

**CITY OF ALBUQUERQUE
ENVIRONMENTAL HEALTH DEPARTMENT
AIR QUALITY PROGRAM**

**TITLE V OPERATING PERMIT RENEWAL
APPLICATION
#2093-RN2-1AR
#AR2093-RN2
Public Service Company of New Mexico
Rio Bravo Generating Station**

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May 2025

Project 253201.0054



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1. GENERAL INFORMATION

1.0 Executive Summary

Executive Summary:

Public Service Company of New Mexico (PNM) operates the Rio Bravo Generating Station ("RBGS" or "facility") located at 725 Electric Avenue, Albuquerque, New Mexico. The facility generates electricity with a nominal 100-150 MW, GE7FA simple-cycle combustion turbine powered primarily with pipeline quality natural gas and with low-sulfur #2 fuel oil as the secondary fuel. Emissions controls on the turbine include dry low-NOx ("DLN") burners for natural gas and water injection for #2 fuel oil combustion. Annual hours of operation limit on each fuel type are 7,320 hours per year for natural gas and 1,440 hours per year for #2 fuel oil.

The Public Service Company of New Mexico is renewing the Title V permit #2093-RN2-1AR issued May 10, 2021 for its Rio Bravo Generating Station, and Acid Rain Permit #AR2093-RN2 issued December 19, 2023. This application is in response to the requirements under 20.11.42.12A.(2)(a)(ii) NMAC to submit a renewal for the Title V Operating Permit twelve (12) months prior to the expiration date of May 10th, 2026. There are no proposed modifications for this application.

1. General information
 - a. Public Service Company of New Mexico
 - b. Facility Name: Rio Bravo Generation Station
2. Facility Information
 - a. Purpose of permit and description/plan: Renewal of Title V Operating Permit (#2093-RN2-1AR)
 - i. PNM is seeking to renew their existing Title V Operating Permit (#2093-RN2-1AR) for the main campus. PNM has not modified any of the existing sources or constructed any additional sources under the Title V Operating Permit.
 - b. Physical facility address: 725 Electric Avenue, Albuquerque, NM
 - c. Facility maps: Various maps and aerial images of the Main campus are included in Section 9 of this application, these include:
 - i. A layout of buildings and sources of criteria pollutants;
 - ii. Most recent Google Earth® imagery of the site;
 - d. Anticipated operating days and hours: The anticipated operating times are 24 hours per day, 7 days per week, and 52 weeks per year.

1.1 Proposed Updates to the Operating Permit

This is a Title V renewal application and there are no proposed updates from the current operating permit.

2. APPLICABLE REGULATIONS AND REQUIREMENTS REVIEW

2.1 Compliance Status with Applicable Requirements

Based on information and belief formed after reasonable inquiry, Public Service Company of New Mexico (PNM) certifies that, as provided in this report, Rio Bravo Generating Station (RBGS) is in compliance with each applicable requirement. A signed certification in accordance with 20 NMAC 11.42.12.A.(5), is provided at the end of Appendix C. Annual Compliance Certification of this Title V modification application package.

2.2 City of Albuquerque Regulations

The regulations outlined below are only the applicable regulations to the PNM Rio Bravo Facility

20.11.2 NMAC - Permit Fees

PNM pays all filing and permit fees as required.

20.11.5 NMAC- Visible Air Contaminants

PNM's Rio Bravo Facility is in compliance with this regulation by performing visual observations based on Method 9 of 40 CFR 60, Appendix A when Unit #1 is operating on fuel oil and when able to meet the Method 9 sun angle position criteria and on Unit #2 if operated during a particular quarter.

20.11.6 NMAC - Emergency Action Plan

PNM's Rio Bravo Generating Station will comply with the provisions of this part as necessary.

20.11.7 NMAC - Variance Procedure

PNM will comply with the provisions of this part if they need to obtain a variance from requirements prescribed by the Board.

20.11.8 NMAC - Ambient Air Quality Standards

PNM's Rio Bravo Generating Station follows National Ambient Air Quality Standards (NAAQS) and the State Ambient Air Quality Standards (NMAAQS) based on the results of air quality dispersion modeling submitted in the original Operating Permit Application package and revised dispersion modeling conducted in support of revision to ATC Permit #0694-M1-RV1.

20.11.20 NMAC - Fugitive Dust Control

The active areas of the property are either paved or have a gravel surface. PNM's Rio Bravo Generating Station takes adequate steps to ensure that all people conducting active operations that result in disturbed surface areas use reasonably available control measures or other effective measure on an ongoing basis to prevent or abate injury to human health and animal and plant life and to prevent or abate unreasonable

interference with public welfare, visibility and the reasonable use of property. PNM's Rio Bravo Generating Station is in compliance with this regulation.

20.11.40 NMAC - Source Registration

PNM's Rio Bravo Generating Station has received ATC and Title V permits from the City of Albuquerque Air Quality Program (COAAQP) that includes sources that need to be registered/permited.

20.11.41 NMAC - Authority-to-Construct Permits

PNM's Rio Bravo Generating Station has received a construction permit from COAAQP that includes sources that need to be registered/permited, ATC Permit #0694-M3.

20.11.42 NMAC - Operating Permits

PNM's Rio Bravo Generating Station received Operating Permit #2093-RN2-1AR on May 10, 2021 from COAAQP that includes all sources regulated by this regulation.

20.11.43 NMAC - Stack Height Requirements

As part of permits pursuant to 20.11.41, 60, or 61 NMAC, sources shall demonstrate compliance with good engineering practice.

20.11.60 NMAC - Permitting Nonattainment Areas

PNM's Rio Bravo Generating Station is not currently located in a non-attainment area for any criteria pollutant, so this part is currently not applicable.

20.11.61 NMAC - Prevention of Significant Deterioration

PNM's Rio Bravo Generating Station currently operating under PSD Permit #0694-M3 and will comply with the provisions of this part if new construction or modification of existing equipment triggers any additional requirements.

20.11.62 NMAC - Acid Rain Program Permits

PNM's Rio Bravo Generating Station is an applicable source affected by the Federal Acid Rain Program. PNM's Rio Bravo Generating Station operates under Acid Rain Permit #AR2093-RN2 issued December 19, 2023.

20.11.63 NMAC - New Source Performance Standards for Stationary Sources

PNM's Rio Bravo Generating Station is applicable to requirements under 40 CRF Part 60.

20.11.65 NMAC - Volatile Organic Compounds

PNM's Rio Bravo Generating Station takes the appropriate steps to minimize VOC emissions from stationary sources. PNM's Rio Bravo Generating Station is in compliance with this regulation.

20.11.67 NMAC – Equipment, Emissions, Limitations

PNM's Rio Bravo Generating Station will comply with the applicable requirements of 20.11.67.17, 18, 19, and 20 NMAC under normal operating conditions.

20.11.90 NMAC - Administration, Enforcement, Inspection

PNM's Rio Bravo Generating Station complies with the provisions of this regulation when operating equipment under abnormal conditions.

20.11.100, 101, and 102 NMAC - Motor Vehicle Inspection and Oxygenated Fuels

As part of its vehicle maintenance program, PNM's Rio Bravo Generating Station ensures that emissions control devices exist on all motor vehicles, and that they are not disabled. PNM's Rio Bravo Generating Station ensures oxygenated fuels are used in their vehicles as appropriate.

2.3 Federal Regulations

40 CFR 50 - National Primary and Secondary Ambient Air Quality Standards (NAAQS)

PNM's Rio Bravo Generating Station is in compliance with NAAQS based on the results of air quality dispersion modeling submitted in the original Operating Permit Application package and revised dispersion modeling conducted in support of revision to ATC Permit #0694-M1-RV1.

40 CFR 60 Subpart A – General Provisions

PNM's Rio Bravo Generating Station complies with this regulation. This regulation applies because 40 CFR 60 Subpart GG applies to Rio Bravo Generating Station.

40 CFR 60 Subparts K through Kb - New Source Performance Standards for Petroleum Liquid Storage Vessels

PNM's Rio Bravo Generating Station currently has a fuel storage tank that meets the volumes subject to the requirements of Subparts A and Kb. However, the tank stores only #2 fuel oil which has a vapor pressure less than 3.5 kPA, which exempts PNM's Rio Bravo Generating Station from the General Provision (Part 60, Subpart A) and from the provisions of Subpart Kb.

40 CFR 60 Subparts GG - New Source Performance Standards for Stationary Gas Turbines

PNM's Rio Bravo Generating Station is applicable to this regulation for stationary gas turbines with a heat input at peak load greater than or equal to 10.7 gigajoules/hr constructed, modified, or reconstructed after October 3, 1977. Ongoing compliance is demonstrated by the continuous emissions monitoring system (CEMS) installed on the turbine for NO_x emissions and fuel sulfur contents for compliance with SO₂ emissions. Relative accuracy test audits (RATA) are conducted to ensure the validity of the CEMS data as required by 40 CFR Part 75. Fuel invoices or supplier's specification sheets are maintained to show compliance with fuel sulfur content limits.

40 CFR 60 Subparts IIII - New Source Performance Standards for Stationary Combustion Ignition Internal Combustion Engines

PNM's Rio Bravo Generating Station is applicable to this regulation for operators of stationary compression ignition (CI) internal combustion engines (ICE) that commence construction after July 11, 2005. Pursuant to 40 CFR 60 Subpart IIII §60.4211(f), Emission Unit #3 is applicable to this regulation.

40 CFR 61 Subpart M - Asbestos NESHAP

PNM's Rio Bravo Generating Station will notify the appropriate regulators of demolition activities that trigger the provisions of this regulation. PNM's Rio Bravo Generating Station is in compliance with this regulation.

40 CFR 63 Subpart A – General Provisions

PNM's Rio Bravo Generating Station complies with this regulation. This regulation applies because 40 CFR 63 Subpart ZZZZ applies to Rio Bravo Generating Station's emergency generator (Unit #2)

40 CFR 63 Subpart ZZZZ – National Emission Standard for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines

PNM's Rio Bravo Generating Station complies with this regulation. Maintenance and recordkeeping requirements are conducted as specified by the regulation for the Rio Bravo Generating Station's emergency generator (Unit #2).

CFR 40 Part 64; Compliance Assurance Monitoring

64.2 Applicability

(a) Except for backup utility units that are exempt under paragraph (b)(2) of this section, the requirements of this part shall apply to a pollutant-specific emissions unit at a major source that is required to obtain a part 70 or 71 permit if the unit satisfies all of the following criteria:

- (1) The unit is subject to an emission limitation or standard for the applicable regulated air pollutant (or a surrogate thereof), other than an emission limitation or standard that is exempt under paragraph (b)(1) of this section;
- (2) The unit uses a control device to achieve compliance with any such emission limitation or standard; and
- (3) The unit has potential pre-control device emissions of the applicable regulated air pollutant that are equal to or greater than 100 percent of the amount, in tons per year, required for a source to be classified as a major source. For purposes of this paragraph, "potential precontrol device emissions" shall have the same meaning as "potential to emit, " as defined in §64.1, except that emission reductions achieved by the applicable control device shall not be taken into account.

For PNM's Rio Bravo Generating Station, NO_x emissions are achieved with low-NO_x burners when combusting natural gas and water injection when combusting #2 fuel oil. Both control methods reduce the formation of NO_x emissions by 40 to 50%.

Pursuant to 40 CFR 64.2(b)(1)(iii) and (vi), Rio Bravo Generating Station is exempt from the potential requirements of 40 CFR Part 64.

(b) Exemptions

- (1) Exempt emission limitations or standards. The requirements of this part shall not apply to any of the following emission limitations or standards:
 - (i) Emission limitations or standards proposed by the Administrator after November 15,

1990 pursuant to section 111 or 112 of the Act.

(ii) Stratospheric ozone protection requirements under title VI of the Act.

PNM

(iii) Acid Rain Program requirements pursuant to sections 404, 405, 406, 407(a), 407(b), or 410 of the Act.

(iv) Emission limitations or standards or other applicable requirements that apply solely under an emissions trading program approved or promulgated by the Administrator under the Act that allows for trading emissions within a source or between sources. (v) An emissions cap that meets the requirements specified in § 70.4(b)(12) or § 71.6(a)(13)(iii) of this chapter.

(vi) Emission limitations or standards for which a part 70 or 71 permit specifies a continuous compliance determination method, as defined in § 64.1. The exemption provided in this paragraph (b)(1)(vi) shall not apply if the applicable compliance method includes an assumed control device emission reduction factor that could be affected by the actual operation and maintenance of the control device (such as a surface coating line controlled by an incinerator for which continuous compliance is determined by calculating emissions on the basis of coating records and an assumed control device efficiency factor based on an initial performance test; in this example, this part would apply to the control device and capture system, but not to the remaining elements of the coating line, such as raw material usage).

40 CFR 68 - Emergency Response

PNM's Rio Bravo Generating Station does not currently store propane and therefore does not require preparation of a Risk Management Plan. PNM's Rio Bravo Generating Station will meet the compliance requirements of the General Duty Clause for this rule.

40 CFR 70 – State Operating Permit Programs

PNM's Rio Bravo Generating Station received Title V operating permit #2093-RN2-1AR, dated May 10, 2021, from COAAQP that includes all regulated air emissions sources.

40 CFR 72 - Permits Regulation

PNM's Rio Bravo Generating Station is subject to Permits Regulation and is in compliance with applicable requirements.

40 CFR 73 - Sulfur Dioxide Allowances

PNM's Rio Bravo Generating Station is subject to this part and maintains sufficient SO₂ allowances in its compliance accounts. Facilities subject to 40 CFR 72 include: independent power producers; facilities who may apply to receive allowances under the Energy Conservation and Renewable Energy Reserve Program; small diesel refineries; and any other person who chooses to purchase, hold, or transfer allowances (authorization to emit up to one ton of sulfur dioxide).

40 CFR 75-Continuous Emission Monitoring

PNM's Rio Bravo Generating Station operates a continuous emission monitoring system (CEMS) and reports NO_x emissions data from the CEMS, and calculates SO₂ emissions based on fuel flow measurements, sulfur content, and heat content data, in compliance with this regulation.

Table 1. NMAC Applicable Regulations

Citation 20 NMAC (AQCR)	Regulation Title	Regulated Pollutants	Regulated Source Category	Applicability
11.1 NMAC	General Provisions	All pollutants	Ambient Air Quality Standards for sources subject to another requirement under 20 NMAC 11.	Applicable
11.2 NMAC	Permit Fees	All pollutants	Sources subject to another requirement of 20 NMAC 11.	Applicable
11.5 NMAC	Visible Air Contaminants	Visible air contaminants (PM, fumes, smoke, or aerosols)	Incinerator, PWDs, stationary spark ignition engines, diesel-powered engines.	Applicable Units #1, #3
11.6 NMAC	Emergency Action Plan	All Pollutants	All sources.	Applicable
11.7 NMAC	Variance Procedure	All Pollutants	All sources	Applicable
11.8 NMAC	Ambient Air Quality Standards	CO,NO ₂ ,O ₃ ,SO ₂ ,PM _{2.5} ,PM ₁₀ ,Pb,H ₂ S, Total Reduced Sulfur, PM (TPM)	All sources.	Applicable
11.20 NMAC	Airborne Particulate Matter	Airborne PM	Industrial/commercial activities, unpaved roads and parking areas, surface disturbances, sandblasting and other surface preparation, demolition.	Applicable
11.23 NMAC	Stratospheric Ozone Protection	ODCs	Equipment used to service motor vehicle AC system	Applicable
11.40 NMAC	Source Registration	All pollutants	By 1 January 1974, commercial/industrial sources emitting >2,000 lb/yr of any air contaminant or any amount of HAPs must obtain a Registration Certificate. Sources constructed after 1 September 1973 must obtain	Applicable

Citation 20 NMAC (AQCR)	Regulation Title	Regulated Pollutants	Regulated Source Category	Applicability
			a Registration Certificate within 180 days after initial startup of source.	
11.41 NMAC	Authority-to-Construct	All pollutants	New construction or modification of sources with >10 lb/hr or >25 tpy (any regulated pollutant precontrolled) or >5 tpy precontrolled lead and sources that emit a significant amount of air contaminant listed in 40 CFR 61.01 (b).	Applicable
11.42 NMAC (40 CFR 70)	Operating Permits	All pollutants	Major Sources	Applicable
11.43 NMAC (40 CFR Part 51 Section 51.100)	Stack Height Requirements	All pollutants	As part of permits pursuant to 20 NMAC 11.41, 60 and 61 sources shall demonstrate compliance with good engineering practice.	Applicable
11.47 NMAC	Emission Inventory Requirements	Regulated Pollutants	Each person who owns or operates a source or who intends to construct or modify a source within Bernalillo county must submit certain relevant information to ensure that the regulations and standards under the Air Quality Control Act and the federal act will not be violated.	Applicable
11.49 NMAC	Excess Emissions	All pollutants	Implement requirements for the reporting of excess emissions and establish affirmative defense provisions for facility owners and operators for excess emissions.	Applicable
11.61 NMAC	Prevention of Significant Deterioration	Criteria pollutants in attainment	Stationary sources in attainment areas listed with potential emissions ≥ 250 tpy or specifically listed sources with potential emissions ≥ 100 tpy of any regulated pollutant.	Applicable
11.62 NMAC (40 CFR 72)	Acid Rain Program Permits	Acid rain pollutants	Large power and cogeneration facilities.	Applicable

Citation 20 NMAC (AQCR)	Regulation Title	Regulated Pollutants	Regulated Source Category	Applicability
11.63 NMAC 40 CFR 60 Subpart A	NSPS – General Provisions	Pollutants applicable to 40 CFR 60	General provisions for any new or revised NSPS.	Applicable for each emission unit affected by a NSPS regulation, as indicated in 40 CFR Part 60 (see below)
11.63 NMAC 40 CFR 60 Subpart B	NSPS – Adoption and Submittal of State Plans for Designated Facilities	Pollutants applicable to 40 CFR 60	Guidelines to control designated pollutants from affected facilities.	Applicable for each air pollutant that is subject to a NSPS regulation that has not been issued air quality criteria. Not applicable.
11.63 40 CFR 60 Subpart Kb	NSPS-Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced After July 23, 1984	VOCs	Storage vessels for volatile organic liquids with a storage capacity greater than 40,000 cubic meters constructed or modified after July 23, 1984.	Would be applicable, however the units at this facility are exempt due to low vapor pressure, according to subsection b.
11.63 NMAC 40 CFR 60 Subpart GG	NSPS - Standards of Performance for Stationary Gas Turbines	NO _x , SO ₂	Stationary gas turbines with a heat input at peak load greater than or equal to 10.7 gigajoules/hr constructed, modified, or reconstructed after October 3, 1977.	Applicable to Unit 1.
11.63 NMAC 40 CFR 60 Subpart IIII	Standards of Performance for Stationary Compression Ignition Internal Combustion Engines	PM, SO ₂ , NO _x , CO, NMHC	The provisions of this subpart are applicable to manufacturers, owners, and operators of stationary compression ignition (CI) internal combustion engines (ICE) that commence construction after July 11, 2005.	Applicable for Unit 3.
11.64 NMAC 40 CFR 61 Subpart A	General Provisions	HAPs	General provisions for National Emission Standards for Hazardous Air Pollutants (NESHAP).	Applicable for each emission unit affected by NESHAP, as indicated in 40 CFR 61, none of the other subparts are applicable so non applicable.

