and the application of good combustion practices, which is the same as the TCEQ Tier I BACT guidelines for simple cycle natural gas fired turbines. Opacity is limited to 5% during routine operations and 15% during MSS actitivies. The applicant noted that no add-on control technologies are listed in the TCEQ guidelines or EPA RBLC database to meet BACT for particulate matter emissions from natural gas combustion turbines. **NH_3:** 10.0 ppmvd @ 15% O_2 on a rolling 3-hr average and 5.0 ppmvd @15% O_2 on a rolling annual basis. Emissions of NH_3 originate from NH_3 slip from the SCR system. Good management practices and operation of the SCR are used. **GHG as CO_2e:** The CTs are exclusively fired with pipeline quality natural gas. The total gross thermal efficiency for the CTs is 117 lb CO_2/MMBtu. This standard is on a 12-month rolling average. These turbines are not subject to NSPS TTTT or NSPS TTTTa, therefore the total gross thermal efficiency requirements of these subparts are not applicable. **MSS:** During startup or shutdown periods, higher NOx emissions may be produced during the transition of the combustors from the diffusion flame mode to full low-NOx (lean premix) operation. Higher VOC and CO emissions are expected during startup/shutdown due to incomplete combustion as the unit transitions to the lean premix operating mode. During startup, higher-than-normal opacity may be experienced. Planned startups and shutdowns emissions were calculated using 52 startup events/turbine and 52 shutdown events/turbine. Pacifico based these hours are based on limiting an individual startups and shutdowns to 60 minutes each. Opacity will not

		exceed 15 percent during startup or shutdown periods.. The proposed BACT for the turbines meet the TCEQ Tier I guidelines and is consistent with the RBLC searches.
ILE Turbine Maintenance Activities	MSSFUG	Maintenance activities, aside from turbine startup and shutdown, include: 1. Turbine water washing (online and offiline) 2. Turbine inlet air filter changeouts 3. Gaseous Fuel Venting from the fuel line and small equipment 4. CEMS analyzer calibration for NOx, CO, and NH_3 5. Small equipment maintenance, replacement, and repair in VOC and ammonia service. 6. Sludge maintenance 7. Inspection, repair, replacement, adjusting, testing, and calibration of analytical equipment and process instrumentation Pacifico will maintain good air pollution control practices and safe operating practices. Pacifico will verify all maintenance activities on an annual basis and evaluate emissions each calendar month. A list of the authorized maintenance activities are included as Attachments A and B of this permit.
Dewpoint Heaters 1-19	DPHEAT1 through DPHEAT19	Natural gas-fired auxiliary fuel gas heaters rated at 8.8 MMBtu/hr (HHV) or 11.1 MMBtu/hr will be operated to heat the incoming natural gas fuel to prevent freezing of the gas regulating valves under certain gas operating conditions and to ensure moisture does not form in the inlet gas line. **NO_X:** 0.011 lb/MMbtu on a rolling 3-hr average achieved by use of low-NOx burners. This concentration is accepted as BACT for small natural gas-fired heaters below 40 MMBtu/hr. **CO:** Exhaust concentration of 50 ppmvd at 3% O_2, which is equivalent to an emission factor of 0.037 lb/MMBtu (HHV) based on vendor data achieved by proper operation and maintenance of the heater, which is considered TCEQ Tier I BACT for natural gas fired heaters less than 40 MMBtu/hr. The proposed CO emission factor is consistent with the applicant's RBLC searches for heaters. **VOC:** Emission factor of 0.0054 lb/MMBtu **SO_2:** The sulfur content of natural gas is 0.5 grain per 100 standard cubic feet (gr/100 scf). **$PM/PM_{10}/PM_{2.5}$:** Use of pipeline-quality natural gas and the application of good combustion practices **GHG as CO_2e:** The total gross thermal efficiency for the dewpoint heaters is 117 lb CO_2/MMBtu. **MSS:** Separate planned MSS emissions are not being