Citation 20 NMAC (AQCR)	Regulation Title	Regulated Pollutants	Regulated Source Category	Applicability
11.67.17 NMAC	Equipment, Emissions, Limitations-Oil Burning Equipment-Nitrogen Dioxide	NO ₂	Oil burning equipment>1 million Btu/yr/unit; Emission Limit: 0.3 lb/million Btu.	Applicable for Unit #1
11.67.18 NMAC	Equipment, Emissions, Limitations-Oil Burning Equipment-Particulate Matter	PM, visible emissions, opacity	Oil burning equipment>250 million Btu/yr/unit; PM Emission Limit: 0.03 lb/million Btu; 20% Opacity.	Applicable for Unit #1
11.67.19 NMAC	Equipment, Emissions, Limitations-Oil Burning Equipment-Sulfur Dioxide	SO ₂	Oil burning equipment>1 million Btu/yr/unit; Emission Limit: 0.34 lb/million Btu.	Applicable for Unit #1
11.67.20 NMAC	Equipment, Emissions, Limitations-Gas Burning Equipment-Nitrogen Dioxide	NO ₂	Gas burning equipment constructed after 31 December 1974 >1 million Btu/yr/unit; Emission limit 0.3 lb/million Btu	Applicable for Unit #1
11.90.13 NMAC	Administration, Enforcement, Inspection-Source Surveillance	All	When notified by the Director, the facility must keep records deemed necessary by the Director.	Applicable
11.90.14 NMAC	Administration, Enforcement, Inspection- Administration and Enforcement	All	When notified by the Director, the facility must determine emissions from a source with a 20 NMAC 11 permit.	Applicable

Table 2. Federal Applicable Regulations

Federal Regulation Citation	Regulation Title	Regulated Pollutants	Regulated Source Category	Applicability
40 CFR 50	National Primary and Secondary Ambient Air Quality Standards	NO _x , CO, SO ₂ , PM ₁₀ , PM _{2.5} , Ozone, Lead	Facility	Applicable
40 CFR 51	Requirements for Preparation, Adoption, and Submittal of Implementation Plans	All Regulated Pollutants	City of Albuquerque/Bernalillo County are the regulating authority for this facility.	Applicable
40 CFR 52	Approval and Promulgation of Implementation Plans	All Regulated Pollutants	City of Albuquerque/Bernalillo County are the regulating authority for this facility.	Applicable
40 CFR 63 Subpart A	Requirements for Control Technology Determinations for Major Sources in Accordance With Clean Air Act Sections, Sections 112(g) and 112(j)	HAPs	General provisions for stationary sources that emit or have the potential to emit HAPs.	Applicable for each source category, as indicated in 40 CFR 63 (see below)
40 CFR 63 Subpart B	List of Hazardous Air Pollutants, Petition Process, Lesser Quantity Designations, Source Category List	HAPs	One or more stationary sources, that is a major source of HAPs, included in a source category for which emission standards have not been established.	Applicable for which emission standards have not been established.
40 CFR 63 Subpart D	Regulations Governing Compliance Extensions for Early Reductions of Hazardous Air Pollutants	HAPs	Existing sources that require a compliance extension from a standard issued under Section 112(d) of the Clean Air Act.	Applicable for sources that require a compliance extension from a standard issued under Section 112(d) of the Clean Air Act.
40 CFR 63 Subpart E	Approval of State Programs and Delegation of Federal Authorities	HAPs	Establishes procedures for the approval of State rules or programs to establish limitations on the potential to emit pollutants listed in or pursuant to section 112(b) of the Act.	Applicable

Federal Regulation Citation	Regulation Title	Regulated Pollutants	Regulated Source Category	Applicability
40 CFR 63 Subpart ZZZZ	National Emission Standard for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines	HAPs	Establishes national emission limitations and operating limitations for hazardous air pollutants (HAP) emitted from stationary reciprocating internal combustion engines (RICE) located at major and area sources of HAP emissions.	Applicable for Unit #3.
40 CFR 63 Subpart JJJJJ	National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers Area Sources	HAPs	Owner or operator of an industrial, commercial, or institutional boiler.	Not applicable
				RBGS is not a boiler.
40 CFR 64	Compliance Assurance Monitoring	All pollutants	Emission units with controls and with a potential to emit greater than the Major Source Threshold.	RGGS is not applicable to CAM.
40 CFR 70	State Operating Permits Programs	Regulated Pollutants	Establishment of comprehensive State air quality permitting systems consistent with the requirements of title V of the Clean Air Act	Applicable
40 CFR 72	Permits regulation	SO ₂ ,NO _x	Sources subject to the Acid Rain Program: units listed in Tables 1,2, or 3 of 40 CFR 73 or utility units (units that sell electricity).	Applicable
40 CFR 73	Sulfur Dioxide Allowance System	SO ₂	Facilities applicable to 40 CFR 72; independent power producers; facilities who may apply to receive allowances under the Energy Conservation and Renewable Energy Reserve Program; small diesel refineries; and any other person who chooses to purchase, hold or transfer allowances (authorization to emit up to one ton of sulfur dioxide).	Applicable, RGS holds SO ₂ Allowances.
40 CFR 75	Continuous Emission Monitoring	SO ₂ ,NO _x ,CO	Units subject to Acid Rain emission limitations and reduction requirements for SO ₂ and NO _x .	Applicable
40 CFR 77	Excess Emissions	SO ₂ , NO _x	Facilities affected under the Acid Rain Program.	Applicable

Federal Regulation Citation	Regulation Title	Regulated Pollutants	Regulated Source Category	Applicability
40 CFR 98	Mandatory Greenhouse Gas Reporting	GHG	Establishes mandatory greenhouse gas (GHG) reporting requirements for owners and operators of certain facilities that directly emit GHG as well as for certain suppliers	Applicable

3. EMISSION CALCULATIONS

3.1 Turbines

Emissions calculations from the turbines are brought forward from the existing 2093-RN2-1AR permit. No emissions were modified with this renewal.

Criteria Pollutant Emission Rate Calculations Particulate Matter (PM/PM₁₀) Compliance Demonstration Method

As discussed in the October 10, 2014 ATC permit modification application supplemental, performance testing of the RBGS stack using EPA Reference Method 5 and 202 is technically infeasible. PNM understands that both EPA Region 6 and ABCAQD agree that the PM test cannot be performed at RBGS, because of the stack geometry and temperature. PNM has requested in the October 10, 2014 ATC permit modification application that the PM stack test requirement be replaced with alternative compliance demonstrations and monitoring requirements. Facility PM emissions will be continuously minimized by the work practice standards that PNM has proposed to be included in the permit. PNM is also proposing an alternative compliance demonstration approach that allows AQD staff to quantitatively verify compliance with the PM limits using several monitored parameters. The combination of workplace practices and the alternative compliance approach described below is no less stringent than a one-time stack test because these activities will occur on an ongoing basis rather than a onetime event.

Section 3.1.3.3 -Stationary Gas Turbine Particulate Matter of EPAs AP-42 Document characterizes PM emissions as follows:

PM emissions from turbines primarily result from carryover of noncombustible trace constituents in the fuel. PM emissions are negligible with natural gas firing and marginally significant with distillate oil firing because of the low ash content. PM emissions can be classified as "filterable" or "condensable" PM. Filterable PM is that portion of the total PM that exists in the stack in either the solid or liquid state... Condensable PM is that portion of the total PM that exists as a gas in the stack but condenses in the cooler ambient air to form particulate matter. Condensable PM exists as a gas in the stack... Condensable PM is composed of organic and inorganic compounds and is generally considered to be all less than 1.0 micrometers in aerodynamic diameter.

The technique that PNM proposes to determine filterable and condensable PM to verify compliance is discussed in Attachment D, "PM Calculation Approach for Rio Bravo Combustion Turbine". The compliance demonstration approach will be used to demonstrate compliance with the lb/hr PM limits in Table 2(b) and the lb/MMBtu PM limit in Condition 2(k) of the Rio Bravo ATC permit #0694-MI-RV2. As discussed in Attachment D, the filterable PM components include fuel oil ash, and total dissolved solids (TDS) in the water used to control NO_x. The condensable PM components include both potential inorganic (SO₃) and organic (unburned semi-volatile compounds) condensable PM that potentially is generated as products of the combustion process. However, because the amount of PM related to the ambient air used for combustion is so small the proposed compliance demonstration does not include a calculation for that component.

PNM will determine the PM emissions from the water injected for NO_x control while combusting oil by assuming that 100% of the TDS in the purified de-mineralized water becomes PM emissions. The water PM component will be calculated based on the measured water flow and TDS in the water. The TDS value of water used for NO_x control will be based on laboratory analysis every 6 months. The value used in the calculation will be the lab results or minimum laboratory detection limit if results are non-detected. The lb/hr and lb/MMBtu PM emissions from water will be calculated semi-annually by multiplying the semi-annual TDS results by the total water injected divided by the hours of operation on fuel oil (to calculate lb/hr) or #2 fuel oil heat input (to

calculate lb/MMBtu) during the reporting period. PNM will determine the PM emissions associated with fuel ash content data for each shipment of #2 fuel oil using ASTM-D482 or equivalent test method. Because natural gas contains no ash, this component is not relevant to natural gas operations. The lb/hr and lb/MMBtu PM emissions from fuel ash will be calculated semi-annually by multiplying the average #2 fuel oil ash content by the total oil usage divided by the hours of operation on fuel oil (to calculate lb/hr) or #2 fuel oil heat input (to calculate lb/MMBtu) during the reporting period.

PNM will calculate the inorganic condensable PM emissions related to sulfuric acid mist formation in the combustion process using the approach developed by EPRI and detailed in "Estimating Total Sulfuric Acid Emissions from Stationary Power Plants." EPRI, Palo Alto, CA: 2012, 1023790. PNM will calculate the inorganic condensable PM on a semi-annual basis and assume the calculated lb/hr and lb/MMBtu rates are representative of PM condensable emissions from this source during the reporting period. The sulfur content of the #2 fuel oil will be determined based on methods described in 40 CFR 75 for each shipment of #2 fuel oil. The Facility will assume the natural gas sulfur content is 1.5 grains S/l 00 scf (standard for pipeline quality gas). To calculate the semi-annual inorganic PM lb/hr rate, RBGS will use the average fuel sulfur content for each fuel times the EPRI H2SO4 conversion factor times the total fuel usage divided by the hours of operation on each fuel (to calculate lb/hr) or #2 fuel oil heat input (to calculate lb/MMBtu less the natural gas contribution) during the reporting period.

While PNM believes that the combustion process would produce minimal amounts of condensable organic PM components, PNM proposes to use the lb/hr VOC emissions measured during the initial performance test performed in the year 2000 as a surrogate for the organic PM component for the purposes of this approach. The lb/MMBtu rate will be calculated for #2 fuel oil by dividing the average lb/hr VOC by the average #2 fuel oil heat input as determined during the initial stack test.

In addition to the approach described above, PNM also proposes to demonstrate compliance based on work practices, and Method 9 opacity measures when firing #2 fuel oil. Thus, PNM proposes to demonstrate compliance based on the following four measures:

1. Work Practice Standards:

- a) Low Sulfur Fuel Oil: during oil operations, combust only low sulfur #2 fuel oil (less than 0.05% sulfur by weight) and maintain records of the sulfur content of each shipment of fuel oil delivery.
- b) Pipeline Quality Natural Gas: during natural gas operations, combust only pipeline quality natural gas.
- c) Hours of Operation: Monitoring and recordkeeping of the hours of operation on natural gas and fuel oil.
- d) Good Air Pollution Control Practices: At all times facility shall, to the extent practicable, maintain and operate the affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions.
- e) Periodic Tuning: The permittee shall perform maintenance and inspect equipment during planned outages and shall perform turbine tuning whenever major combustion components are replaced.

2. Method 9 Opacity Readings during Oil Operations: When firing #2 fuel oil in Unit 1, visible emissions from the stack shall be monitored daily, using 40 CFR 60, Appendix A, Method 9 and shall include two (2) six-minute observation periods. Daily opacity monitoring is not required when conditions do not meet the Method 9 position criteria described in Section 2.1 of 40 CFR 60 Appendix A Method 9 including the requirement that the qualified observer stand with the sun oriented in the 140° sector to his back. Daily Records of observations shall be maintained at the facility and made available to the Division upon request.

3. Semi-Annual Compliance Demonstration Based on monitoring data: Calculate the average TPM (total particulate emissions) semi-annually using the following formula:

Assume TPM = PM = PM₁₀ = PM_{2.5} for compliance purposes.

$$\text{TPM} = F + W + S + O$$

F = PM formed from fuel ash; zero for natural gas, and based on the average fuel ash test data collected after each fuel oil delivery multiplied by the total #2 fuel oil usage divided by the hours of operation on fuel oil (to calculate lb/hr) or heat input (to calculate lb/MMBtu) during the reporting period.

W = PM formed from components in water injected to control NO_x emissions when #2 fuel oil is fired; based on laboratory analysis every 6 month multiplied by the total water injected for NO_x control divided by the hours of operation on fuel oil (to calculate lb/hr) or #2 fuel oil heat input (to calculate lb/MMBtu) during the reporting period. The value used in the calculation will be the lab results or minimum laboratory detection limit if results of non-detect.

S = inorganic condensable PM (primarily sulfur compounds); based on the average sulfur content of each fuel converted to sulfuric acid mist using calculations prepared in accordance with Estimating Total Sulfuric Acid Emissions from Stationary Power Plant, 1023790 Technical Update, prepared by Fossil Energy Research Corporation, Laguna, CA, for Electric Power Research Institute, Palo Alto, California, March 2012 multiplied by the total #2 fuel oil and natural gas usage divided by the hours of operation on each fuel (to calculate lb/hr) or #2 fuel oil heat input (to calculate lb/MMBtu while subtracting out the natural gas contribution) during the reporting period

O = organic condensable PM (carbon-containing compounds); based on the July, 2000 DPGS Compliance Emission Testing report results in lb/hr and converted to lb/MMBtu for VOCs for each fuel.

Each term of the above formula shall be calculated as follows when fired on natural gas to determine the semi-annual average TPM in (lb/hr).

1. F = 0
 - a. Natural gas contains no ash.
2. W = 0
 - a. NO_x control water injection not used when firing on natural gas.
3. S = (Q_{fuel})(S_{fuel})(F1)(3.06 lb H₂SO₄/ 1 lb S)
 - a. Q_{fuel} = total natural gas usage / total hours of operation (scf/hr)
 - b. S_{fuel} = sulfur concentration of fuel = (0.5 grains S/100 scf)(1 lb/ 7,000 grains)
 - c. F1 = fraction of sulfur in fuel converted to H₂SO₄ which can condense into PM = (0.0005)
 - d. (3.06 lb H₂SO₄/ 1 lb S), mass ratio for H₂SO₄ to sulfur
4. O = 5.23 (lb/hr)
 - a. 100% of VOC emissions from 2000 stack test when fired on natural gas.

Each term of the above formula shall be calculated as follows when fired on #2 fuel oil to determine the semi-annual average TPM in (lb/hr).

1. F = (Q_{fuel})(A_{fuel})
 - a. Q_{fuel} = total fuel oil usage / total hours of operation (lb/hr)
 - b. A_{fuel} = fuel ash concentration from fuel oil analysis (%)
2. W = (Q_{water})(TDS)
 - a. Q_{water} = total water used for NO_x control / total hours of operation (lb/hr)
 - b. TDS = total dissolved solids in NO_x control water (ppm)

3. $S = (Q_{fuel})(S_{fuel})(F1)(3.06 \text{ lb H}_2\text{SO}_4/ 1 \text{ lb S})$
 - a. Q_{fuel} = total fuel oil usage / total hours of operation (lb oil/hr)
 - b. S_{fuel} = sulfur concentration of fuel from fuel oil analysis (ppm)
 - c. F1 = fraction of sulfur in fuel converted to H₂SO₄ which can condense into PM = (0.0005)
 - d. (3.06 lb H₂SO₄/ 1 lb S), mass ratio for H₂SO₄ to sulfur
4. $O = 4.77 \text{ (lb/hr)}$
 - a. 100% of VOC emissions from 2000 stack test when fired on fuel oil.

The facility shall submit the TPM lb/hr and lb/MMBtu values in the semi-annual monitoring report as required.

Each term of the above formula shall be calculated as follows when fired on #2 fuel oil to determine the semi-annual average TPM in (lb/hr).

1. $F = (Q_{fuel})(A_{fuel})$
 - a. Q_{fuel} = total fuel oil usage / total hours of operation (lb/hr)
 - b. A_{fuel} = fuel ash concentration from fuel oil analysis (%)
2. $W = (Q_{water})(TDS)$
 - a. Q_{water} = total water used for NO_x control / total hours of operation (lb/hr)
 - b. TDS = total dissolved solids in NO_x control water (ppm)
3. $S = (Q_{fuel})(S_{fuel})(F1)(3.06 \text{ lb H}_2\text{SO}_4/ 1 \text{ lb S})$
 - a. Q_{fuel} = total fuel oil usage / total hours of operation (lb oil/hr)
 - b. S_{fuel} = sulfur concentration of fuel from fuel oil analysis (ppm)
 - c. F1 = fraction of sulfur in fuel converted to H₂SO₄ which can condense into PM = (0.0005)
 - d. (3.06 lb H₂SO₄/ 1 lb S), mass ratio for H₂SO₄ to sulfur
4. $O = 4.77 \text{ (lb/hr)}$
 - a. 100% of VOC emissions from 2000 stack test when fired on fuel oil.

Each term of the above formula shall be calculated as follows when fired on #2 fuel oil to determine the semi-annual average TPM in (lb/MMBtu).

1. $F = (Q_{fuel})(A_{fuel})$
 - a. Q_{fuel} = total fuel oil usage / total heat input (lb/MMBtu)
 - b. A_{fuel} = fuel ash concentration from fuel oil analysis (%)
2. $W = (Q_{water})(TDS)$
 - a. Q_{water} = total water used for NO_x control / total heat input (lb/MMBtu)
 - b. TDS = total dissolved solids in NO_x control water (ppm)
3. $S = (Q_{fuel})(S_{fuel})(F1)(3.06 \text{ lb H}_2\text{SO}_4/ 1 \text{ lb S})$
 - a. Q_{fuel} = total fuel oil usage / total heat input (lb/MMBtu)
 - b. S_{fuel} = sulfur concentration of fuel from fuel oil analysis (ppm)
 - c. F1 = fraction of sulfur in fuel converted to H₂SO₄ which can condense into PM = (0.0005)
 - d. (3.06 lb H₂SO₄/ 1 lb S), mass ratio for H₂SO₄ to sulfur
4. $O = 0.0033 \text{ (lb/MMBtu)}$ a. 100% of VOC emissions from 2000 stack test when fired on fuel oil. The facility submits the TPM lb/hr and lb/MMBtu values in the semi-annual monitoring report as required.

Annual TPM will be calculated by multiplying the average of the semi-annual TPM values during the reporting period by the operating hours during the reporting period.

4. The facility shall monitor the following parameters used in the calculations:

- i. Operational hours, hourly fuel usage and fuel type on a daily basis.

- ii. Fuel oil ash content data for each shipment of #2 fuel oil using ASTM D482 or equivalent test method.
- iii. Fuel oil sulfur content data based on methods described in 40 CFR 75 for each shipment of #2 fuel oil.
- iv. TDS value of water used for NOx control based on laboratory analysis every 6 months, values used in the calculation will be lab results or minimum laboratory detection limit if results are non-detect.
- v. Hourly water injection rate used during fuel oil combustion.

Particulate Matter (PM/PM₁₀/PM_{2.5}) Emission Rates

Supporting documentation regarding PM/PM₁₀ and PM_{2.5} are included in Attachment C and show by a preponderance of the evidence that the proposed emission limits are reasonable and supported by other permit decisions nationwide for GE7FA turbines. Table 1 below contains the emissions limits for PM/ PM₁₀ and PM_{2.5}. These emission rates were submitted with the last ATC Permit #0694-MI-RV2 revision application. PM_{2.5} is calculated conservatively using the approach in EPA Factors Information Retrieval System (FIRE) to establish the PM_{2.5} emission factor for fuel oil as 91% of the PM₁₀ emission factor.

Table 3: PM emission Limits

Pollutant	Natural Gas		#2 Fuel Oil	
	Lb/hr	TPY	Lb/hr	TPY
PM (PM/PM ₁₀)	9.0	32.9	34.0	24.5
PM _{2.5}	8.2	30.0	30.9	22.3

Tables 2 through 6 on the following pages contain detailed emissions calculations for NOx, CO, VOC and SO₂. The basis for emissions calculations are provided and supporting documentation, such as vendor guarantees, are included in Attachment C to this permit application.

Table 4: Vendor Emission Guarantee

Vendor Emission Guarantees (from Vendor guarantee dated 8/7/98)		
Type:	NO _x ppmv@15% O ₂	CO ppmv@15%O ₂
Natural Gas Operation	15	42
Fuel Oil Operation	15	20

Table 5: Heat Input Calculation

Heat Input Calculation					
Heat rate (MMBtu/hr) =Heat rate(btu/kW-hr)*power(kW)/1,000,000					
Natural Gas Operation			Fuel Oil Operation		
Maximum net heat rate	11,088	btu/kWh	Maximum net heat rate	11,298	btu/kWh
Maximum power guarantee	136,380	kW	Maximum power guarantee	142,460	kW

Heat rate(a)	1512.2	MMBtu/hr	Heat rate(a)	1609.5	MMBtu/hr
Heat rate(b)	1582.1	MMBtu/hr	Heat rate(b)	1680.1	MMBtu/hr
Heat rate(c)	1696	MMBtu/hr	Heat rate(c)	1644	MMBtu/hr

(a) Heat rate calculated as worst case by assuming highest heat rate (btu/kW-hr) and highest power guarantees (kW) from Zachary vendor guarantee dated 8/7/98.

(b) Heat rates for GE7FA (PG7241) from Dames and Moore fax dated 05/28/1998. (Used for calculations)

(c) Heat rates as indicated by Statement of Basis for Permit #894-M1-RV1, dated 6/20/2011

(No basis found as related to GE PG7241 (7FA))

Table 6: Unit 1 NOx and CO emission rate calculations

Emission Rate Calculation ^d					
Fuel and pollutant	Molecular weight (lb/lb-mol)	Emission Factor (E _f)	O ₂ concentration %vol	O ₂ F-Factor DSCF/MMBtu	Emission rate (lb/MMBtu)
Natural Gas Operation NOx	46.01	1.19*10 ⁻⁷	15.0%	8710	5.53*10 ⁻²
Natural Gas Operation CO	28	7.27*10 ⁻⁸	15.0%	8710	3.36*10 ⁻²
Fuel Oil Operation NOx	46.01	1.19*10 ⁻⁷	15.0%	9190	1.63*10 ⁻¹
Fuel Oil Operation CO	28	7.27*10 ⁻⁸	15.0%	9190	4.73*10 ⁻²

$$\text{Emission Factor (} E_f \text{)} = (\text{Molecular Weight} / 385.15 \text{)} * 10^{-6}$$

$$\text{Emission rate (Ib/MMBtu)} = C_{\text{ppm}} * \text{O}_2 \text{ F-Factor (DSCF/MMBtu)} * E_f * 20.9 / (20.9 - \text{O}_2 \text{ \%})$$

(d) From "Procedures For Preparing Emission factor Documents", EPA-454/R-95-015, Section 2.4.1

SO2 emissions calculation

Natural Gas Operation:

$$SO_2 \text{ Rate (Ib/MMBtu)} = (2.0 / 7000) * (10^6 * (\text{Stot} / \text{GCV})^e$$

S_{tot}=0.5 grains/100 scf

GCV= 102,000 Btu/1000 scf

Emission rate of SO₂= 1.40x10⁻³

(e) From EPA Part 75, Appendix D, equation D-1H

Fuel Oil Operation:

$$SO_2 \text{ Rate (lb/MMBtu)} = 1.01 * S^f$$

S (% sulfur content of fuel)=0.05

Emission rate SO₂=5.05x10⁻² lb/MMBtu

(f) AP-42 Table 3.1-2a

$$\text{Mass Rate (lb/hr)} = \text{Emission Rate (lb/MMBtu)} * \text{Firing Rate (MMBtu/hr)}$$

$$\text{Mass Rate (tons/year)} = \text{Mass rate (lb/hr)} * (\text{Hours of operation/year}) / 2000 \text{ (lb/ton)}$$

Table 7: Unit 1 NO_x,CO,VOC and SO₂ Emission Rate Summary

Fuel type	NO _x		CO		VOC		SO ₂	
	Lb/hr ^{gh}	Tpy ^{ijkl}	Lb/hr ^{gi}	Tpy ^{ijkl}	Lb/hr ^g	Tpy ^{ijkl}	Lb/hr ^g	Tpy ^{ijkl}
Natural Gas	87.5	320.1	106.5	389.7	6	22	2.2	8.1
Fuel Oil	288.1	207.5	159	114.5	17	12	84.8	61.1
Total	-	527.6	-	504.2	-	34	-	69.2

(g) Requested as a 24-hr average emission rate.

(h) NO_x rate for fuel oil includes a 5% safety factor.

(i) CO rate includes a 100% safety factor.

(j) Based on 7320 hours per year.

(k) Based on 1440 hours per year.

(L) Requested as a 12 month rolling average rate.

RBGS's Unit 1 is applicable to the NO_x emission limits found in 40 CFR Part 60 Subpart GG.

NO_x emission rate calculations per 40 CFR 60.332(a)(1) can be found in Table 7 below.

Emission Unit 1 NSPS Subpart GG NO_x Emission Rate Summary

Natural Gas

NSPS Subpart GG NOx Standard calculated as provided in 40CFR60.332(a)(1):

$$STD = \frac{0.0075 \times 14.4}{Y} + F \qquad 1 \text{ Btu} = 1.0551 \text{ kJ}$$

where:

STD = allowable ISO corrected NOx emission concentration (percent by volume at 15 percent oxygen and on a dry basis),

Y = manufacturer's rated heat rate at manufacturer's rated load (kilojoules per watt hour) or, actual measured heat rate based on lower heating value of fuel as measured at actual peak load for the facility. The value of Y shall not exceed 14.4 kilojoules per watt hour, and

F = NOx emission allowance for fuel-bound nitrogen. For natural gas, F = 0. For fuel oil, F =(no fuel bound nitrogen credit)

Table 8: Fuel Heating Values

Fuel	HHV Btu	LHV Btu	Ratio of lower fuel heating value to higher fuel heating value
Natural gas	22,453	20,267	0.90
Fuel Oil	19,594	18,320	0.93

* HHV and LHV values from Department of Energy, Energy Efficiency and Renewable Energy

Natural Gas - Calculation Using Data from Manufacturer's Specifications for GE PG7241 (FA) at Base Load

Design heat rate (Btu/kWh) 10,320 HHV for natural gas from manufacturer's specifications for GE PG7241 (FA) at base load

Calculated LHV (Btu/kWh) 9,315

0.90 ratio to determine low heating value conversion to kiloules/kWh

9.829 Design heat rate BTU/kWh • 1.0551 joules/BTU • 1 kiloules/1000 joules

NOx %v@15%O2, dry basis 0.0110 STD = 0.0075' (14.4/9.829)+0

NOx ppmvd@15%O2 109.9 Natural Gas

Fuel Oil - Calculation Using Data from Manufacturer's Specifications for GE PG7241 (FA) at Base Load

Design heat rate (Btu/kWh) 10,640 HHV for fuel oil from manufacturer's specifications for GE PG7241 (FA) at base load

Calculated LHV (Btu/kWh) 9,948

0.93 ratio to determine low heating value conversion to kiloules/kWh

10.496 Design heat rate BTU/kWh • 1.0551 joules/BTU • 1 kiloules/1000 joules

NOx %v@15%O2, dry basis 0.0103 STD = 0.0075' (14.4/10.496)+0

NOx ppmvd@15%O2 102.9 Fuel Oil

VI. Greenhouse Gas (GHG) Potential Emission Rate Calculations ^(b)

$$W_{\text{CH}_4 \text{ or } \text{N}_2\text{O}} = 1\text{E-}03 * \text{HHV} * \text{EF} * \text{Fuel} * \text{Hours}^{\text{b}}$$

$$\text{CO}_2\text{-e} = W * \text{GWP}^{\text{c}}$$

$$\text{WCO}_2 = (\text{Fc} * \text{H} * \text{Uf} * \text{MWCO}_2) / 2000^{\text{a}}$$

$$\text{Mass Rate (tons/year)} = \text{Mass Rate (tons/hr)} * \text{hrs/year}$$

$$\text{Mass Rate (tons/year)} = \text{Mass Rate (tonnes/hr)} * 1.1023 \text{ tons/tonnes}$$

Natural gas

$$\text{F-Factor} = 1040 \text{ (scf/MMBtu)}$$

$$\text{H} = 1582.1 \text{ (MMBtu/hr)}$$

$$\text{U}_f = 0.026 \text{ (scf CO}_2\text{/lb-mole @ 14.7 psia \& 68}^\circ\text{F)}$$

$$\text{Hr/year} = 7320$$

$$\text{MWCO}_2 = 44 \text{ (lb/lb-mole CO}_2\text{)}$$

$$\text{Mass rate, CO}_2 = 95 \text{ (tons/hr)}$$

Fuel Oil

$$\text{F-Factor} = 1420 \text{ (scf/MMBtu)}$$

$$\text{H} = 1680.1 \text{ (MMBtu/hr)}$$

$$\text{U}_f = 0.0026 \text{ (scf CO}_2\text{/lb-mole @ 14.7 psia \& 68}^\circ\text{F)}$$

$$\text{Hr/year} = 1440$$

$$\text{MWCO}_2 = 44 \text{ (lb/lb-mole CO}_2\text{)}$$

$$\text{Mass rate, CO}_2 = 136.3 \text{ (tons/yr)}$$

Table 9: Greenhouse Gas Emission Calculations

Fuel type	Emission Factor		Mass rate tonnes/yr W		GWP		CO2 e tons/yr		CO2 tons/yr	Mass tons/yr GHG
	CH4	NO2	CH4	NO2	CH4	NO2	CH4	NO2		
Natural gas	1x10 ⁻³	1.0x10 ⁻⁴	11.6	1.2	21	310	268.1	395.7	688,240.6	688,904.4
Fuel oil	3x10 ⁻³	6.0x10 ⁻⁴	7.3	1.5	21	310	168	496	196,312.5	196,976.5
Total:	-	-	-	-	-	-	-	-	-	885,881.0

^(a) From 40 CFR 98, Subpart D which refers to 40 CFR part 75, Appendix G, Equation G-4

^(b) From 40 CFR 98, Subpart C, Equation C-8

^(c) From 40 CFR 98, Subpart A, Equation A-1

Hazardous Air Pollutants (HAPS) Potential Emission Rate Calculations

Hazardous Air Pollutants Example

Calculations

$$\text{Mass Rate (lb/hr)} = \text{Emission Rate (lb/MMBtu)} * \text{Firing Rate (MMBtu/hr)}$$

$$\text{Benzene (NG) (lb/hr)} = 1.2\text{E-}05 \text{ (lb/MMBtu)} * 1582 \text{ (MMBtu/hr)} \text{ Benzene (NG) =}$$

$$0.019 \text{ lb/hr}$$

$$\text{Mass Rate (tons/year)} = \text{Mass rate (lb/hr)} * (\text{Hours of operation/year}) / 2000 \text{ (lb/ton)}$$

$$\text{Benzene (NG) (tons/year)} = 0.019 \text{ (lb/hr)} * 7320 \text{ (hrs/year)} / 2000 \text{ (lb/ton)}$$

$$\text{Benzene (NG)} = 0.069 \text{ tons/year}$$

Natural Gas Operation

Table 10: HAPS emission Calculations Natural Gas

Natural Gas Operation HAPs Potential Emission Rate^a			
Pollutant	Emission Factor (ln/MMBtu)^b	Potential Emission Rate (lb/hr)	Potential Emission Rate (tons per year)
1,3-Butadiene	$<4.3 \times 10^{-7}$	0.001	0.002
Acetaldehyde	4.00×10^{-5}	0.063	0.232
Acrolein	6.40×10^{-6}	0.01	0.037
Benzene	1.20×10^{-5}	0.019	0.069
Ethylbenzene	3.20×10^{-5}	0.051	0.185
Formaldehyde	7.10×10^{-4}	1.123	4.111
Napthalene	1.30×10^{-6}	0.002	0.008
PAH	2.20×10^{-6}	0.003	0.013
Propylene Oxide	$<2.9 \times 10^{-5}$	0.046	0.168
Toluene	1.30×10^{-4}	0.206	0.753
Xylenes	6.40×10^{-5}	0.101	0.371
Potential Emission Rate:		1.625	5.949

^aThese calculations are based on the assumptions of a firing rate of 1582 MMBtu/hr and 7320 hours of operation per year.

^bThe emission Factors are from AP-42 Table 3.1-3 Uncontrolled

Table 11: HAPs Emissions for Fuel Oil

Fuel Oil Operations HAPs Potential Emission Rate^a			
Pollutant	Emission Factor (lb/MMBtu)	Potential Emission Rate (lb.hr)	Potential Emission Rate (tons per year)
1,3-Butadiene ^b	$<1.6 \times 10^{-5}$	0.027	0.019
Benzene ^b	5.50×10^{-5}	0.092	0.067
Formaldehyde ^b	2.80×10^{-4}	0.47	0.339
Napthalene ^b	3.50×10^{-5}	0.059	0.042
PAH ^b	4.00×10^{-5}	0.067	0.048
Arsenic ^c	$<1.1 \times 10^{-5}$	0.018	0.013
Beryllium ^c	$<3.1 \times 10^{-7}$	0.001	0
Cadmium ^c	4.80×10^{-6}	0.008	0.006
Chromium ^c	1.10×10^{-5}	0.018	0.013
Lead ^c	1.40×10^{-5}	0.024	0.017
Manganese ^c	7.90×10^{-4}	1.327	0.956
Mercury ^c	1.20×10^{-6}	0.002	0.001
Nickel ^c	$<4.6 \times 10^{-6}$	0.008	0.006
Selenium ^c	$<2.5 \times 10^{-5}$	0.042	0.03

Potential emission rate:	2.164	1.558
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^a These calculations assumed that the firing rate was 1680 MMBtu/hr and 1440 hours per year operation.

^b Uncontrolled emission factors taken from AP-42 Table 3.1-4

^c Uncontrolled emission factors taken from AP-42 Table 3.1-5

Table 12: HAPS Emission Summary

Fuel	E _{hr} (lb/hr)	E _{annual} (tons/year)
Natural Gas	1.63 lb/hr	5.95 tons/year
Fuel Oil	2.16 lb/hr	1.56 tons/year
HAP Potential Emission Rate	3.79 lb/hr	7.51 tons/year

3.2 Diesel Fired emergency generator

Emissions calculations from the diesel fired emergency generators are brought forward from the existing 2093-RN1-M1-3AR Title V modification permit. No emissions were modified with this renewal.

No change in facility emissions is proposed in this application.

Unit #3 - Permitted Emission Rates

The diesel-fired emergency generator will be a Cummins QSX15-G9, 755 BHP, 500 kW, Tier 2 engine. The engine will be applicable to NSPS Subpart Illi and as such will be required to limit the maintenance/testing hours of operation to 100 hours per year to stay defined as an "Emergency stationary RICE". Annual operations are limited to 500 hours per year to stay defined as an "emergency engine".

Table 13:Generator Emission Calculations

Pollutant	g/kW-hr	g/hp-hr	Horsepower	Lbs/Hr	TPY
NO _x +NMHC	6.4	4.8	755	7.99	2.00
NO _x	5.76	4.32	755	7.20	1.80
NMHC	0.64	0.48	755	0.80	0.20
CO	3.5	2.6	755	4.34	1.09
PM	0.20	0.15	755	0.25	0.063

Emission rate calculations are based on EPA Nonroad Compression-Ignition Engines: Exhaust Emission Standards, Tier 2, for generator sizes $450 \leq 560$ kW. To determine the emission rates for NOx and NMHC, 90% of the NOx + NMHC emission limit was used to determine NOx and 10% was used for NMHC. To calculate the emission rates for SO₂, the maximum engine fuel consumption rate (34.7 gal/hr), the sulfur content of the fuel (15 PPM) and a conversion factor from sulfur-to-sulfur dioxide of 2 was used.

SO₂ emission rate calculation

$$\text{Lbs/hr} = \text{Fuel Burned (gal/hr)} \times 7.1 \text{ lbs/gal} \times \text{Sulfur Content} \times 2$$

$$\text{Lbs/hr} = 34.7 \text{ gal/hr} \times 7.1 \text{ lbs/gal} \times 15 / 1,000,000 \times 2 = 0.0074 \text{ lbs/hr}$$

$$\text{TPY} = \text{lbs/hr} \times 500 \text{ hr/yr} / 2000 \text{ lbs/ton} = 0.0074 \text{ lbs/hr} \times 500 / 2000 = 0.0018 \text{ tons/yr}$$

4. MONITORING, RECORDKEEPING, AND REPORTING COMPLIANCE CERTIFICATION

IV. Monitoring, Recordkeeping, and Reporting Compliance Certification

PNM's Rio Bravo Generating Station certified compliance with all applicable requirements of Title V Operating Permit #2093-RN2-1AR as shown in Appendix C. Annual Compliance Certification Report.

5. STARTUP, SHUTDOWN, AND MAINTENANCE EMISSIONS

Since the last Title V renewal issued on May 10, 2021. PNM has not modified their startup, shutdown, and maintenance emissions for any sources associated with PNM Rio Bravo or other PNM facilities. All SSM activities are not expected to create any emission limit deviations specified in the current Title V Operating Permit #2093-RN2-1AR.

6. FEE INFORMATION

Pursuant to NMAC 20.11.2 – There are no fee requirements for Title V renewal applications.

7. OPERATIONAL PLAN TO MITIGATE EMISSIONS

PNM minimizes emissions during startup, shutdown, and emergency upset & breakdown conditions by utilizing the following guidelines:

1. Design considerations; all systems at the Rio Bravo Generating Station have been designed and constructed to meet established industry design standards and practices.
1. Preventative Maintenance; PNM has a preventative maintenance program in place. This program includes all systems that can potentially contribute to excessive emissions during startup, shutdown, and emergency conditions. Preventative maintenance programs are also intended to minimize conditions that could potentially lead to excessive startup times or an excessive number of startups, shutdowns, or malfunctions.
2. Improper Operation; Startup, shutdown, and emergency conditions resulting from improper or careless operation are minimized through job experience requirements and training programs that meet or exceed generally established industry practices.
3. Startup and Shutdown Operation; startup and shutdown procedures will not depart from normal operating conditions as specified by the equipment manufacturer.

During periods of excess emissions caused by emergency upsets or breakdown conditions, PNM will perform the following actions:

1. Minimization; PNM will make the maximum reasonable effort to minimize the magnitude and duration of excess emissions. This effort may include, but is not limited to, depending on the nature of the cause, use of the off-shift and/or over-time labor and use of contract labor and contractors.
2. Causes; determine, to the extent possible, the cause(s) and corrective measure(s) of the condition resulting in the excess emissions.
3. Notification; notify the City of Albuquerque Air Quality Program of all periods of excess emissions per the notification requirements of 20.11.49.15 NMAC.

8. FACILITY PLOT PLANS

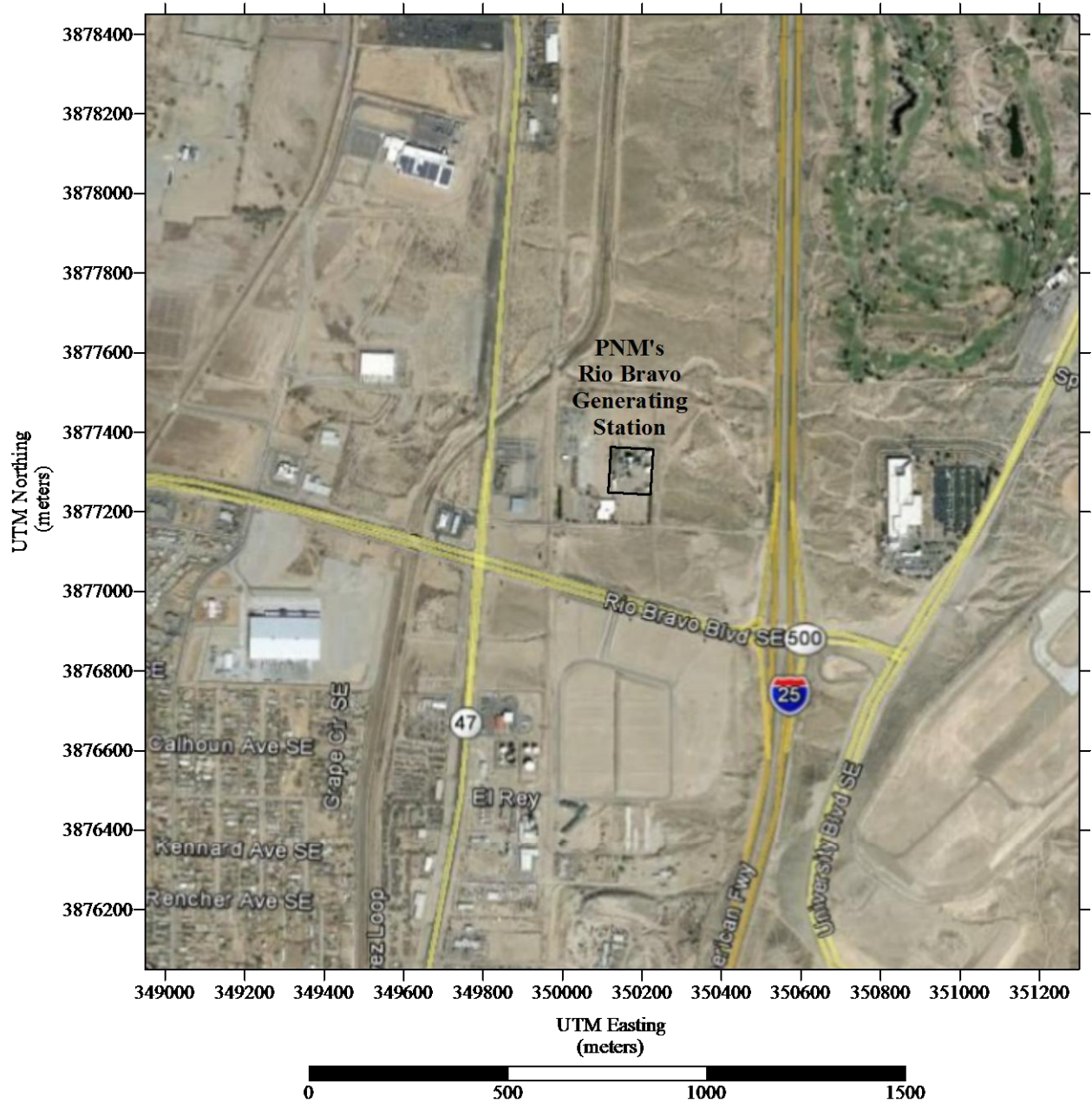
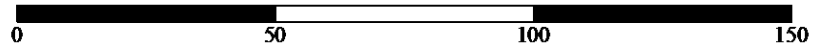
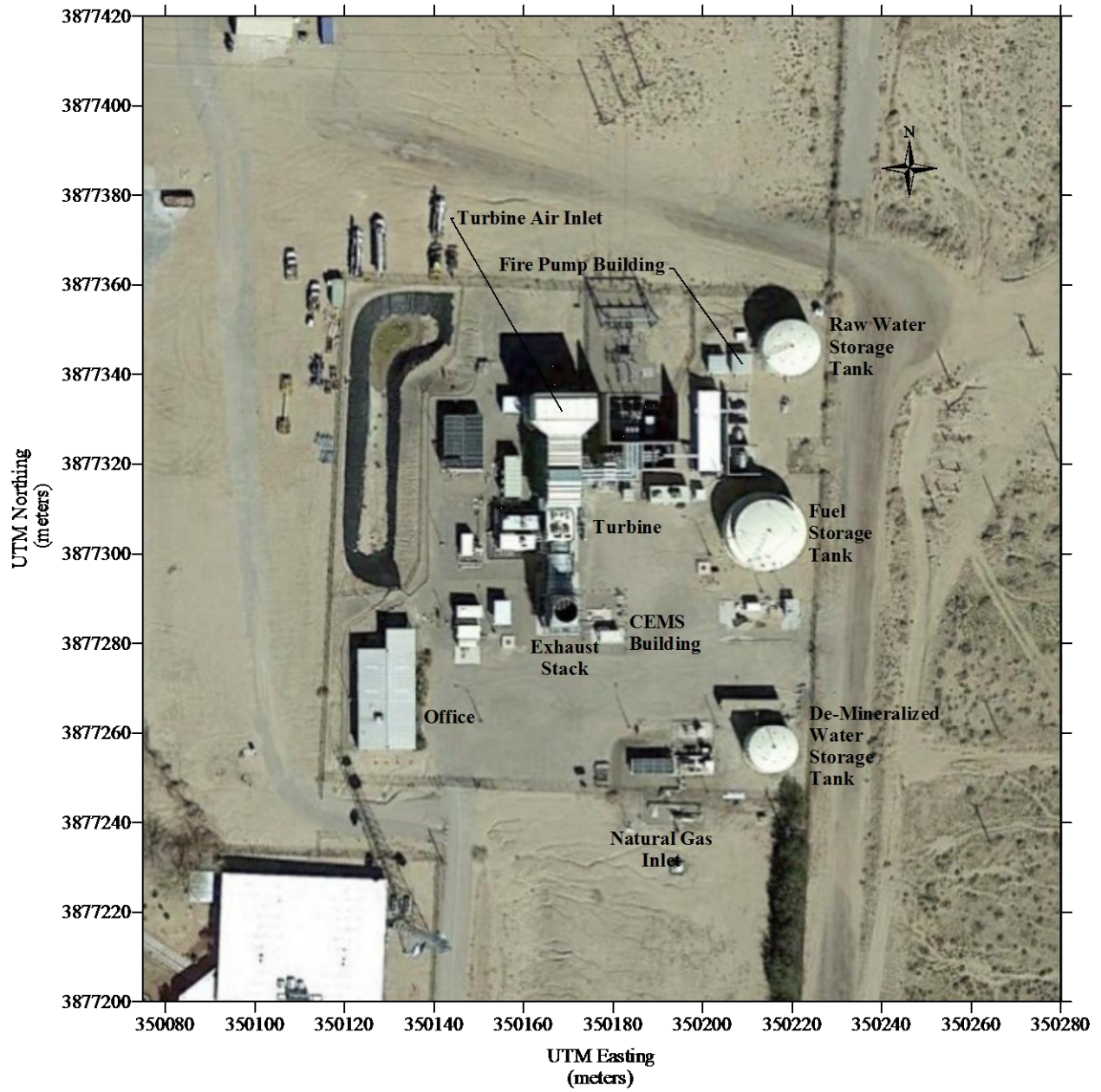


Figure 2: Aerial View Showing Location of PNM's Rio Bravo Generating Station



9. ALTERNATIVE OPERATING SCENARIOS

PNM's Rio Bravo Generating Station operates only in the manner described in their current operating permit and does not have alternative operating scenarios.