		authorized for the fuel heater. The applicant represented that they will minimize the duration and frequency of MSS activities.
Emergency Engines 1-15	EGEN1 through EGEN15	The emergency engines meets EPA Tier 2 emission levels required by NSPS Subpart IIII. The emergency generator fires only ultra-low sulfur diesel fuel with a maximum sulfur content of 15 ppm. The emergency generator will operate up to 100 hours per year for non-emergency operation, including maintenance checks and readiness testing. It is equipped with a non-resettable runtime meter. **GHG as CO_2e:** The emergency generator meets an emission limit of 98.65 tpy CO_2e.
Firewater Pump 1-2	FPUMP1 through FPUMP2	The firewater pumps meets EPA Tier 3 emission levels required by NSPS Subpart IIII. The emergency generator fires only ultra-low sulfur diesel fuel with a maximum sulfur content of 15 ppm. The firewater pumps will operate up to 100 hours per year for non-emergency operation, including maintenance checks and readiness testing. It is equipped with a non-resettable runtime meter. **GHG as CO_2e:** The firewater pumps meets an emission limit of 6 tpy CO_2e.
Supplemental Engine Generators 1-2	ENGINE-1 through ENGINE-2	Supplemental engines are rated at a nominal capability of 18.8 MW of electrical power each, and the annual emissions are based on approximately 1,000 hours per year of supplemental power generation. **NO_X:** Emission factor of 0.7 g/hr-hr on a rolling 3-hr average provided by vendor guarantee **CO:** 2 g/hp-hr on a rolling 3-hr average required by 40 CFR Subpart JJJJ (stationary non-emergency SI engines) **VOC:** 0.7 g/hp-hr required by 40 CFR Subpart JJJJ (stationary non-emergency SI engines) **SO_2:** The sulfur content of natural gas is 0.5 grain per 100 standard cubic feet (gr/100 scf). **$PM/PM_{10}/PM_{2.5}$:** Use of pipeline-quality natural gas and the application of good combustion practices **GHG as CO_2e:** the supplemental engines meet an emission limit of 3,760 tpy CO_2e. **MSS:** Separate planned MSS emissions are not being authorized for the supplemental engines. The applicant represented that they will minimize the duration and frequency of MSS activities.
Lube Oil Vents 1-35	OILVENT1 through OILVENT35	**VOC and PM**: Emissions are generated from the lubrication oil feed system, and emissions of condensed droplets will be controlled by a mist

		eliminator serving the lube oil reservoir. Emissions are estimated based on an assume daily volumetric emission rate per mist eliminator and the lube oil replacement rates for similar units equipped with mist eliminators. Lube oil vent emissions are counted both as VOC and particulate matter. It is assumed that lube oil mist eliminator vents will emit equal to or less than 0.2 gallons per day of lube oil per vent, based on oil consumption for similar units. The TCEQ does not provide Tier 1 BACT guidelines for lube oil vent emissions, and there is no process code in the RBLC database associated with lube oil vents. The applicant proposed to control the lube oil vent emissions with oil mist eliminators to satisfy BACT for PM/PM_{10}/$PM_{2.5}$ and VOC, which is being deemed valid due to the low emission rates noted above.
Tanks 1-7	TNK-DSL1 through TNK-DSL7	These fixed roof storage tanks store diesel and natural gas condensate. All tanks are horizontal fixed roof tanks. These tanks are equipped with bottom fill or submerged fill and have exterior surfaces painted white. All tanks store chemicals with below 0.5 psia true vapor pressure or the tank is less than 25,000 gallons in size. Therefore, vapors from storage of chemicals are routed to the atmosphere.
Circuit Breaker Sulfur Hexafluoride (SF_6) Fugitives	FUG-SF6	Fugitive emissions from the circuit breakers are due to SF_6 leakage. SF_6 is used in high voltage electrical equipment as an, insulator and/or arc quenching medium. State-of-the-art enclosed pressure SF_6 circuit breakers with leak detection are used to minimize leaks of SF_6. Use of good operations and preventative maintenance practices are employed. The circuit breakers meet a total emission limit of 7,320.25 tpy CO_2e.

Impacts Evaluation

Was modeling conducted?	**Yes**	Type of Modeling:	**AERMOD (V 24142)**
Is the site within 3,000 feet of any school?			**No**
Additional site/land use information: rural			

Based on the modeling review, the air quality analysis (AQA) is acceptable for all review types and pollutants. The health effects review is complete and no adverse health effects are expected to occur among the public health, welfare, or the environment as a result of exposure to the emissions from the facilities authorized by this permit. Please see the model audit dated November 25, 2025 (WCC Content ID 8053725) for full details.

Allison Jackson	1/15/2026		1/15/2026
Project Reviewer Allison Jackson	Date	Team Leader Joel Stanford	Date