10. AIR DISPERSION MODELING WAIVER

In 1997, DPGS was modeled for NO_x, CO, and SO₂ using the EPA-approved ISCST3 air dispersion model. The facility was modeled alone and then the proposed source impacts added to the background to provide a total concentration which was compared to NAAQS and NMAAQs. Results of the modeling analysis demonstrated that modeled impacts from the facility did not cause or contribute to a violation of any applicable NAAQS or NMAAQs for NO_x, CO, or SO₂.

Annual and 24-hour standards for PM_{2.5} have been promulgated since modeling was last performed for this facility. Therefore, modeling was conducted in July 2013, using the most recent version of the EPA-approved dispersion model AERMOD, to demonstrate compliance for PM_{2.5} standards and for PM₁₀ and PM. The proposed project source was modeled alone and then the proposed source impacts added to the background to provide a total concentration which was compared to the NAAQS and NMAAQs. Results of the modeling analysis demonstrated that modeled impacts from the facility did not cause or contribute to a violation of the NAAQS or NMAAQs for PM, PM₁₀ or PM_{2.5}.

In October 2013, modeling was conducted, using the most recent version of the EPA-approved air dispersion model AERMOD, to demonstrate compliance for the NO_x, CO, and SO₂ standards. Since the facility was previously modeled, the EPA promulgated a 1-hour SO₂ standard, which has now been included in the analysis. The facility was modeled alone and then its impacts added to the background to provide a total concentration which was compared to the NAAQS and NMAAQs. Results of the modeling analysis demonstrate that modeled impacts from the facility did not cause or contribute to a violation of any applicable NAAQS or NMAAQs for NO_x, CO, and SO₂.

On April 17, 2017, PNM Rio Bravo Station received a modeling waiver from performing a dispersion modeling analysis for installation of the new emergency generator, Emission Unit #3.

11. INSIGNIFICANT ACTIVITIES

PNM's Rio Bravo Generating Station has identified the Fuel Oil Storage Tanks, and the Emergency Generator Fuel Oil Storage tank as insignificant activities pursuant to the Albuquerque Environmental Health Department, Air Quality Program's List of Insignificant Activities, revised January 3, 1996.

Table 14: Insignificant Activities

Insignificant Activity	Pollutant/Parameter	Insignificant Activity Citation
Aboveground Fuel Oil Storage Tank	Vapor pressure<3.5 kPa, VOC<1 TPY	II.A.1
Emergency Generator Fuel Oil Storage Tank	Vapor pressure<3.5 kPa, VOC<1 TPY	II.A.1

XVI. Insignificant Activities

TANKS 4.0.9d Emissions Report - Detail Format Tank Identification and Physical Characteristics

Identification

User Identification:	RBGS #1
City:	Albuquerque
State:	New Mexico
Company:	PNM
Type of Tank:	Vertical Fixed Roof Tank
Description:	PNM's RBGS #2 Fuel Oil Tank

Tank Dimensions

Shell Height (ft):	32.00
Diameter (ft):	48.00
Liquid Height (ft) :	30.50
Avg. Liquid Height (ft):	28.00
Volume (gallons):	420,000.00
Turnovers:	41.44
Net Throughput(gal/yr):	17,405,424.00
Is Tank Heated (y/n):	N

Paint Characteristics

Shell Color/Shade:	White/White
Shell Condition	Good
Roof Color/Shade:	White/White
Roof Condition:	Good

Roof Characteristics

Type:	Dome
Height (ft)	1.50
Radius (ft) (Dome Roof)	48.00

Breather Vent Settings

Vacuum Settings (psig):	-0.03
Pressure Settings (psig)	0.03

Meteorological Data used in Emissions Calculations: Albuquerque, New Mexico (Avg Atmospheric Pressure = 12.15 psia)

XVI. Insignificant Activities

TANKS 4.0.9d Emissions Report - Detail Format Liquid Contents of Storage Tank

RBGS #1 - Vertical Fixed Roof Tank Albuquerque, New Mexico

Mixture/Component	Month	Daily Liquid Surf. Temperature (deg F)			Liquid Bulk Temp (deg F)	Vapor Pressure (psia)			Vapor Mol. Weight.	Liquid Mass Fract.	Vapor Mass Fract.	Mol. Weight	Basis for Vapor Pressure Calculations
		Avg.	Min.	Max.		Avg.	Min.	Max.					
Distillate fuel oil no. 2	All	58.54	51.41	65.66	56.17	0.0062	0.0048	0.0079	130.0000			188.00	Option 1: VP50 = .0045 VP60 = .0065

XVI. Insignificant Activities

TANKS 4.0.9d Emissions Report - Detail Format Detail Calculations (AP-42)

RBGS #1 - Vertical Fixed Roof Tank Albuquerque, New Mexico

Annual Emission Calculations

Standing Losses (lb):	22.8831
Vapor Space Volume (cu ft):	8,597.1646
Vapor Density (lb/cu ft):	0.0001
Vapor Space Expansion Factor:	0.0503
Vented Vapor Saturation Factor:	0.9984

Tank Vapor Space Volume:

Vapor Space Volume (cu ft):	8,597.1646
Tank Diameter (ft):	48.0000
Vapor Space Outage (ft):	4.7510
Tank Shell Height (ft):	32.0000
Average Liquid Height (ft):	28.0000
Roof Outage (ft):	0.7510

Roof Outage (Dome Roof)

Roof Outage (ft):	0.7510
Dome Radius (ft):	48.0000
Shell Radius (ft):	24.0000

Vapor Density

Vapor Density (lb/cu ft):	0.0001
Vapor Molecular Weight (lb/lb-mole):	130.0000
Vapor Pressure at Daily Average Liquid Surface Temperature (psia):	0.0062
Daily Avg. Liquid Surface Temp. (deg. R):	518.2062
Daily Average Ambient Temp. (deg. F):	56.1542
Ideal Gas Constant R (psia cu ft / (lb-mol-deg R)):	10.7310
Liquid Bulk Temperature (deg. R):	515.8442
Tank Paint Solar Absorptance (Shell):	0.1700
Tank Paint Solar Absorptance (Roof):	0.1700
Daily Total Solar Insulation Factor (Btu/sqft day):	1,765.3167

Vapor Space Expansion Factor

Vapor Space Expansion Factor:	0.0503
Daily Vapor Temperature Range (deg. R):	28.5089
Daily Vapor Pressure Range (psia):	0.0031
Breather Vent Press. Setting Range (psia):	0.0600
Vapor Pressure at Daily Average Liquid Surface Temperature (psia):	0.0062
Vapor Pressure at Daily Minimum Liquid Surface Temperature (psia):	0.0048
Vapor Pressure at Daily Maximum Liquid Surface Temperature (psia):	0.0079
Daily Avg. Liquid Surface Temp. (deg R):	518.2062
Daily Min. Liquid Surface Temp. (deg R):	511.0790
Daily Max. Liquid Surface Temp. (deg R):	525.3334
Daily Ambient Temp. Range (deg. R):	27.9250

Vented Vapor Saturation Factor

Vented Vapor Saturation Factor:	0.9984
Vapor Pressure at Daily Average Liquid:	

XVI. Insignificant Activities

Surface Temperature (psia):	0.0062
Vapor Space Outage (ft):	4.7510
Working Losses (lb):	319.5486
Vapor Molecular Weight (lb/lb-mole):	130.0000
Vapor Pressure at Daily Average Liquid Surface Temperature (psia):	0.0062
Annual Net Throughput (gal/yr.):	17,405,424.0000
Annual Turnovers:	41.4400
Turnover Factor:	0.8906
Maximum Liquid Volume (gal):	420,000.0000
Maximum Liquid Height (ft):	30.5000
Tank Diameter (ft):	48.0000
Working Loss Product Factor:	1.0000
Total Losses (lb):	320.7088

TANKS 4.0.9d
Emissions Report – Detail
Format Individual Tank Emission Totals

Emissions Report for: Annual

RBGS #1 - Vertical Fixed Roof Tank
Albuquerque, New Mexico

Components	Losses(lbs)		
	Working Loss	Breathing Loss	Total Emissions
Distillate fuel oil no. 2	297.83	22.88	320.71

APPENDIX A. TITLE V OPERATING PERMIT RENEWAL APPLICATION FORMS



City of Albuquerque Environmental Health Department Air Quality Program



Air Quality Compliance History Disclosure Form

The Albuquerque-Bernalillo County Joint Air Quality Program (“Program”) administers and enforces local air quality laws for the City of Albuquerque (“City”) and Bernalillo County (“County”) on behalf of the City Environmental Health Department, including the New Mexico Air Quality Control Act (“AQCA”), NMSA 1978, Sections 74-2-1 to -17. In accordance with Sections 74-2-7(P) and (S) of the AQCA, the Program may deny any permit application or revoke any permit issued pursuant to the AQCA if, within ten years immediately preceding the date of submission of the permit application, the applicant or permittee meets any one of the criteria outlined in the AQCA. The Program requires applicants to file this Compliance History Disclosure Form in order for the Program to deem an air permit application administratively complete, or issue an air permit for those permits without an initial administrative completeness determination process. Additionally, an existing permit holder (permits issued prior to the Effective Date of this Form) shall provide this Compliance History Disclosure Form to the Program upon the Program’s request. Note: Program Staff can answer basic questions about this Compliance History Disclosure Form but cannot provide specific guidance or legal advice.

Instructions

1. Applications filed pursuant to the following regulations shall include this Compliance History Disclosure Form, in accordance with Section 74-2-7(S) of the AQCA: *Construction Permits* (20.11.41 NMAC); *Operating Permits* (20.11.42 NMAC); *Nonattainment Areas* (20.11.60 NMAC); *Prevention of Significant Deterioration* (20.11.61 NMAC); *Acid Rain* (20.11.62 NMAC); and *Fugitive Dust* (20.11.20 NMAC) except this Form shall not be required for asbestos notifications under 20.11.20.22 NMAC.
2. This Compliance History Disclosure Form is not site specific: responses shall be based on the applicant/permittee as an entity and not be limited to the application, site, facility or source.
3. The permittee identified on this Compliance History Disclosure Form shall match the permittee in the existing permit or new application. If the information in an existing permit needs to be changed, please contact the Program about revisions and ownership transfers.
4. Answer every question completely and truthfully, and do not leave any blank spaces. If there is nothing to disclose in answer to a particular question, check the box labeled “No” except for Question 5b. Failure to provide any of the information requested in this Compliance History Disclosure Form may constitute grounds for an incompleteness determination, application denial, or permit revocation.
5. Be especially careful not to leave out information in a way that might create an impression that you are trying to hide it. Omitting information, even unintentionally, may result in application denial or permit revocation.
6. For any required explanations, be sure to identify the question to which the explanation is responsive. If you submit any document in connection with your answer to any question, refer to it as, “Exhibit No. ___”, and attach it after the explanation(s) at the end of the Compliance History Disclosure Form, consecutively numbering each additional page at the top right corner.
7. The Program may require additional information to make a thorough review of an application. At all times before the Program has made a final decision regarding the application, an applicant has a duty to promptly supplement and correct information the applicant has submitted in an application to the Program. The applicant’s duty to supplement and correct the application includes, but is not limited to, relevant information acquired after the applicant has submitted the application and additional information the applicant otherwise determines is relevant to the application and the Program’s review and decision. While the Program is processing an application, regardless of whether the Program has determined the application is administratively complete, if the Program determines that additional information is necessary to evaluate or make a final decision regarding the application, the Program may request additional information and the applicant shall provide the requested additional information.
8. Supplementary information required by the Program may include responses to public comment received by the Program during the application review process.
9. Any fees submitted for processing an application that has been denied will not be refunded. If the Program denies an application, a person may submit a new application and the fee required for a new application. The applicant has the burden of demonstrating that a permit should be issued.

COMPLIANCE HISTORY		
A. Applicant/Permittee Name: Public Service Company of New Mexico (PNM)		Check Applicable Box: <input checked="" type="checkbox"/> Applicant <input type="checkbox"/> Permittee
B. Time Period of Compliance Reporting (10 Years): <u>[Click to Insert Date]</u> to <u>[Click to Insert Date]</u> Instructions: For applicants, answer the following questions with information from within the 10 years preceding the current application. For existing permit holders requested to submit this form by the Program outside of an application, answer the following questions with information from within the 10 years preceding the Program's issuance of each permit.		
C. Questions		
1	Knowingly misrepresented a material fact in an application for a permit?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
2	Refused to disclose information required by the provisions of the New Mexico Air Quality Control Act?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
3	Been convicted in any court of any state or the United States of a felony related to environmental crime?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
4	Been convicted in any court of any state or the United States of a crime defined by state or federal statute as involving or being in restraint of trade, price fixing, bribery, or fraud?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
5a	Constructed or operated any facility for which a permit was sought, including the current application, without the required air quality permit(s) under 20.11.41 NMAC, 20.11.42 NMAC, 20.11.60 NMAC, 20.11.61 NMAC, or 20.11.62 NMAC?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
5b	If "No" to question 5a, mark N/A and go to question 6. If "Yes" to question 5a, state whether each facility that was constructed or operated without the required air quality permit met at least one of the following exceptions: i. The unpermitted facility was discovered after acquisition during a timely environmental audit that was authorized by the Program or the New Mexico Environment Department; or ii. The operator of the facility, using good engineering practices and established approved calculation methodologies, estimated that the facility's emissions would not require an air permit, and the operator applied for an air permit within 30 calendar days of discovering that an air permit was required for the facility.	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A
6	Had any permit revoked or permanently suspended for cause under the environmental laws of any state or the United States?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
7	For each "yes" answer, or "no" to 5b, please attach an explanation and supporting documentation.	

I, the undersigned, hereby certify under penalty of law that this Compliance History Disclosure Form (Form) and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. I have knowledge of the information in this Form and it is, to the best of my knowledge and belief, true, accurate, and complete. I understand that there are significant penalties for submitting false information, including denial of the application or revocation of a permit, as well as fines and imprisonment for knowing violations. If I filed an application, I covenant and agree to promptly supplement and correct information in this Form until the Program makes a final decision regarding the application. Further, I certify that I am qualified and authorized to file this Form, to certify to the truth and accuracy of the information herein, and bind the permittee and source.

Signed on [Click to Insert Date]

Heath Coe
Print Name

[Signature]
Signature

Director
Print Title

PNM
Company Name



**City of Albuquerque – Environmental Health Department
Air Quality Program**

Please mail this application to **P.O. Box 1293, Albuquerque, NM 87103**
or hand deliver between 8:00 am – 5:00 pm Monday – Friday to:
3rd Floor, Suite 3023 – One Civic Plaza NW, Albuquerque, NM 87102
(505) 768-1972 aqd@cabq.gov

20.11.42 NMAC Operating Permit Application Form

Please answer all questions applicable to your specific business, operation and products. Use the abbreviation "N/A" for "not applicable" wherever appropriate.

SECTION 1 - GENERAL INFORMATION (20.11.42.12(A)(4) NMAC)

{Specific instructions corresponding to numbers in brackets are included in the application package.}

1. Company Name: {1} Public Service Company of New Mexico
2. Application Date: 05/10/2025
3. Company Mailing Address: 2401 Aztec Rd. NE Albuquerque, NM 87107 4. Phone: (505) 241-2026
5. Owner's Name: {2} Edward-James Anderson, Environmental Compliance Manager 6. Phone (505)241-2026
7. Owner's Address: 2401 Aztec Rd. NE Albuquerque, NM 87107
8. Plant Name: {3} {if different from 1} Rio Bravo Generating Station 9. Phone: (505) 241-4723
10. Plant Address: {if different from line 3} 725 Electric Avenue Albuquerque, NM 87105
11. Operator of Plant: {4} Heath Lee 12. Phone: (505) 241-4723
13. Plant Operator Address: 4400 Paseo Del Norte Albuquerque, NM 87113
14. Responsible Official {5}: Heath Lee 15. Phone: (505)241-4723
16. Address of Responsible Official: 4400 Paseo Del Norte Albuquerque, NM 87113
17. Person to Contact at Site {6}: Gregory Little 18. Title: Technical Project Manager 19. Phone: (505) 241-2025
20. Owner's Agent(s): {7} Gregory Little 21. Phone: (505) 241-2025
22. Company's State of Incorporation or Registration to do Business: New Mexico
23. Company's Corporate or Partnership Relationship to any other Air Quality Permittee: {8} N/A
24. Name of Parent Company: {9} PNM Resources, Inc.
25. Address of Parent Company: 414 Silver Avenue, Albuquerque, NM 87102
26. Names of Subsidiary Companies: {10} PNM, Texas-New Mexico Power Company (TNMP)
27. Air Quality Permits for this Source Already Received: (Permit Number(s)) RN1-M1, 649-M3, 2093-RN1-M1-3AR, AR2093-RN2
28. Other Air Quality Permits Issued to this Applicant: (Permit Number(s)) OP499-M2-RN1, AR499, Source Registration 2148, 1553, 1437-M3, 0542-M1, 1654-M1-RV1, 1632-RV I, 061 I-M I, 1722
29. Reason this source must have a Part 42 operating permit: {11} Facility is a Title V Major Source and Title IV Acid Rain Source
30. Is U.S.G.S. quadrangular map or equivalent attached? {12} Yes
31. Ownership of land at plant site (private, State, Federal, Indian, etc.): Private
NOTE: If the land at the plant site is Indian land, contact the Air Quality Program staff for assistance.
32. Distance, in meters, of plant site to nearest residence, school or occupied structure: {13} 850m (approximately) from nearest residence or occupied structure.

33. Location of Plant:
- 33A. City or County: Bernalillo County 33B. Direction and distance from nearest town: 4 miles South of Albuquerque
- 33C. UTM Zone: 13 UTME: 350,169 km UTMN: 3877,287 km
- 33D. Range: 3E Township: 9N Section: 8 30E. Latitude: 35°1',37.8"N Longitude: 106°38',32.7" W
34. Plant Elevation 5075 ft above mean sea level
35. Describe briefly type of plant and nature of processes (or modification) and products, including primary and secondary SIC codes: {14}
- There are no changes or modification to the plant.
-
36. Describe briefly any processes or products associated with any alternative operating scenarios described in this application, including primary and secondary SIC codes {15}: N/A
-
37. Plant's Maximum Allowable Hourly and Annual Capacities (specify units) {16}: Hourly: 15,510.8100 Scf Natural Gas, 12,087.1 gal. Low Sulfur #2 Fuel Oil Annual 11,354 MMScf Natural Gas, 17,405,424 Gallons, Low Sulfur #2 Fuel Oil
38. Permit Renewals or Significant Modifications
- 38A. Is this an application for an operating permit renewal or significant modification? Yes X No _____.
- 38B. If yes, when does the current operating permit expire? 05/10/2026
39. Is this a portable or temporary source {17}? Yes _____ No X.
- 39A. If yes, provide identifying numbers (e.g. serial numbers): _____
- 39B. If yes, date of anticipated startup: _____ 40C. If yes, date of anticipated relocation: _____
40. Operational Periods: (20.11.42.12(A)(4)(e)(vi) NMAC)
- 40A. Specify **standard** operational periods:
- 24 hours per day, _____ am to _____ pm, 7 days per week, 4.3 weeks per month, 12 months per year.
- 40B. Specify **maximum** operational periods:
- 24 hours per day, _____ am to _____ pm, 7 days per week, 4.3 weeks per month, 12 months per year.
41. Compliance History Disclosure Form Attached? Yes X No _____

SECTION 2 AIR POLLUTANT EMISSIONS RATES PRIOR TO CONTROL OR ABATEMENT EQUIPMENT OR TO ATMOSPHERE IF UNCONTROLLED (20.11.42.12(A)(4) NMAC)

(Use additional sheets if necessary)

UNIT No. {1}	EMISSIONS UNIT, PROCESS or OPERATION {2}	UNCONTROLLED AIR POLLUTANT EMISSION RATES {3}		MEASUREMENT OR ESTIMATION METHOD {6}	APPLICABLE REQUIREMENT(s) {7}
		Pollutant {4}	Quantity {5}		
001 Natural Gas	001 (GE 7FA (PG7241))	NO _x	87.5 lb/hr	Manufacturer Data	
			383.3 tn/yr		
001 Natural Gas	001 (GE 7FA (PG7241))	CO	106.5 lb/hr	Manufacturer Data	
			466.5 tn/yr		
001 Natural Gas	001 (GE 7FA (PG7241))	PM ₁₀	9.0 lb/hr	Manufacturer Data	
			39.4 tn/yr		
001 Natural Gas	001 (GE 7FA (PG7241))	PM _{2.5}	8.2 lb/hr	Manufacturer Data	
			35.9 tn/yr		
001 Natural Gas	001 (GE 7FA (PG7241))	VOC	288.1 lb/hr	Manufacturer Data	
			1261.9 tn/yr		
001 Natural Gas	001 (GE 7FA (PG7241))	SO _x	2.2 lb/hr	Manufacturer Data	
			9.6 tn/yr		
001 Fuel Oil	001 (GE 7FA (PG7241))	NO _x	288.1 lb/hr	Manufacturer Data	
			1261.9 tn/yr		
001 Fuel Oil	001 (GE 7FA (PG7241))	CO	159.0 lb/hr	Manufacturer Data	
			696.4 tn/yr		

SECTION 2 AIR POLLUTANT EMISSIONS RATES PRIOR TO CONTROL OR ABATEMENT EQUIPMENT OR TO ATMOSPHERE IF UNCONTROLLED (20.11.42.12(A)(4) NMAC)

(Continued)

UNIT No. {1}	EMISSIONS UNIT, PROCESS or OPERATION {2}	UNCONTROLLED AIR POLLUTANT EMISSION RATES {3}		MEASUREMENT OR ESTIMATION METHOD {6}	APPLICABLE REQUIREMENT(S) {7}
		Pollutant {4}	Quantity {5}		
001 Fuel Oil	001 (GE 7FA (PG7241))	PM ₁₀	34.0 lb/hr	Manufacturer Data	
			148.9 tn/yr		
001 Fuel Oil	001 (GE 7FA (PG7241))	PM _{2.5}	30.9 lb/hr	Manufacturer Data	
			135.3 tn/yr		
001 Fuel Oil	001 (GE 7FA (PG7241))	VOC	17.0 lb/hr	Manufacturer Data	
			74.5 tn/yr		
001 Fuel Oil	001 (GE 7FA (PG7241))	SO ₂	84.8 lb/hr	Manufacturer Data	
			371.4 tn/yr		
003	Diesel-Fired Emergency Generator	NO _x	7.20 lb/hr	40 CFR 89.112(a)	40 CFR 60, Subpart IIII 60.4205 (b) 40 CFR 60.421 (c) 20.11.5.13.C NMAC
			1.8 tn/yr		
		CO	4.34 lb/hr		
			1.1 tn/yr		
		PM ₁₀	0.25 lb/hr		
			0.063 tn/yr		
		PM _{2.5}	0.25 lb/hr		
			0.063 tn/yr		
		VOC	0.80 lb/hr		
			0.20 tn/yr		
SO ₂	0.0074 lb/hr				
	0.0018 tn/yr				

Section 2: Air Pollutant Emissions Rates Prior to Control or Abatement Equipment, or to Atmosphere if Uncontrolled

Each piece of equipment in the facility that emits air pollutants must be listed in this section. Maximum possible emissions rates **prior** to air pollution control equipment, waste abatement equipment, process control capture equipment, or to the atmosphere for uncontrolled emissions are to be provided in this section. Calculations made to determine the values shown on the form are to be shown and referenced in Package Element 4B (Emissions Calculations).

These emissions include: pollutants for which the source is major; regulated air pollutants; all fugitive emissions; and any hazardous or toxic air contaminants emitted as part of plant processes. If products or raw materials are stored and pollutants are passively released through off gassing while in storage, these pollutants must also be listed. Emissions from flares and wood waste burners should be listed in this section.

Notes

- {1} Use the process or operation equipment unit numbers that were assigned to each piece of equipment in Package Element 4A (Process Flow Sheets) above. For fugitive emissions, describe the source of the emissions. For liquid tank and solid material storage, use the tank or storage unit number.
- {2} For example: boiler, catalyst regeneration units, flare, furnace, gas engine, haul road, iron melting cupola, material dryer, process fugitive, silo, smelter furnace, solvent cleaner, storage tanks, etc.
- {3} Use one line for each pollutant emitted by each piece of equipment. Attach additional sheets if required.
- {4} List each pollutant defined by EPA to be a regulated air pollutant that this source emits. Also list all other pollutants for which this source is major. Provide trade name or common name and chemical composition if known. (E.g. particulate matter (describe composition), SO₂, CO, hydrogen sulfide, nitrogen oxides (as nitrogen dioxide), etc.)
- {5} Maximum allowable quantities at maximum allowable production rates and 8760 hours per year unless limited by federally enforceable permit conditions. See Section 1, Line 37. tn = tons (2,000 lb).
- {6} Specify how the quantity of emitted pollutant was determined: from actual measurement (specify equipment used) of emissions (preferred), process material balances, equipment manufacturer's information, EPA emission factor, or other source. Show the calculations used to obtain the emission rates in Package Element 4B (Emissions Calculations).
- {7} Specify the requirement(s) that is(are) applicable to this process, operation or emission unit. See Part 42 for list of applicable requirements. E.g. 20.11.67.20 NMAC; NSPS Subpart GG; 20.11.41 NMAC. If there is insufficient room on the form, please attach a clearly identified additional sheet.

SECTION 3 EMISSIONS FROM AIR POLLUTION CONTROL EQUIPMENT AND FROM UNCONTROLLED PROCESS EQUIPMENT
 (20.11.42.12(A)(4) NMAC)

(Use additional sheets if necessary)

Emission Unit Nos. {1}	CONTROL EQUIPMENT			AIR POLLUTANTS EMITTED {4}			CONTROL EFFICIENCY		APPLICABLE REQUIREMENTS {8}	
	Unit No. {2}	Type {3}	Manufacturer and Model Number	Pollutant {5}	Quantity {6}			% by Weight		Method of Determination {7}
					Actual	Units	Allowable			
001 Natural Gas	001	Dry Low NO _x Burners	GE 7FA (PG7241) 297260	NO _x	87.5	lb/hr	87.5	40-50	Manufacturer Data	
					320.1	tn/yr	320.1			
001 Natural gas	001	N/A	GE 7FA (PG7241) 297260	CO	106.5	lb/hr	606.5	N/A		
					389.8	tn/yr	389.8			
001 Natural Gas	001	N/A	GE 7FA (PG7241) 297260	PM ₁₀	9.0	lb/hr	9.0	N/A		
					32.9	tn/yr	32.9			
001 Natural Gas	001	N/A	GE 7FA (PG7241) 297260	PM _{2.5}	8.2	lb/hr	8.2	N/A		
					30	tn/yr	30			
001 Natural Gas	001	N/A	GE 7FA (PG7241) 297260	VOC	6.0	lb/hr	6.0	N/A		
					22.0	tn/yr	22.0			
001 Natural Gas	001	N/A	GE 7FA (PG7241) 297260	SO ₂	2.2	lb/hr	2.2	N/A		
					8.1	tn/yr	8.1			
001 Fuel Oil	001	Water Injection	GE 7FA (PG7241) 297260	NO _x	288.1	lb/hr	288.1	40-50	Manufacturer Data	
					207.5	tn/yr	207.5			
001 Fuel Oil	001	N/A	GE 7FA (PG7241) 297260	CO	159.0	lb/hr	159.0	N/A		
					114.5	tn/yr	114.5			

See Section II

SECTION 3 EMISSIONS FROM AIR POLLUTION CONTROL EQUIPMENT AND FROM UNCONTROLLED PROCESS EQUIPMENT
(20.11.42.12(A)(4) NMAC)

(Continued)

Emission Unit Nos. {1}	CONTROL EQUIPMENT			AIR POLLUTANTS EMITTED {4}				CONTROL EFFICIENCY		APPLICABLE REQUIREMENTS {8}
	Unit No. {2}	Type {3}	Manufacturer and Model Number	Pollutant {5}	Quantity {6}			% by Weight	Method of Determination {7}	
					Actual	Units	Allowable			
001 Fuel Oil	001	N/A	GE 7FA (PG7241) 297260	PM ₁₀	34.0	lb/hr	34.0	N/A		
					24.5	tn/yr	24.5			
001 Fuel Oil	001	N/A	GE 7FA (PG7241) 297260	PM _{2.5}	30.9	lb/hr	30.9	N/A		
					22.3	tn/yr	22.3			
001 Fuel Oil	001	N/A	GE 7FA (PG7241) 297260	VOC	17.0	lb/hr	17.0	N/A		
					12.0	tn/yr	12.0			
001 Fuel Oil	001	N/A	GE 7FA (PG7241) 297260	SO ₂	84.8	lb/hr	84.8	N/A		
					61.1	tn/yr	61.1			
003	003	N/A	Engine-Cummins QSX15-G9 Generator-Cummins 500DFEK	NO _x	7.20	lb/hr	1.39	N/A		
					1.80	tn/yr	0.14			
				CO	4.34	lb/hr	0.51			
					1.10	tn/yr	0.05			
				PM ₁₀	0.25	lb/hr	0.06			
					0.063	tn/yr	0.006			
				PM _{2.5}	0.25	lb/hr	0.06			
					0.063	tn/yr	0.006			
				VOC	0.80	lb/hr	0.38			
					0.20	tn/yr	0.04			
				SO ₂	0.0074	lb/hr	0.15			
					0.0018	tn/yr	0.02			

Section 3: Emissions From Air Pollution Control Equipment and from Uncontrolled Process Equipment

All emissions to the atmosphere, either controlled or uncontrolled if no control exists, associated with the operation of this facility must be identified in this section. This includes fugitive process emissions, and other fugitive or indirect emissions resulting from activities of this facility, e.g. fugitive dust from haul roads. [Insignificant activities are found in Package Element 9.]

Provide emissions rates from air pollution control equipment, waste abatement equipment, process control capture equipment, and from uncontrolled processes, operations or activities. Calculations made to determine the values shown on the form are to be shown and referenced in Package Element 4B (Emissions Calculations). These emissions include: pollutants for which the source is major; regulated air pollutants; and any hazardous or toxic air contaminants emitted as part of plant processes. Emissions from flares, sulfur recovery units, VOC afterburners, and wood waste burners must also be listed.

Sufficient information must be included for the department to evaluate, and verify, the operation and stated control efficiencies of the control equipment involved. Attach additional sheets as needed to list all control equipment. Include references to process flow sheets required in Package Element 4A and attach any equipment layout and assembly drawings as necessary to describe all air pollution control equipment.

Notes:

{1} List the emission unit numbers that feed each individual piece of control equipment. If multiple process units (with individual numbers) discharge to one control equipment unit, list all emission unit numbers that feed that control equipment unit. For liquid tank and solid material storage, use the tank or storage unit number.

{2} Corresponding to control equipment unit numbers from Package Element 4.

{3} Baghouse, cyclone, electrostatic precipitator, enclosures, scrubber, VOC afterburners, etc.

{4} Emissions after gases have passed through control equipment. Use one line for each pollutant emitted. Attach additional sheets if required.

{5} SO₂, NO_x, particulate matter, etc.

{6} "Actual" rates are based on actual production and hours of operation. "Allowable" values are based on maximum allowable production rates. If there is no control equipment, the values in the "Allowable" column are the same as the values in the "Quantity" column in Section 2. List quantities in both pounds per hour and tons per year. Yearly values are based on 8760 hours per year unless the applicant desires to restrict hours of operation as a permit condition. If the emission rate is limited by a federally enforceable applicable requirement, then provide the value of this rate.

{7} Field test results, manufacturer's data, etc. See note {6} from Section 2, Air Pollutant Emission Rates.

{8} Specify the requirement(s) that apply to this control equipment unit and process.

SECTION 4 COMPLIANCE MONITORING DEVICES AND EQUIPMENT

(20.11.42.12(A)(4) NMAC)

(Use additional sheets if necessary)

Unit No. {1}	Pollutant Monitored or Measured	Type of Instrument {2}	Manufacturer and Model Number	Range {3}	Sensitivity	Accuracy	Emission Units {4}	Location of Monitor {5}
001	NOx	Chemiluminescence	Teledyne T200M	25/250 ppm (Dual Range)	+/-0.1	+/-0.1	1	Sample Port, Exhaust Stack
001	O2	Paramagnetic	Teledyne T300	21%	+/-0.1	+/-0.1	1	Sample Port, Exhaust Stack
001	Fuel Flow, Natural Gas	Orifice	Triad Measurement, Orifice 2	Up to 2 MMScf	N/A	+/-0.1	1	Turbine Fuel Inlet
001	Fuel Flow, Fuel Oil	Positive Displacement	Brodie, B70CB	42.5-425 gpm	N/A	+/-0.1	1	Turbine Fuel Inlet
001	All Applicable	DAHS (Data Acquisition & Handling System_	CISCO BREEX75	N/A	N/A	N/A	1	CEMS Shelter

Section 4: Compliance Monitoring Devices and Equipment

Use this section to list all compliance monitoring devices and equipment used at the facility to verify emission rates and other permit terms and conditions. Use one line for each monitoring device and piece of equipment.

Notes:

- {1} List the unit number of the compliance monitoring device as shown in Package Element 4A (Process Flow Sheets).
- {2} State the type of the monitoring device. E.g. Ultra Violet Photometric Analyzer, NDIR Photometer, Opacity Meter, EPA Sampling Train (specify the sampling method number), etc.
- {3} 0- 1,000 ppm, 0 - 50 g/m3, 0 - 100% opacity, etc.
- {4} Provide the unit number(s) (from Package Element 4A -- Process Flow Sheets) of the emissions unit(s) being monitored by each device.
- {5} Describe the physical location of the monitoring device and the recording device. E.g. Monitor is located in ductwork 50' upstream from stack. Recorder is located in operating control room.

SECTION 5 FUELS AND FUEL USAGE
(20.11.42.12(A)(4) NMAC)

Unit No. {1}	Type of Equipment {2}	Equipment Manufacturer	Rated Capacity {3}	FUEL DATA {4}				
				Fuel Type {5}	Amount Per Year {6}	Heating Value (State Units) {7}	Percent Sulfur {8}	Percent Ash {9}
001	Simple Cycle Combustion Turbine	GE	150 MW	Pipeline Quality Natural Gas	11,354 MMScf	1020 Btu/SCF	0.5 grains/100 SCF ^(b)	N/A
001	Simple Cycle Combustion Turbine	GE	150 MW	Low Sulfur Fuel Oil #2	17,405,424 gallons	139 MMBtu/10 ³ gallons	0.05% by wt	N/A
003	Emergency Generator	Cummins	755 HP	Ultra-Low Sulfur Fuel Oil #2	15,300 gallons	139 MMBtu/10 ³ gallons	0.000015% by wt	N/A

^a Annual fuel usage is estimated based on AP-42, manufacturer data, or maximum operating data. The annual fuel use is not a permit limit for any of the units listed in this table.

^b Percent sulfur from permit applications. For diesel engines less than 600 hp, the assumed percent sulfur is not explicitly stated in EPA AP-42 Section 3.

Section 5: Fuels and Fuel Usage

This section provides information on all the fuel usage for all process equipment at the facility. Flares and waste burners are not listed here unless supplemental fuel is used to sustain combustion. In that case, only the supplemental or auxiliary fuel data is given here.

A material balance for combustion within the plant is required to complete this Section and should be attached to this Section. Show calculations in Package Element 4B.

Only equipment that uses fuel is listed in this section.

Notes:

- {1} Corresponding to emissions, process, or operational unit numbers as shown in Package Element 4A (Process Flow Sheets).
- {2} State the type of equipment. E.g. Boiler, diesel engine, furnace, gas engine, gas turbine, oven, space heater, etc.
- {3} Provide the maximum nameplate rate and the normal rate, if these rates are different, e.g. million btu/hr, HP, etc.
- {4} If auxiliary fuel or different fuel is used "on standby", the data for that fuel must also be provided.
- {5} E.g. Natural gas; LPG; No. 1, 2, 4, or 6 fuel oil; refinery gas; coal; wood; etc.
- {6} Use the following units depending on the fuel type: Million cubic feet of gas; gallons of fuel oil; pounds of LPG; etc. State what units you are using.
- {7} Use the following units depending on the fuel type: Btu/thousand ft³ for gas, Btu/lb for solid fuel, or Btu/gallon for liquid fuel.
- {8} State both average percentage by weight and maximum percentage by weight. Sulfur content is not required if sweet pipeline quality natural gas is used as the fuel. Specify in "fuel type" that sweet pipeline quality gas is used and state specification under "sulfur". Provide fuel supplier specifications for sulfur content.
- {9} State both average percentage by weight and maximum percentage by weight. Ash content is not required if sweet pipeline quality natural gas is used as the fuel.

SECTION 6A RAW MATERIALS PROCESSED

(20.11.42.12(A)(4) NMAC)

(Use additional sheets if necessary)

Unit No. {1}	Material {2a}	Composition {3}	Condition {4}	Quantity Used {5} (Specify Units)
001	Pipeline Quality Natural Gas	0.5 grains/100 SCF maximum	N/A	11,354 MMScf
001	Fuel Oil #2	0.05% wt. sulfur maximum	N/A	17,405,424 gallons
003	Fuel Oil #2	15 PPM sulfur maximum	N/A	15,300 gallons

SECTION 6B MATERIALS PRODUCED (DO NOT INCLUDE EMISSIONS AND WASTE PRODUCTS LISTED IN SECTIONS 2, 3, & 10)
(20.11.42.12(A)(4)(e)(iv) NMAC)

Unit No. {1}	Material {2b}	Composition {3}	Condition {4}	Production Rates {5} (Specify Units)
N/A				

Sections 6A and 6B: Raw Materials Processed and Materials Produced

This section addresses any feedstocks or raw materials used in the plant process, and materials or products (not including solid or liquid waste products) that are generated. As an example, sour natural gas is the raw material and sweet pipeline quality gas and natural gas liquids are the products. This section quantifies a portion of the facility material balance. Some unit numbers will correspond to process equipment, as for example where a stream is "refined", such as sour gas to sweet gas, or rock crushing with rock aggregate feed and various products are produced in stages (crushers, screens).

Calculations made to determine the values shown on the form are to be shown and referenced in Package Element 4B (Emissions Calculations).

Notes: (These apply to both 6A and 6B)

- {1} Corresponding to emissions, process or operational unit numbers as shown in Package Element 4A (Process Flow Sheets).
- {2a} What is the raw material -- for example: crude oil, sour gas, raw ore.
- {2b} What is the finished product -- for example: gasoline, diesel fuel, sweet gas.
- {3} List each major component with weight percentages and chemical compositions (if known), or attach separate analysis sheet.
- {4} Provide typical particle size distribution for aggregates, pumice dust, etc. and average moisture content if known.
- {5} Barrels per day, thousands of standard cubic feet per day, tons per hour, etc. Reference process flow sheets required in Package Element 4A, including material balances.

SECTION 7 STACK PARAMETERS
(20.11.42.12(A)(4) NMAC)

(Use additional sheets if necessary)

Stack No. {1}	Emission Unit Nos. {2}	Stack Height ft. {3}	Inside Stack Exit Diameter ft {4}	EXIT GAS CONDITIONS {5}			SAMPLING PORTS		
				Temp. °F	Velocity ft/sec {6}	Moisture % by Vol	Number	Size	Location {7}
0001	0001	(Natural Gas) 50ft Above Ground Level	23.6 ft	1103 °F	96.8	7	12 (6 on the North and South sides of stack)	6" Inner Diameter	Approximately 10ft. from stack exit.
0001	0001	(Natural Gas) 50ft Above Ground Level	23.6 ft	1081 °F	98.3	12	12 (6 on the North and South sides of stack)	6" Inner Diameter	Approximately 10ft. from stack exit.
0003	0003	8.5	0.5 ft	900 °F	171.4	N/A	N/A	N/A	N/A

This section is used to describe the release points of all emissions associated with the facility. This includes actual stacks as well as the release point information in cases where there is no stack, such as where fugitive releases occur.

This information is required for EPA's Aerometric Information Retrieval System database and also for air dispersion modeling that may be required for either this source or another source.

Notes:

- {1} Use stack numbers from Package Element 4A (Process Flow Sheets). If there is a release point with no stack, state the location of the release point.
- {2} If one stack serves multiple processes, operations, or emissions units, provide unit numbers for all emissions units discharging to this stack.
- {3} Height above ground of the stack exit or release point.
- {4} If stack is circular, give inside diameter at exit point. If stack is not circular, provide actual exit dimensions. If stack exit is not pointed up, give direction that stack points. State whether rain cap is used.
- {5} If conditions are not measured at actual stack exit, specify location at which measurements are made.
- {6} Show calculations in sufficient detail to allow permit engineer to verify actual velocity values. These calculations should be shown in Package Element 4B and clearly identified.
- {7} Provide the physical location(s) of the sampling ports. For example: 2 ports at 90 degrees, 25 ft. from top of stack.

SECTION 8A LIQUID STORAGE TANKS - MATERIAL DATA

(20.11.42.12(A)(4) NMAC)

(Use additional sheets if necessary)

Tank No. {1}	Material Name {2}	Composition {3}	Liquid Density (lb/gal)	Vapor Molecular Weight (lb/lb-mol)	Average Storage Temp., T_{av} (°F)	True Vapor Pressure at T_{av} (psia)	Maximum Storage Temp., T_{max} (°F)	True Vapor Pressure at T_{max} (psia)
1	Fuel Oil #2	0.05% wt. Sulfur	7.1	130	59°F	0.0062	66°F	0.0079
2	Fuel Oil #2	0.05% wt. Sulfur	7.1	130	59°F	0.0062	66°F	0.0079
3	Fuel Oil #2	15 PPM Sulfur	7.1	130	59°F	0.0062	66°F	0.0079

Section 8A: Liquid Storage Tanks - Material Data

This section is used to describe any liquid materials that are stored at the plant and are potential sources of gaseous emissions. This includes raw feedstocks, and intermediate and final product storage. If your plant has no tanks which store volatile organic compounds, or other toxic or hazardous materials, write "N/A" in the top line of the table.

This information is requested for the calculation and characterization of fugitive emissions. EPA's reference AP-42 Section 12 lists reference data for liquid storage tanks.

The emissions data for the tanks should be provided in Sections 2 and 3 of this application form.

Notes:

- {1} The tank numbers are to be assigned by the applicant. Use a unique tank number for each tank. These are the same numbers as are used in Package Element 4A (Process Flow Sheets) to identify each tank.
- {2} Give the trade name or commonly used name for the liquid stored in the tanks. E.g. Stoddard Solvent, fuel oil, etc.
- {3} Identify each major component (including sulfur) and give its weight percent. If space is insufficient, attach analysis sheet. The material name and tank number should be clearly identified on any attachments.

SECTION 8B LIQUID STORAGE TANKS - TANK DATA

(20.11.42.12(A)(4) NMAC)

(Use additional sheets if necessary)

Tank No. {1}	Date Installed/Modified {2}	Material(s) Stored {3}	Roof Type {4}	Seal Type {5}	Capacity (gal)	Diameter (ft)	Vapor Space Height (ft) {6}	Roof/Shell Color {7}	Paint Cond. {8}	Annual Throughput (gal/yr) {9}	Turnovers per Year {10}
1	2/99	Fuel Oil #2	FX	N/A	420,000	43	4	White	Good	17,405,424	41.4
2	7/99	Fuel Oil #2	FX	N/A	150	3.0	<1	Red	Good	3,400	22.7
3	2/18	Fuel Oil #2	FX	N/A	300	4.0	<1	Black	Good	15,300	51.0

Section 8B: Liquid Storage Tanks - Tank Data

Notes:

- {1} Use tank number(s) from Section 8A.
- {2} Date (mo./yr.) tank was originally installed or constructed. If the tank was later modified or reconstructed, provide the date this work was completed and attach a separate description of the modifications or reconstruction.
- {3} If the tank is used to store more than one material, use a separate line for each material and provide all the requested data for each material.
- {4} Use the following abbreviations: Fixed roof - FX, Internal Floating Roof - IF, External Floating Roof - EF, Pressure - P.
- {5} Select the appropriate number and letter from the following list that describes the tank and seal type (e.g. "2b" indicates welded tank, liquid mounted resilient seal with weather shield):
NOTE: For pressure tanks, enter control pressure (psia).

WELDED TANK SEALS

- | | | |
|---------------------------|-----------------------------|----------------------------|
| 1. Mechanical shoe | 2. Liquid mounted resilient | 3. Vapor mounted resilient |
| a. Primary only | a. Primary only | a. Primary only |
| b. Shoe mounted secondary | b. Weather shield | b. Weather shield |
| c. Rim mounted secondary | c. Rim mounted secondary | c. Rim mounted secondary |

RIVETED TANK

- 4. Mechanical shoe seal
 - a. Primary only
 - b. Shoe mounted secondary
 - c. Rim mounted secondary
- {6} This applies to fixed roof tanks **only**. Give the average distance from liquid surface to tank roof. For all other tanks, write "N/A"
- {7} Use the following abbreviations: White - WH, Aluminum (specular) - AS, Aluminum (diffuse) - AD, Light Gray - LG, Medium Gray - MG, Black - BL, Other - OT.
- {8} Describe the condition of the paint on the tank as either: Good or Poor.
- {9} Enter throughput, in gallons/year, of each material that is stored in the tank.
- {10} Turnover = annual throughput (gal) / tank capacity (gal).

SECTION 9A SOLID MATERIAL STORAGE - MATERIAL DATA

(20.11.42.12(A)(4) NMAC)

(Use additional sheets if necessary)

Storage Unit No. {1}	Material Name	Emissions Unit, Process or Operation Served {2}	Storage Type {3}	Composition {4}	Date Installed or Modified (Mo./Yr)
N/A					

Section 9A: Solid Material Storage - Material Data

This section is used to describe any solid stored materials used in the plant process which are potential sources of particulate matter. This includes raw feedstocks, intermediate and final product storage. If there is no solid material storage at the plant, write "N/A" in the top line of the table.

Emissions data for solid material that is stored on the plant site should be provided in Sections 2 and 3.

Notes:

- {1} Individual storage unit numbers are assigned by the applicant in Package Element 4A (Process Flow Sheets). These same unit numbers are used in this Section and in Sections 2 and 3 to identify the storage units.
- {2} State which process, operation or emissions unit is served and whether transfer equipment is used. E.g. open feed conveyor.
- {3} Examples of storage type: silo, open pile, shed, enclosed building, enclosed weigh bin or surge bin.
- {4} Give the chemical composition of the material being stored. If space is insufficient, attach analysis sheet. The material name and storage unit number should be identified clearly in any attachments.

SECTION 9B SOLID MATERIAL STORAGE - STORAGE DATA

(20.11.42.12(A)(4) NMAC)

(Use additional sheets if necessary)

Storage Unit No. {1}	Transfer or Transport Method {2}		Maximum Hourly Throughput (specify units)	Annual Throughput (specify units)	Dust Control Method (Storage or Transfer) {3}
	Incoming	Outgoing			
N/A					

Section 9B: Solid Material Storage - Storage Data

This section is used to specify the amounts and methods of solid material transfer in the facility process or operation.

Notes:

- {1} Use the same storage unit numbers as in Section 9A.
- {2} Examples of transfer or transport method:
Incoming: how material is loaded into the storage unit, e.g. truck, rail car, front end loader, etc.

Outgoing: how material is moved from the storage area to the process area, e.g. closed pneumatic feed, closed gravity feed, open gravity feed, enclosed screw conveyor, front end loader, open or enclosed belt conveyor, truck.
- {3} State what kind of dust control methods are used in the storage or transfer of material. E.g. silo bin filters, telescoping stacker chutes, enclosures, dust pickup to baghouse, etc. If the storage unit is equipped with a stack, provide the stack parameters in Section 7 (Stack Parameters).

SECTION 10 WASTE PRODUCT DISPOSAL (SOLID AND LIQUID WASTES THAT DO NOT RESULT IN AIR EMISSIONS)
 (20.11.42.12(A)(4) NMAC)

(Use additional sheets if necessary)

Equipment Unit No. {1}	WASTE MATERIAL		METHOD OF DISPOSAL {4}
	Type {2}	Amount {3}	
N/A		/hr	
		/yr	
		/hr	
		/yr	
		/hr	
		/yr	
		/hr	
		/yr	
		/hr	
		/yr	
		/hr	
		/yr	
		/hr	
		/yr	
		/hr	
		/yr	
		/hr	
		/yr	

Section 10: Waste Product Disposal

Use this section to describe solid and liquid waste product disposal. Any waste product disposal that results in emissions of air pollutants, such as flares or wood waste burners, should be listed and characterized in Sections 2 and 3 of this application form.

This form is designed to complete the material and mass balances of the applicant's operation. It is not part of the part of the air emissions characterization.

Be aware that incineration of waste materials is regulated and 20.11.68 NMAC or 20.11.69 NMAC may apply.

Notes:

- {1} Give the control equipment or process unit numbers from Sections 2 through 9 that produce solid or liquid waste products which are then disposed of.
- {2} For example: Waste paper, wood chips, rubbish, garbage, acids, oils, fly ash, tailings, sulfur, etc.
- {3} Provide the quantity of waste product generated in terms of pounds, tons, or gallons per hour and per year. Specify units used.
- {4} For example: Sanitary landfill, waste pickup, sewage treatment plant, etc.

SECTION 11 CERTIFICATION -- (20.11.42.12(A)(5) NMAC)

NOTICE REGARDING SCOPE OF A PERMIT: The Environmental Health Department's issuance of an air quality permit only authorizes the use of the specified equipment pursuant to the air quality control laws, regulations and conditions. Permits relate to air quality control only and are issued for the sole purpose of regulating the emission of air contaminants from said equipment. Air quality permits are not a general authorization for the location, construction and/or operation of a facility, nor does a permit authorize any particular land use or other form of land entitlement. It is the applicant's/permittee's responsibility to obtain all other necessary permits from the appropriate agencies, such as the City of Albuquerque Planning Department or Bernalillo County Department of Planning and Development Services, including but not limited to site plan approvals, building permits, fire department approvals and the like, as may be required by law for the location, construction and/or operation of a facility. For more information, please visit the City of Albuquerque Planning Department website at <https://www.cabq.gov/planning> and the Bernalillo County Department of Planning and Development Services website at <https://www.bernco.gov/planning>.

NOTICE REGARDING ACCURACY OF INFORMATION AND DATA SUBMITTED: Any misrepresentation of a material fact in this application and its attachments is cause for denial of a permit or revocation of part or all of the resulting registration or permit, and revocation of a permit for cause may limit the permittee's ability to obtain any subsequent air quality permit for ten (10) years. Any person who knowingly makes any false statement, representation, or certification in any application, record, report, plan or other document filed or required to be maintained under the Air Quality Control Act, NMSA 1978 §§ 74-2-1 to 74-2-17, is guilty of a misdemeanor and shall, upon conviction, be punished by a fine of not more than ten thousand dollars (\$10,000) per day per violation or by imprisonment for not more than twelve months, or by both.

I, the undersigned, hereby certify that I have knowledge of the information and data represented and submitted in this application and that the same is true and accurate, including the information and date in any and all attachments, including without limitation associated forms, materials, drawings, specifications, and other data. I also certify that the information represented gives a true and complete portrayal of the existing, modified existing, or planned new stationary source with respect to air pollution sources and control equipment. I understand that there may be significant penalties for submitting false information, including the possibility of fines and imprisonment for knowing violations. I also understand that the person who has applied for or has been issued an air quality permit by the Department is an obligatory party to a permit appeal filed pursuant to 20.11.81 NMAC. Further, I certify that I am qualified and authorized to file this application, to certify the truth and accuracy of the information herein, and bind the source. Moreover, I covenant and agree to comply with any requests by the Department for additional information necessary for the Department to evaluate or make a final decision regarding the application.

Signed this 8th day of May, 2025, upon my oath of affirmation, before a notary of the State of New Mexico

SIGNATURE (Responsible Official)

DATE

May 8, 2025

PRINTED NAME

Heath Lee
Director, Plant Manager Northern NM Gas & Oil

TITLE

Subscribed and sworn to before me on this 8th day of May, 2025.

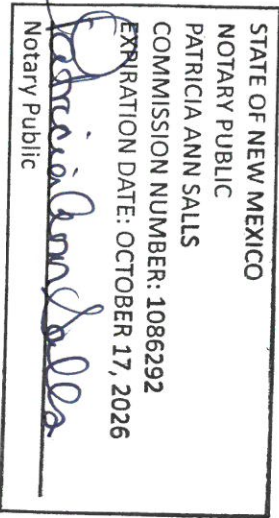
My authorization as a Notary of the State of New Mexico expires on the 17th day of October, 2026.

NOTARY'S SIGNATURE

May 8, 2025
DATE

NOTARY'S PRINTED NAME

Patricia Ann Salls



APPENDIX B. EMISSION CALCULATION BACKGROUND DOCUMENTS

- 1) Dames & Moore vendor data for GE turbine, dated May 28, 1998
- 2) Zachary vendor guarantee for GE turbine, dated August 10, 1998
- 3) GE letters to Florida Power and Light discussing basis for PM Guarantees
- 4) John S. Seitz PM2.5 Memo dated October 23, 1997
- 5.) Emergency generator manufacture Specification Sheet

Attachment C: PM Emission Calculation Background Documents

SENT BY:

5-28-98 ; 15:55 ;

DAMES & MOORE-

512 931 8828:7 4/ 5

Cobisa - Gas Fuel Part Loads at 20F
ESTIMATED PERFORMANCE PG7241(WA)

Load Condition		BASE	75%	50%	25%
Ambient Temp.	Deg F.	20.	20.	20.	20.
Fuel Type		Coal Gas	Coal Gas	Coal Gas	Coal Gas
Fuel HHV	Btu/lb	23,300	23,300	23,300	23,300
Fuel Temperature	Deg F	80	80	80	80
Output	kW	153,300.	115,000.	76,600.	38,300.
Heat Rate (HHV)	Btu/kWh	10,320.	11,050.	13,250.	18,170.
Heat Cons. (HHV) X 10 ⁶	Btu/h	1,582.1	1,270.8	1,015.	695.9
Exhaust Flow X 10 ³	lb/h	3156.	2513.	2071.	1908.
Exhaust Temp.	Deg F.	1081.	1111.	1199.	971.
Exhaust Heat (HHV) X 10 ⁶	Btu/h	1001.3	831.5	715.0	536.7

EMISSIONS

NOx	ppmvd @ 15% O2 - 15	15.	15.	15.	75.
NOx AS NO2	lb/h	88.	70.	55.	186.
CO	ppmvd	- 15.	15.	15.	96.
CO	lb/h	43.	34.	28.	169.
UHC	ppmvd	7.	7.	7.	43.
UHC	lb/h	12.	10.	8.	46.
Particulates	lb/h	- 9.	9.	9.	9.

EXHAUST ANALYSIS % VOL.

Argon	0.90	0.90	0.91	0.91
Nitrogen	75.10	75.11	75.22	75.95
Oxygen	12.57	12.60	12.91	14.99
Carbon Dioxide	3.84	3.83	3.68	2.73
Water	7.60	7.57	7.29	5.42

SITE CONDITIONS

Elevation	ft.	5000.0
Site Pressure	psia	12.25
Inlet Loss	in Water	4.04
Exhaust Loss	in Water	5.5
Relative Humidity	%	20
Application		7F42-Hydrogen-Cooled Generator
Combustion System		15/42 DLN Combustor

Emission information based on GE recommended measurement methods, NOx emissions are corrected to 15% O2 without heat rate correction and are not corrected to ISO reference condition per 40CFR 60.335(e)(1). NOx levels shown will be controlled by algorithms within the SPEEDTRONIC control system.

IPS- 60342 version code- 1.3.0 Opt: 11
 GORDONSA 5/28/98 10:57 60342 gas 7241 part load 20F.dat

12184961504 P. 84

Attachment C: PM Emission Calculation Background Documents

SENT BY: TOTAL P.05

5-28-98 : 15:55 :

DAMES & MOORE-

512 451 8828:# 5/ 5

Cobisa - Distillate Fuel Part Loads at 20F
ESTIMATED PERFORMANCE SUMMARY

Load Condition		BASE	75%	50%	25%
Ambient Temp.	Deg F.	38.	38.	38.	25%
Fuel Type		Dist.	Dist.	Dist.	Dist.
Fuel HHV	Btu/lb	19,400	19,400	19,400	19,400
Fuel Temperature	Deg F.	80	80	80	80
Liquid Fuel H/C Ratio		1.8	1.8	1.8	1.8
Output	kW	177,908.	182,400.	78,900.	19,508.
Heat Rate (HHV)	Btu/kwh	10,640.	11,518.	12,490.	17,290.
Heat Cons. (HHV) X 10 ⁶	Btu/h	1,480.1	1,363.8	1,064.4	681.4
Exhaust Flow X 10 ³	lb/h	3249.	3434.	2034.	1913.
Exhaust Temp.	Deg F.	1062.	1184.	1200.	996.
Exhaust Heat (HHV) X 10 ⁶	Btu/h	973.2	823.4	498.3	518.6
Water Flow	lb/h	103,360.	81,710.	51,590.	8.

EMISSIONS					
NOx	ppmv @ 15% O2	42.	42.	41.	133.
NOx AS NO2	lb/h	281.	226.	179.	349.
CO	ppmv	28.	30.	26.	246.
CO	lb/h	57.	49.	48.	438.
UHC	ppmv	7.	7.	7.	22.
UHC	lb/h	12.	10.	8.	23.
SO2	ppmv	12.0	13.8	12.0	8.0
SO2	lb/h	87.0	71.0	53.0	39.0
SO3	ppmv	1.0	1.0	1.0	1.0
SO3	lb/h	6.0	6.0	6.0	3.0
Sulfur Mist	lb/h	9.0	7.0	6.0	4.0
Particulates	lb/h	17.	17.	17.	17.

EXHAUST ANALYSIS % VOL.

Argon					
Nitrogen		0.86	0.85	0.85	0.92
Oxygen		72.02	71.75	72.67	76.09
Carbon Dioxide		11.25	10.39	11.45	15.07
Water		5.60	6.00	5.98	3.83
		10.28	10.81	9.44	5.50

TEST CONDITIONS

Elevation	ft.	3000.0
Site Pressure	psia	12.25
Inlet Loss	in Water	4.04
Exhaust Loss	in Water	5.5
Relative Humidity	%	20
Application		4000HP Hydrogen-Cooled Generator
Combustion System		1548 DLN Combustor

Emission information based on CE mass/volume measurement methods. NOx emissions are corrected to 15% O2 without heat rate correction and are not corrected to ISO reference conditions per 40CFR 60.333(d)(1). NOx levels shown will be controlled by algorithms within the SPEEDTRONIC control system.

Distillate Fuel is assumed to have 0.015% Fuel-Bound Nitrogen, or less. FBN Amounts Greater Than 0.015% Will Add to the Reported NOx Value. Sulfur Emissions Based On 0.03 WT% Sulfur Content in the Fuel.

IFS- 80342 version code- 1.3.0 Opt: 11
 GORDONBA 5/28/98 11:07 60342 distillate 20F part load.dat

12104961584 P.05

TD

REV-28-1998 13:21 FROM COBISA CORPORATION

Zachary Vendor Guarantee

G. Thermal Performance Test on Natural Gas.

1. Seller shall demonstrate the net electrical output and heat rate of the Equipment on natural gas with a continuous 4-hour test starting after stabilization. The test must conform to the Approved Test Procedures. Tests will be conducted with the inlet evaporative cooler operating normally.
2. Performance Guarantees:
136,380 kW (Net) and 10,560 btu/kWh (HHV), output is measured at the generator terminals and includes allowances for excitation power and AC-equipment supplied by Seller with the Unit as shown on the table in paragraph I(F) above. This does not include any balance-of-plant equipment supplied by Buyer.
3. Performance Minimum:
Minimum net output: 129,561 kW
Maximum net heat rate: 11,088 btu/kWh (HHV).
4. Liquidated Damages:
Output: \$180 / kW for output less than 136,380 kW (Net) and greater than 133,380 kW (Net); plus, \$480 / kW for output equal to or less than 133,380 kW (Net) and greater than 125,000 kW (Net); plus, \$495 / kW for output equal to or less than 125,000 kW (Net)

Heat Rate: \$2,550/ btu/kWh (HHV) above 10,560 btu/kWh (HHV).
5. Synchronization of the Equipment must occur within ten (10) minutes after the initiation of the unpurged starting sequence for a successful test.

H. Thermal Performance Test on #2 Fuel Oil.

1. Seller shall demonstrate net electrical output and heat rate on #2 fuel oil with a continuous 4-hour test starting after stabilization. The test must conform to the Approved Test Procedures. Owner shall have fifteen (15) days after receipt of the written results of the Thermal Performance Test on #2 fuel oil to review and approve the output determination, with such approval not to be unreasonably withheld. If Owner reasonably rejects the output determination, Seller shall reconduct the Thermal Performance Test until it is accepted by Owner. Tests will be conducted with the inlet evaporative cooler operating normally.
2. Performance Guarantees:
142,460 kW (Net) and 10,760 btu/kWh (HHV), output is measured at the generator terminals and includes allowances for excitation power and AC-equipment supplied by Seller with the Unit as shown on the table in paragraph I(F) above. This does not include any balance-of-plant equipment supplied by Buyer.
3. Performance Minimum:
Minimum net output: 135,337 kW
Maximum net heat rate: 11,298 btu/kWh (HHV).

Zachary Vendor Guarantee

TABLE 8-1

GUARANTEED EMISSION LEVELS

Equipment Emissions:	Natural Gas	#2 Fuel Oil
NO _x , ppmvd @ 15% O ₂	15	42
CO, ppmvd @ 15% O ₂	15	20
Particulate Matter, lbs/hr	9	17
VOC (non-methane), ppmvw	1.4	3.5
Opacity, percent	<10	<20



GE International
Power Systems

Brahim Richani, Ph.D.
Manager – GPPSD/PPE CC Systems, Applications & Environmental Engineering
(518) 385-5368
Fax: (518) 381-7450

Global Power Plant Systems Dept.
GE International, Inc.
1 River Road, Bldg. 2 - Room 304
Schenectady, NY 12345

September 19, 2003

Mr. John Gnecco
Florida Power and Light
Email: John_Gnecco@fpl.com
Tel: 561-694-4000

SUBJECT: Expected Particulate Matter Emissions: GE 7FA DLN Combustion Turbines

Dear Mr. Gnecco:

In response to your request for expected PM-10 emissions data for GE 7FA DLN gas turbines, enclosed is a summary of the data gathered to date on our 7FA units with liquid fuel-firing and water injection for NOx control. All of the emissions data included in this summary must be considered as estimates only and are not guarantees under any condition.

Only limited data are available in-house for water injected liquid fuel-fired 7FA units. The data presented in this transmittal correspond to stack measurements for 7 tests on 3 units located at different sites and operating at base load conditions. Both front and back half emissions were measured using EPA Method 5 and 202, respectively. Each test consisted of 3 runs each, with exception of Test 1 where the back half emissions were measured for only 2 of the 3 runs.

From the enclosed summary, it is observed that PM-10 emissions (front and back half) for liquid fuel operations range from 4 to 37 lbs/hr with an average of 24 lbs/hr and a standard deviation of 9 lbs/hr. Front half emissions ranged from 1 to 20 lbs/hr with an average of 10 lbs/hr and a standard deviation of 4 lbs/hr, and back half emissions ranged from 3 to 21 lbs/hr with an average of 14 lbs/hr and a standard deviation of 6 lbs/hr. It is assumed that back half emissions include sulfur mist emissions corresponding to an 0.05% by wt. Sulfur fuel. The 0.05% by wt. sulfur can contribute as much as 10 lbs/hr of sulfur mist emissions at base load operating conditions. With a 0.0015% by wt. sulfur fuel, the expected corresponding sulfur mist contribution to total PM-10 emissions is less than 1 lb/hr.

As evident in the summary data, PM-10 emissions vary widely although they reflect emissions from equivalent units (same combustor and size) firing similar liquid fuels. Additionally, the combustion process in gas turbines is highly efficient, complete and repeatable process with a very specific range of allowable operating conditions. Therefore, it is assumed that the variation in the data is largely due to non-combustion factors such as fuel and ambient air impurities and measurement artifacts. For these reasons, it is GE's policy to keep the PM-10 emissions guarantee for 7FA liquid-fuel operations to 34 lbs/hr excluding sulfur compounds. Additionally

Attachment C: PM Emission Calculation Background Documents

Mr. John Gnecco – FPL
September 19, 2003
Page 2 of 4

in the case of non-compliance, GE's only remedy in meeting the PM-10 emissions guarantee is to re-test the unit after an extended period of operation (minimum of 300 hrs). To date, this has proven to be highly successful, which further reflect that PM-10 emissions variations from gas turbines are mostly due to non-combustion factors.

I hope you find this summary helpful. Please note that the summary data presented herein are subject to change as additional field data are gathered. If you have any questions, feel free to call me at (518) 385-5368.

Sincerely,



Brahim Richani, Ph.D.
Manager

Enclosure

cc: John Almstead – GE
Frank Brooks – GE
Joel Chalfin – GE
Jeanne Beres – GE
Jim Dryzmala – GE



GE International
Power Systems

Brahim Richani, Ph.D.
Manager – GPPSD/PPE CC Systems, Applications & Environmental Engineering
(518) 385-5368
Fax: (518) 381-7450

Global Power Plant Systems Dept.
GE International, Inc.
1 River Road, Bldg. 2 - Room 304
Schenectady, NY 12345

June 17, 2003

Mr. John Gnecco
Florida Power and Light
Email: John_Gnecco@fpl.com
Tel: 561-694-4000

SUBJECT: Particulate Matter Emissions: GE PG7241FA DLN Combustion Turbines

Dear Mr. Gnecco:

In response to your request of PM-10 emissions data for GE PG7241 DLN (7FA) gas turbines, enclosed is a summary of the data gathered to date on our 7FA units with natural gas firing. All of the emissions data included in this summary are for natural gas-fired operations only.

From the enclosed summary, it is concluded that PM-10 emissions (front and back half) can range from 1 to 29 lbs/hr with an average of 7.5 lbs/hr. Front half emissions range from 0 to 17 lbs/hr with an average of 4.8 lbs/hr, and back half emissions range from 0 to 15 lbs/hr with an average of 2.8 lbs/hr.

As evident in the summary data, PM-10 emissions vary widely although they reflect emissions from equivalent units (same combustor and size) firing natural gas. The variation in the data implies that there is no consistency in the gathered PM-10 emissions. Please note that the combustion process in gas turbines, specifically DLN units, is a highly efficient, complete and repeatable process with a narrow and very specific range of allowable operating conditions. Once these units are field tuned and certified during the commissioning process, there are no operator adjustments conducted altering the combustion process thereafter. Due to the specific characteristics of the combustion process and the variation in the gathered data, GE believes that PM-10 emissions from its 7FA natural gas-fired units are essentially zero (no emissions from the combustion process itself). Therefore, it is impractical to speculate any PM-10 emissions from the combustion process.

The reported levels in the gathered data are due to non-combustion factors such as measurement artifacts, airborne PM which passes through the gas turbine inlet air filters, airborne construction debris, metallic rust or oxidation products, etc. It is anticipated that front-half (filterable) PM-10 emissions include ambient air and/or fuel quality effects for which GE has no control of and they generally may contain:

- Airborne PM-10 that passes through the gas turbine inlet air filters

Attachment C: PM Emission Calculation Background Documents

Mr. John Gnecco – FPL
June 17, 2003
Page 2 of 4

- Particulate matter (inert solids) in the fuel gas supply
- Airborne construction debris (present in the inlet or exhaust equipment)
- Metallic rust or oxidation products (present in the inlet or exhaust equipment)
- Measurement (Method 5) artifacts

Additionally, back-half (condensable) PM-10 emissions are mostly from site-specific fuel contaminants and may contain:

- Formation of ammonia sulfates from the SCR system
- Sulfates even w/o an SCR system
- Unburned fuel hydrocarbons that agglomerate to form particles
- Possible other undefined condensables

I hope you find this summary helpful for your permitting needs. If you have any questions, or need additional information, please call me.

Sincerely,



Brahim Richani, Ph.D.
Manager

Enclosure

cc: Ken Kosky – Golder Associates – kkosky@golder.com; Tel: 352-336-5600
Frank Brooks – GE
Joel Chalfin – GE
Jeanne Beres – GE

Attachment C: PM Emission Calculation Background Documents

October 23, 1997 MEMORANDUM

SUBJECT: Interim Implementation of New Source Review Requirements for PM2.5

FROM: John S. Seitz, Director Office of Air Quality Planning & Standards (MD-10)

TO: See Addressees

This memorandum addresses the interim use of PM10 as a surrogate for PM2.5 in meeting new source review (NSR) requirements under the Clean Air Act (Act), including the permit programs for prevention of significant deterioration of air quality (PSD). The revised national ambient air quality standards (NAAQS) for particulate matter, which include the revised NAAQS for PM10 and new NAAQS for PM2.5, became effective on September 16, 1997. In view of the significant technical difficulties that now exist with respect to PM2.5 monitoring, emissions estimation, and modeling (described below), EPA believes that PM10 may properly be used as a surrogate for PM2.5 in meeting NSR requirements until these difficulties are resolved. The EPA's views on implementing the ozone and PM10 NAAQS during the interim period following the effective date of the new 8-hour ozone and revised PM10 NAAQS will be set forth in a separate EPA memorandum.

Section 165(a)(1) of the Act provides that no new or modified major source may be constructed without a PSD permit. Moreover, section 165(a)(3) provides that the emissions from any such source may not cause or contribute to a violation of any NAAQS. Also, section 165(a)(4) requires best available control technology for each pollutant subject to regulation under the Act. The EPA's recent promulgation of the primary and secondary standards for PM2.5 marks the first time that EPA has specifically regulated fine particles--less than 2.5 microns in diameter--as a discrete indicator for particulate matter. Hence, this memorandum addresses how to implement PSD for PM2.5 in light of significant technical difficulties which presently exist.

Of specific concern is the lack of necessary tools to calculate emissions of PM2.5 and related precursors and project ambient air quality impacts so that sources and permitting authorities can adequately meet the NSR requirements for PM2.5. Any comprehensive system for regulating PM2.5 must take into account not only the fine particles emitted directly by stationary sources but also the various precursors, emitted by certain sources, which result in secondarily-formed fine particles through chemical reactions in the atmosphere. Recent studies suggest that secondary particulate matter may account for over half of total ambient PM2.5 nationwide. Emissions factors for the fine particles emitted directly by stationary sources, and

Attachment C: PM Emission Calculation Background Documents

for some important precursors (e.g., ammonia), are largely unavailable at the present time.

The EPA is in the process of developing a comprehensive modeling system which will be designed to include precursor emissions and account for secondary fine particle formation. The modeling system will also incorporate a method for nesting small local impacts from individual point sources within a greater modeling domain. Before this can be completed, it will be necessary to collect sufficient monitoring data to verify and validate protocol modeling results.

Ambient monitoring for PSD purposes must be collected from appropriately designed monitors. Sufficient quantities of such monitors will not be available specifically for PSD monitoring purposes in the near future. Initially, as these monitors become available, they will be needed to establish the new monitoring stations for the national network of PM_{2.5} sites, including the required core PM_{2.5} State and local air monitoring stations. A high priority has been placed on the establishment of the necessary PM_{2.5} monitoring sites nationwide so that the information from these sites can be analyzed and evaluated in order to establish plans and priorities for implementing the PM_{2.5} NAAQS, including the promulgation of section 107 designations.

For the reasons stated above, EPA believes that it is administratively impracticable at this time to require sources and State permitting authorities to attempt to implement PSD permitting for PM_{2.5}. The EPA has projects underway that will address the current technical and informational deficiencies, but it will take 3-5 years to complete these projects. Until these deficiencies are corrected, EPA believes that sources should continue to meet PSD and NSR program requirements for controlling PM₁₀ emissions (and, in the case of PM₁₀ nonattainment areas, offsetting emissions) and for analyzing impacts on PM₁₀ air quality. Meeting these measures in the interim will serve as a surrogate approach for reducing PM_{2.5} emissions and protecting air quality.

This memorandum presents EPA's views on the issues associated with implementation of the new PM_{2.5} NAAQS under Federal, State and local NSR programs. The statements do not bind State and local governments and the public as a matter of law. When the technical difficulties are resolved, EPA will amend the PSD regulations under 40 CFR 51.166 and 52.21 to establish a PM_{2.5} significant emissions rate, and EPA will also promulgate other appropriate regulatory measures pertinent to PM_{2.5} and its precursors. Because the earliest date on which

Attachment C: PM Emission Calculation Background Documents

PM2.5 nonattainment areas will be designated is in 2002, and nonattainment NSR does not apply until after nonattainment designations are made, implementation of the nonattainment NSR requirements under part D of title I of the Act need not be addressed at this time.

If you have any questions concerning this memorandum or wish to address any issues raised herein, please contact Dan deRoeck at (919) 541-5593.

Addressees: Director, Office of Ecosystem Protection, Region I
Director, Division of Environmental Planning and Protection, Region II
Director, Air, Radiation, and Toxics Division, Region III
Director, Air, Pesticides, and Toxics Management Division, Region IV
Director, Air and Radiation Division, Region V
Director, Multimedia Planning and Permitting Division, Region VI
Director, Air, RCRA, and Toxics Division, Region VII
Assistant Regional Administrator, Office of Pollution Prevention, State and Tribal Assistance, Region VIII
Director, Air and Toxics Division, Region IX
Director, Office of Air Quality, Region X

cc: New Source Review Contacts
Greg Foote (2344)
Mark Kataoka (2344)
Lydia Wegman (MD-10)

bcc: Karen Blanchard (MD-12)
Tom Curran (MD-12)
Dan deRoeck (MD-12)
Bill Hamilton (MD-15)
Sally Shaver (MD-15)

Our energy working for you.™



Quotation

Cummins Sales and Service
 1921 Broadway NE Albuquerque, NM 87102
 Direct: 575-312-4584
 February 8, 2017

Project Name: GE012617-03 PNMR 500KW Generator REV 2

Quotation: GE012617-03

Thank you for your inquiry. We are pleased to quote as follows:

		USD
Item	Description	Qty
	Diesel Genset: 60Hz-500KW	
Install-US-Stat	U.S. EPA, Stationary Emergency Application	1
500DFEK	Genset-Diesel,60Hz,500kW-Standby Rating	1
A331-2	Duty Rating-Standby Power	1
L090-2	Listing-UL 2200	1
L170-2	Emissions Certification, EPA, Tier 2, NSPS CI Stationary Emergency	1
F200-2	Enclosure-Steel,Weather Prot,Base Mtd,w/ExhSys	1
C201-2	Fuel Tank-Subbase,300 Gallon,UL142 Compliant	1
R002-2	Voltage-277/480,3 Phase,Wye,4 Wire	1
B258-2	Alternator-60 Hz, 12 Lead, Extended Range,125/105C	1
H703-2	Generator Set Control-PowerCommand 2.3	1
H536-2	Display Language-English	1
H606-2	Meters-AC Output,Analog	1
H678-2	Display-Control, LCD	1
K631-2	Relays-Genset Status, User Configured	1
KU32-2	Relay - Alarm Shutdown	1
H609-2	Control Mounting-Left Facing	1
KU94-2	CB or EB or TB-Right Only	1
KC62-2	Circuit Breaker-800A,Right CB on Right side,3-Pole,UL 600,IEC 690 100%	1
KB72-2	CB or EB or TB-Bottom Entry, Right	1
KM72-2	Shunttrip-24vdc,Single Circuit Breaker	1
P175-2	Enclosure Color-Green,Steel Enclosure	1
L163-2	Listing, ULC-S601-07	1
C127-2	Separator-Fuel/Water	1
E074-2	Engine Cooling-Radiator, 50C Ambient	1
H389-2	Shutdown-Low Coolant Level	1
H557-2	Coolant Heater-208/240/480V, Below 40F Ambient Temp	1
D041-2	Engine Air Cleaner-Normal Duty	1

L189-2	ST 5YR 1500HR P + L + T	1
L050-2	Literature-English	1
A412-2	Packing-None, Base Mounted Housing	1
CP01-2	Common Parts Listing	1
SPEC-N	Product Revision - N	1
EXCLUDES	City of Albuquerque Air Quality Permit	1
EXCLUDES	Offloading and Installation	1
SULABR	Startup and Testing	30
OMMNL	Manuals, Operation and Maintenance	1
LBTRO	Load Bank Testing, Resistive. Per project specifications	5
BATTLA	Starting Battery Kit, Lead Acid	2
SENSNRG	Battery Charger, 10A Multiple Input Voltage	1

Grand Total for 1 500KW Generator \$80,209.50

12-14 Week Lead Time
 Fuel Not Included

Submitted by

Garrett Eldridge , Power Systems Sales
 garrett.eldridge@Cummins.com



ALTERNATOR DATA SHEET

Frame Size HC5F

CHARACTERISTICS

WEIGHTS:	Wound Stator Assembly:	1776 lb	800 kg
	Rotor Assembly:	1512 lb	681 kg
	Complete Assembly:	3738 lb	1684 kg
MAXIMUM SPEED:		2250 rpm	
EXCITATION CURRENT:	Full Load	1.72 Amps	
	No Load	0.40 Amps	
INSULATION SYSTEM:	Class H Throughout		

3 Ø RATINGS factor) (Based on specific temperature rise at 40°C ambient temperature)	(0.8 power)	60 Hz (winding no)				50 Hz (winding no)		
		110/190 220/380 (311/312)	120/208 240/416 (311/312)	139/240 277/480 (311/312)	347/600 (07/17)	110/190 220/380 (311/312)	120/208 240/416 (311/312)	127/220 254/440 (311/312)
150°C Rise Ratings	kW	570	625	700	700	568	568	552
	kVA	713	781	875	875	710	710	690
125°C Rise Ratings	kW	538	590	660	660	536	536	520
	kVA	673	738	825	825	670	670	650
105°C Rise Ratings	kW	500	550	600	600	496	496	480
	kVA	625	688	750	750	620	620	600
80°C Rise Ratings	kW	440	484	528	528	432	432	416
	kVA	550	605	660	660	540	540	520
REACTANCES 10%) (Based on full load at 125C Rise Rating)	(per unit ±)	110/190 220/380	120/208 240/416	139/240 277/480	347/600	110/190 220/380	120/208 240/416	127/220 254/440
Synchronous		3.64	3.33	2.80	2.80	2.90	2.43	2.10
Transient		0.17	0.15	0.13	0.13	0.17	0.14	0.12
Subtransient		0.12	0.11	0.09	0.09	0.11	0.09	0.08
Negative Sequence		0.23	0.21	0.18	0.18	0.18	0.15	0.13
Zero Sequence		0.10	0.09	0.08	0.08	0.08	0.07	0.06
MOTOR STARTING		<u>Broad Range</u>		<u>600</u>	<u>Broad Range</u>			
Maximum kVA (90% Sustained Voltage)		2429		2429	1769			
TIME CONSTANTS	(Sec)	<u>Broad Range</u>		<u>600</u>	<u>Broad Range</u>			
Transient		0.080		0.080	0.080			
Subtransient		0.012		0.012	0.012			
Open Circuit		2.500		2.500	2.500			
DC		0.019		0.019	0.019			
WINDINGS (@20°C)		<u>Broad Range</u>		<u>600</u>	<u>Broad Range</u>			
Stator Resistance (Ohms per phase)		0.0062		0.0098	0.0062			
Rotor Resistance (Ohms)		2.1600		2.1600	2.1600			
Number of Leads		12		6	12			

Single phase power can be taken up to 40% of 3 phase- ratings



Exhaust Emission Data Sheet

500DFEK

60 Hz Diesel Generator Set

EPA NSPS Stationary Emergency

Engine Information:

Model:	Cummins Inc. QSX15-G9 NR 2	Bore:	5.39 in. (137 mm)
Nameplate BHP @ 1800 RPM:	755	Stroke:	6.65 in. (169 mm)
Type:	4 Cycle, In-Line, 6 Cylinder Diesel	Displacement:	912 cu. in. (14.9 liters)
Aspiration:	Turbo-charged with air-to-air charge air cooling		
Compression Ratio:	17:1		
Emission Control Device:	Turbocharged and Charge Air Cooled		

	<u>1/4</u>	<u>1/2</u>	<u>3/4</u>	<u>Full</u>	<u>Full</u>
PERFORMANCE DATA	Standby	Standby	Standby	Standby	Prime
Engine HP @ Stated Load (1800 RPM)	202	379	555	732	668
Fuel Consumption (gal/hr)	11.3	18.7	25.8	34.7	30.6
Exhaust Gas Flow (CFM)	1400	2150	2730	3625	3160
Exhaust Temperature (°F)	745	830	820	900	880
EXHAUST EMISSION DATA					
HC (Total Unburned Hydrocarbons)	0.18	0.07	0.06	0.11	0.08
NOx (Oxides of Nitrogen as NO2)	2.85	3.60	4.60	4.85	5.15
CO (Carbon Monoxide)	0.45	0.33	0.47	0.31	0.41
PM (particular Matter)	0.08	0.05	0.05	0.05	0.02
Smoke (Pierburg)	0.52	0.55	0.61	0.31	0.38

All values are Grams per HP-Hour

TEST METHODS AND CONDITIONS**Test Methods:**

Steady-State emissions recorded per ISO8178-1 during operation at rated engine speed (+/-2%) and stated constant load (+/-2%) with engine temperatures, pressures and emission rated stabilized.

Fuel Specification: 40-48 Cetane Number, 0.05 Wt.% max. Sulfur; Reference ISO8178-5, 40CFR86.1313-98 Type 2-D and ASTM D975 No. 2-D.

Reference Conditions:

25 °C (77 °F) Air Inlet Temperature, 40 °C (104 °F) Fuel Inlet Temperature, 100 kPa (29.53 in Hg) Barometric Pressure; 10.7 g/kg (75 grains H₂O/lb) of dry air Humidity (required for NOx correction); Intake Restriction set to maximum allowable limit for clean filter; Exhaust Back pressure set to maximum allowable limit.

Data was taken from a single engine test according to the test methods, fuel specification and reference conditions stated above and is subjected to instrumentation and engine-to-engine variability. Tests conducted with alternate test methods, instrumentation, fuel or reference conditions can yield different results.

Data Subject to Change Without Notice.



2016 EPA Tier 2 Exhaust Emission Compliance Statement 500DFEK Stationary Emergency 60 Hz Diesel Generator Set

Compliance Information:

The engine used in this generator set complies with Tier 2 emissions limit of U.S. EPA New Source Performance Standards for stationary emergency engines under the provisions of 40 CFR 60 Subpart IIII when tested per ISO8178 D2.

Engine Manufacturer:	Cummins Inc
EPA Certificate Number:	GCEXL015.AAJ-022
Effective Date:	11/04/2015
Date Issued:	11/04/2015
EPA Engine Family (Cummins Emissions Family):	GCEXL015.AAJ (J103)

Engine Information:

Model:	QSX / QSX15 / QSX15-G / QSX15-G9	Bore:	5.39 in. (137 mm)
Engine Nameplate HP:	755	Stroke:	6.65 in. (169 mm)
Type:	4 Cycle, In-line, 6 Cylinder Diesel	Displacement:	912 cu. in. (15 liters)
Aspiration:	Turbocharged and CAC	Compression Ratio:	17.0:1
Emission Control Device:	Electronic Control	Exhaust Stack Diameter:	8 in.

Diesel Fuel Emission Limits

D2 Cycle Exhaust Emissions

	Grams per BHP-hr			Grams per kWm-hr		
	<u>NOx + NMHC</u>	<u>CO</u>	<u>PM</u>	<u>NOx + NMHC</u>	<u>CO</u>	<u>PM</u>
Test Results - Diesel Fuel (300-4000 ppm Sulfur)	4.3	0.4	0.10	5.7	0.6	0.13
EPA Emissions Limit	4.8	2.6	0.15	6.4	3.5	0.20
Test Results - CARB Diesel Fuel (<15 ppm Sulfur)	3.9	0.4	0.08	5.2	0.6	0.11
CARB Emissions Limit	4.8	2.6	0.15	6.4	3.5	0.20

The CARB emission values are based on CARB approved calculations for converting EPA (500 ppm) fuel to CARB (15 ppm) fuel.

Test Methods: EPA/CARB Nonroad emissions recorded per 40CFR89 (ref. ISO8178-1) and weighted at load points prescribed in Subpart E, Appendix A for Constant Speed Engines (ref. ISO8178-4, D2)

Diesel Fuel Specifications: Cetane Number: 40-48. Reference: ASTM D975 No. 2-D.

Reference Conditions: Air Inlet Temperature: 25°C (77°F), Fuel Inlet Temperature: 40°C (104°F). Barometric Pressure: 100 kPa (29.53 in Hg), Humidity: 10.7 g/kg (75 grains H2O/lb) of dry air; required for NOx correction, Restrictions: Intake Restriction set to a maximum allowable limit for clean filter; Exhaust Back Pressure set to a maximum allowable limit.

Tests conducted using alternate test methods, instrumentation, fuel or reference conditions can yield different results.

Engine operation with excessive air intake or exhaust restriction beyond published maximum limits, or with improper maintenance, may result in elevated emission levels.

Our energy working for you.™



Cummins Sales and Service
14333 Gateway West El Paso, TX 79928
El Paso NM 79928 United States
Direct: 575-312-4584

Standard Exclusions

Proposal Validity:

The proposal is valid for 45 days from the date of proposal unless specifically noted.

Taxes & Permits:

The proposal excludes any applicable sales taxes, permits, & licensing. Taxes unless otherwise stated are not included in our proposal.

Delivery:

Equipment is quoted F.O.B. jobsite unless otherwise stated in our proposal.

Equipment held for longer than 30 days may be subject to a monthly storage fee.

General Clarifications:

The proposal offered here in is limited to the plans & specification sections listed on our proposal. Cummins Sales and Service takes general exception to specified products, services, and attachments which are proprietary to any other manufacturer. No other sections shall apply. Please note that the proposal excludes all installation (exhaust systems, fuel systems, cooling systems, vibration isolators, etc.), diesel fuel for testing/ top-off, nor crane/ millwright services for off-load of equipment unless otherwise noted in the proposal.

Closeout Documentation:

Unless stated otherwise, electronic submittals & O & M manuals will be provided. Printed copies are available upon request, additional charges may apply.

Invoicing & Cancellations:

Payment Terms are Net 30 days from date of invoice & are subject to the approval of our Credit Department at the time an order is placed. Cummins Sales and Service does not approve or acknowledge any other terms without express written confirmation.

In cases where retainage is required, a maximum of 10% retainage will be allowed. The balance of retainage is due after start-up/ commissioning services of equipment provided by Cummins Sales and Service is completed. Retainage balances not paid within 30 days after start-up/ commissioning is completed will be accessed a service charge rate equal to 1.5% per month on any outstanding balance. Generators, Transfer Switches, & Switchgear will be invoiced at the time of shipment. Orders are subject to the Cummins Power Generation (CPG/ Factory) cancellation policy. The exact dollar value of the cancellation charge will be determined after Cummins Sales and Service cancellation cost is determined. Equipment is custom fabricated to order. A Written notice of cancellation is required.

Warranty:

Cummins Sales and Service will administer the warranty of Cummins Inc. (Cummins) for new Cummins engines, and will administer the warranty of Onan Corporation (Onan) for new Onan generators. Cummins Sales and Service will also administer the warranty provided by the manufacturer for other new engines and equipment sold. Warranty certificates are provided by the equipment manufacturer or new

engine sales locations, and additional copies are available from Cummins Sales and Service. The manufacturer's warranty is the only warranty that applies to new engines and equipment.

Submittals:

An order for the equipment covered by this proposal will be accepted on a Hold For Release basis. Your order will not be released & scheduled for production until written approval to proceed is received in our office.

Testing & Commissioning:

If included in the proposal, all on-site start-up/ commissioning, testing & training assumes weekdays, during standard Cummins Sales and Service business hours. Additional charges may be added for work requested to be done on overtime, weekends, & holidays.

Third party electrical testing & certifications, seismic calculations, coordination studies, stamped engineering calculations, emissions testing, all other services & material not specifically listed in the preceding quotation.

APPENDIX C. ANNUAL COMPLIANCE CERTIFICATION REPORT

PNM
2401 Aztec Road NE
MS Z100
Albuquerque, NM 87107
505-241-2025
Gregory.Little@pnmresources.com



July 17, 2024

FEDERAL EXPRESS

Compliance Officer
Air Quality Program, City of Albuquerque
1 Civic Plaza, 3rd Floor, Room 3047
Albuquerque, NM 87102

**RE: Public Service Company of New Mexico – Rio Bravo Generating Station
2023 - 2024 Annual Compliance Certification (ACC)
Title V Operating Permit 2093-RN2-1AR, 7/1/23 to 6/30/24**

Dear Compliance Officer:

Enclosed is the 2023 - 2024 annual compliance certification report for the Public Service Company of New Mexico (PNM) Rio Bravo Generating Station. This report covers the following period: July 1, 2023, to June 30, 2024.

This report is being submitted to fulfill the requirements of Operating Permit 2093-RN2-1AR.

Heath Lee, the Title V Responsible Official, has certified the report.

If you have any questions regarding this report, please contact me at (505) 241-2025.

Sincerely,

A handwritten signature in black ink, appearing to read "Greg Little", written over a white background.

Greg Little, Technical Project Manager

Enclosure

Cc: Heath Lee, PNM, Rio Bravo Generating Station

Chief, Air Enforcement Section
US EPA Region 6, ECD-A
1201 Elm Street, Suite 500
Dallas, TX 75270



**City of Albuquerque Environmental Health Department
Air Quality Division
Annual Compliance Certification Report Form
(20.11.42.12.C.5c NMAC)**

PART 1

Identifying Information

Source Name Rio Bravo Generating Station County Bernalillo

Source Address 725 Electric Avenue, SW

City Albuquerque State NM Zip Code: 87105

Responsible Official Heath Lee Ph No 505/241-4723 Fax No 505/241-2487

Technical Contact Greg Little Ph No. 505/241-2025 Fax No 505/241-2384

Principal Company Product or Business: Electricity Generation Primary SIC Code: 4911

Permit No. 2093-RN2-1AR Permit Issued Date: August 31, 2021

Reporting Period

The reporting period should be the one-year, or shorter period, required by your operating permit. It will be assumed that the beginning date begins and ends at Midnight (12 A M), unless you specify otherwise

Period beginning July 1, 2023 Period ending June 30, 2024

Certification of Truth, Accuracy, and Completeness

I, Heath Lee certify that, based on information and belief formed after reasonable inquiry, the statements and information contained in the attached annual compliance certification are true, accurate, and complete

Signature  Date: 7-12-24

Title Responsible Official/Plant Manager

PART 2

Annual Compliance Certification Data for Operating Permit No. 2093-RN2-1AR			
Permit Term or Condition Identification No.	Method(s) or other information or other facts used to determine the compliance status	Data Collection Frequency continuous (C) or intermittent (I)	In Compliance? If so type "Yes". If not type "Dev" and complete table entitled "Deviation Reporting (Part 3)"
Condition 1.0 General Conditions	Procedural Regulatory Statement	I	Yes
Condition 1.1	Procedural Regulatory Statement	I	Yes
Condition 1.1.1	Procedural Regulatory Statement	I	Yes
Condition 1.1.2	Company Policy and Procedures	I	Yes
Condition 1.1.3	Procedural Regulatory Statement	I	Yes
Condition 1.1.4	Record review, Department inspections	I	Yes
Condition 1.1.5	Procedural Regulatory Statement	I	Yes
Condition 1.1.6	Procedural Regulatory Statement	I	Yes
Condition 1.2	Procedural Regulatory Statement	I	Yes
Condition 1.3	Procedural Regulatory Statement	I	Yes
Condition 1.4	Record review, Fee payment records	I	Yes
Condition 1.5	Record review, Semi-annual and annual compliance certifications	I	Yes
Condition 1.6	Procedural Regulatory Statement	I	Yes
Condition 1.7	Record review, Emission inventories records	I	Yes
Condition 1.8	Procedural Regulatory Statement	I	Yes
Condition 1.9	Procedural Regulatory Statement	I	Yes

Annual Compliance Certification Data for Operating Permit No. 2093-RN2-1AR

Permit Term or Condition Identification No.	Method(s) or other information or other facts used to determine the compliance status	Data Collection Frequency continuous (C) or intermittent (I)	In Compliance? If so type "Yes". If not type "Dev" and complete table entitled "Deviation Reporting (Part 3)"
Condition 2.0	Procedural Regulatory Statement	I	Yes
Condition 2.1	Procedural Regulatory Statement	I	Yes
Condition 2.2	Procedural Regulatory Statement	I	Yes
Condition 3.0	Procedural Regulatory Statement	I	Yes
Condition 3.1	Procedural Regulatory Statement	I	Yes
Condition 3.2	Procedural Regulatory Statement	I	Yes
Condition 3.2.1	Record review, CEMS data, 2000 stack testing data, 40 CFR 75 Appendix D for Stack SO ₂ emission, Total Particulate Emissions calculation and monitoring data, visible emissions tests, Acid Rain data	C	Yes
Condition 3.2.1.1	Record review, CEMS/DAHS data	C	Yes
Condition 3.2.1.2	Record review, CEMS/DAHS data	C	Yes
Condition 3.2.1.3	Record review, Stack test data for CO and VOC	I	Yes
Condition 3.2.1.4	Record review, CO and VOC stack testing results, Operating hours	I	Yes
Condition 3.2.1.5	Record review, 40 CFR 75 Appendix D for Stack SO ₂ emissions	C	Yes
Condition 3.2.1.6	Record review, Work Practice Standards, Visual emissions tests (EPA Method 9) for opacity, Monitoring Data	C	Yes
Condition 3.2.1.6.1	Record review, Work Practice Standards	C	Yes
Condition 3.2.1.6.2	Record review, Visual emissions tests (EPA Method 9) for opacity	I	Yes
Condition 3.2.1.6.3	Record review, Monitoring Data for Total Particulate Emissions calculation	I	Yes
Condition 3.2.1.7	Record review, CEMS/DAHS data	C	Yes

Annual Compliance Certification Data for Operating Permit No. 2093-RN2-1AR			
Permit Term or Condition Identification No.	Method(s) or other information or other facts used to determine the compliance status	Data Collection Frequency continuous (C) or intermittent (I)	In Compliance? If so type "Yes". If not type "Dev" and complete table entitled "Deviation Reporting (Part 3)"
Condition 3.2.1.8	Record review, CEMS/DAHS data	C	Yes
Condition 3.2.1.8.1	Record review, CEMS/DAHS data	C	Yes
Condition 3.2.1.8.2	Record review, Fuel lab analyses	I	Yes
Condition 3.2.1.9	Record review, CEMS/DAHS data	C	Yes
Condition 3.2.1.10	Record review, Monitoring data for Total Particulate Matter emissions calculation	I	Yes
Condition 3.2.1.11	Record review 40 CFR 75 Appendix D for Stack SO ₂ emissions	C	Yes
Condition 3.2.1.12	Record review, CEMS/DAHS data	C	Yes
Condition 3.2.1.13	Condition no longer applies with removal of Unit 2, Fire Pump as documented in 2093-RN1-M1-3AR Administrative Revision		
Condition 3.2.1.14	Record review, EPA Tier 2 Exhaust Emission Compliance Statement	I	Yes
Condition 3.2.1.15	Record review, EPA Tier 2 Exhaust Emission Compliance Statement	I	Yes
Condition 3.2.2	Procedural Regulatory Statement	I	Yes
Condition 3.2.2.1	Records review, Visual emissions tests (EPA Method 9) for opacity and use of pipeline quality natural gas	I	Yes
Condition 3.2.2.2	Condition no longer applies with removal of Unit 2, Fire Pump as documented in 2093-RN1-M1-3AR Administrative Revision		
Condition 3.2.2.3	Record review, Annual visual emissions test (EPA Method 9) for opacity	I	Yes
Condition 3.3	Procedural Regulatory Statement	I	Yes
Condition 3.3.1	Record Review, CEMS/DAHS data	C	Yes
Condition 3.3.2	Condition no longer applies with removal of Unit 2, Fire Pump as documented in 2093-RN1-M1-3AR Administrative Revision		

Annual Compliance Certification Data for Operating Permit No. 2093-RN2-1AR			
Permit Term or Condition Identification No.	Method(s) or other information or other facts used to determine the compliance status	Data Collection Frequency continuous (C) or intermittent (I)	In Compliance? If so type "Yes". If not type "Dev" and complete table entitled "Deviation Reporting (Part 3)"
Condition 3.3.2.1	Condition no longer applies with removal of Unit 2, Fire Pump as documented in 2093-RN1-M1-3AR Administrative Revision		
Condition 3.3.2.1.1	Condition no longer applies with removal of Unit 2, Fire Pump as documented in 2093-RN1-M1-3AR Administrative Revision		
Condition 3.3.2.1.2	Condition no longer applies with removal of Unit 2, Fire Pump as documented in 2093-RN1-M1-3AR Administrative Revision		
Condition 3.3.2.2	Condition no longer applies with removal of Unit 2, Fire Pump as documented in 2093-RN1-M1-3AR Administrative Revision		
Condition 3.3.2.2.1	Condition no longer applies with removal of Unit 2, Fire Pump as documented in 2093-RN1-M1-3AR Administrative Revision		
Condition 3.3.2.2.2	Condition no longer applies with removal of Unit 2, Fire Pump as documented in 2093-RN1-M1-3AR Administrative Revision		
Condition 3.3.2.2.3	Condition no longer applies with removal of Unit 2, Fire Pump as documented in 2093-RN1-M1-3AR Administrative Revision		
Condition 3.3.2.3	Condition no longer applies with removal of Unit 2, Fire Pump as documented in 2093-RN1-M1-3AR Administrative Revision		
Condition 3.3.2.4	Condition no longer applies with removal of Unit 2, Fire Pump as documented in 2093-RN1-M1-3AR Administrative Revision		
Condition 3.3.3	Procedural Regulatory Statement	I	Yes
Condition 3.3.3.1	Record Review, EPA Tier 2 Exhaust Emission Compliance Statement	I	Yes
Condition 3.3.3.2	Record Review, EPA Tier 2 Exhaust Emission Compliance Statement	I	Yes
Condition 3.3.3.3	Record Review, Operating hour logs	I	Yes
Condition 3.3.3.4	Procedural Regulatory Statement	I	Yes
Condition 3.3.3.4.1	Record Review, Fuel purchase records	I	Yes
Condition 3.3.3.4.2	Record Review, Fuel purchase records	I	Yes
Condition 3.3.3.4.2.1	Record Review, Fuel purchase records	I	Yes
Condition 3.3.3.4.2.2	Record Review, Fuel purchase records	I	Yes

Annual Compliance Certification Data for Operating Permit No. 2093-RN2-1AR

Permit Term or Condition Identification No.	Method(s) or other information or other facts used to determine the compliance status	Data Collection Frequency continuous (C) or intermittent (I)	In Compliance? If so type "Yes". If not type "Dev" and complete table entitled "Deviation Reporting (Part 3)"
Condition 3.3.3.5	Record Review, Maintenance records	I	Yes
Condition 3.3.4	Record Review, Maintenance records	I	Yes
Condition 3.4	Procedural Regulatory Statement	I	Yes
Condition 3.4 1	Record Review, CEMS/DAHS data, Stack Test Results, Opacity, Monitoring Data for Total Particulate Matter calculation	C	Yes
Condition 3.4.1 1	Record review, CEMS/DAHS data	C	Yes
Condition 3.4.1.2	Record review, Stack test for CO and VOC	I	Yes
Condition 3.4.1 3	Record Review, Fuel sulfur lab analyses	I	Yes
Condition 3.4.1.4	Record Review, Monitoring Data for Total Particulate Matter Calculations	I	Yes
Condition 3.4.1.4.1	Record review, CEMS/DAHS data	C	Yes
Condition 3.4 1.4.2	Record Review, Fuel oil lab analyses	I	Yes
Condition 3.4.1 4.3	Record Review, Fuel oil lab analyses	I	Yes
Condition 3.4.1.4.4	Record Review, Demin water lab analyses	I	Yes
Condition 3.4.1 4 5	Record review, CEMS/DAHS data	C	Yes
Condition 3.4.1.5	Procedural Regulatory Statement	I	Yes
Condition 3.4.1.5.1	Record review, Fuel flow meter records, CEMS/DAHS data	C	Yes
Condition 3 4.1.5.2	Records review, Visual emissions tests (EPA Method 9) for opacity	I	Yes
Condition 3.4.1.5.3	Condition no longer applies with removal of Unit 2, Fire Pump as documented in 2093-RN1-M1-3AR Administrative Revision		
Condition 3 4 1.5.4	Records review, Annual visual emissions tests (EPA Method 9) for opacity	I	Yes

Annual Compliance Certification Data for Operating Permit No. 2093-RN2-1AR

Permit Term or Condition Identification No.	Method(s) or other information or other facts used to determine the compliance status	Data Collection Frequency continuous (C) or intermittent (I)	In Compliance? If so type "Yes". If not type "Dev" and complete table entitled "Deviation Reporting (Part 3)"
Condition 3.4.1.6	Record review, CEMS/DAHS data	C	Yes
Condition 3.4.1.7	Record review, CEMS for monitoring CO2 emissions.	C	Yes
Condition 3.4.1.8	Procedural Regulatory Statement	I	Yes
Condition 3.4.1.9	Record review, CEMS/DAHS data	C	Yes
Condition 3.4.1.10	Condition no longer applies with removal of Unit 2, Fire Pump as documented in 2093-RN1-M1-3AR Administrative Revision		
Condition 3.4.1.11	Record review, Operating logs	I	Yes
Condition 3.4.2	Procedural Regulatory Statement	I	Yes
Condition 3.4.2.1	Procedural Regulatory Statement	I	Yes
Condition 3.4.2.2	Procedural Regulatory Statement	I	Yes
Condition 3.4.2.3	Procedural Regulatory Statement	I	Yes
Condition 4.0	Procedural Regulatory Statement	I	Yes
Condition 4.1	Procedural Regulatory Statement	I	Yes
Condition 4.1.1	Procedural Regulatory Statement	I	Yes
Condition 4.1.1.1	Record review, Quarterly EDRs, and CEMS/DAHS data	C	Yes
Condition 4.1.1.2	Record review, Stack test for CO and VOC	I	Yes
Condition 4.1.1.3	Record review, Fuel lab analyses, CEMS/DAHS data	C	Yes
Condition 4.1.1.4	Record review, Monitoring data for Total Particulate Matter calculations	I	Yes
Condition 4.1.1.5	Record review, Visual emissions tests (EPA Method 9) for opacity	I	Yes

Annual Compliance Certification Data for Operating Permit No. 2093-RN2-1AR

Permit Term or Condition Identification No.	Method(s) or other information or other facts used to determine the compliance status	Data Collection Frequency continuous (C) or intermittent (I)	In Compliance? If so type "Yes". If not type "Dev" and complete table entitled "Deviation Reporting (Part 3)"
Condition 4.1.1.6	Record review, CEMS/DAHS data	C	Yes
Condition 4.1.1.7	Record review, Stack tests	I	Yes
Condition 4.1.1.8	Record review, CEMS/DAHS data	C	Yes
Condition 4.1.1.8.1	Record review, CEMS/DAHS data	C	Yes
Condition 4.1.1.8.2	Record review, Fuel lab analyses	I	Yes
Condition 4.1.1.8.3	Record review, NSPS Semi-Annual reports	I	Yes
Condition 4.1.1.9	Record review, CEMS for monitoring CO2 emissions	C	Yes
Condition 4.1.1.10	Record review, Plant maintenance records	I	Yes
Condition 4.1.1.11	Record review, CEMS/DAHS records	C	Yes
Condition 4.1.2	Condition no longer applies with removal of Unit 2, Fire Pump as documented in 2093-RN1-M1-3AR Administrative Revision		
Condition 4.1.2.1	Condition no longer applies with removal of Unit 2, Fire Pump as documented in 2093-RN1-M1-3AR Administrative Revision		
Condition 4.1.2.2	Condition no longer applies with removal of Unit 2, Fire Pump as documented in 2093-RN1-M1-3AR Administrative Revision		
Condition 4.1.2.3	Condition no longer applies with removal of Unit 2, Fire Pump as documented in 2093-RN1-M1-3AR Administrative Revision		
Condition 4.1.2.4	Condition no longer applies with removal of Unit 2, Fire Pump as documented in 2093-RN1-M1-3AR Administrative Revision		
Condition 4.1.2.5	Condition no longer applies with removal of Unit 2, Fire Pump as documented in 2093-RN1-M1-3AR Administrative Revision		
Condition 4.1.3	Procedural Regulatory Statement	I	Yes
Condition 4.1.3.1	Record review, Plant records, Operating logs	I	Yes
Condition 4.1.3.2	Record review, Operating logs	I	Yes

Annual Compliance Certification Data for Operating Permit No. 2093-RN2-1AR

Permit Term or Condition Identification No.	Method(s) or other information or other facts used to determine the compliance status	Data Collection Frequency continuous (C) or intermittent (I)	In Compliance? If so type "Yes". If not type "Dev" and complete table entitled "Deviation Reporting (Part 3)"
Condition 4.1.3.3	Record review, Visual emissions tests (EPA Method 9) for opacity	I	Yes
Condition 4 2	Procedural Regulatory Statement	I	Yes
Condition 4.2.1	Procedural Regulatory Statement	I	Yes
Conditions 4.2.1.1 through 4.2.1.6	Record review, sampling, and measurement data	I	Yes
Condition 4.2.2	Record review, Calibration records, Maintenance records, CEMS data	C	Yes
Condition 4 2.3	Record review, Monitoring, sampling, calibration records	I	Yes
Condition 5 0	Procedural Regulatory Statement	I	Yes
Condition 5.1	Procedural Regulatory Statement	I	Yes
Condition 5.1.1	Procedural Regulatory Statement	I	Yes
Condition 5.1.1.1	Record review, CEMS data, semi-annual reports	C	Yes
Condition 5 1.1.2	Record review, Stack test for CO and VOC, semi-annual reports	I	Yes
Condition 5.1.1 3	Record review, CEMS/DAHS data, fuel lab analyses, semi-annual reports, semi-annual reports	C	Yes
Condition 5.1.1.4	Records review, Monitoring data for Total Particulate Matter calculations, semi-annual reports	I	Yes
Condition 5.1.1.5	Record review, Visual emissions tests (EPA Method 9) for opacity Condition no longer applies to Unit 2, Fire Pump since its removal was documented in 2093-RN1-M1-3AR Administrative Revision	I	Yes
Condition 5 1.1.6	Record review, CEMS/DAHS data, semi-annual reports	C	Yes
Condition 5.1.1.7	Record review, Stack tests, semi-annual reports	I	Yes

Annual Compliance Certification Data for Operating Permit No. 2093-RN2-1AR			
Permit Term or Condition Identification No.	Method(s) or other information or other facts used to determine the compliance status	Data Collection Frequency continuous (C) or intermittent (I)	In Compliance? If so type "Yes". If not type "Dev" and complete table entitled "Deviation Reporting (Part 3)"
Condition 5.1.1.8	Record review, Plant records, semi-annual reports	I	Yes
Condition 5.1.1.9	Record review, EPA GHG inventory reports, semi-annual reports	I	Yes
Condition 5.1.1.10	Record review, Acid Rain data, Quarterly EDR reports to EPA, semi-annual reports	I	Yes
Condition 5.1.1.11	Record review, NSPS semi-annual reports	I	Yes
Condition 5.1.2	Condition no longer applies with removal of Unit 2, Fire Pump as documented in 2093-RN1-M1-3AR Administrative Revision		
Condition 5.1.2.1	Condition no longer applies with removal of Unit 2, Fire Pump as documented in 2093-RN1-M1-3AR Administrative Revision		
Condition 5.1.2.2	Condition no longer applies with removal of Unit 2, Fire Pump as documented in 2093-RN1-M1-3AR Administrative Revision		
Condition 5.1.2.3	Condition no longer applies with removal of Unit 2, Fire Pump as documented in 2093-RN1-M1-3AR Administrative Revision		
Condition 5.1.3	Procedural Regulatory Statement	I	Yes
Condition 5.1.3.1	Record review, Operating logs, semi-annual reports	I	Yes
Condition 5.1.3.2	Record review, Operating logs, semi-annual reports	I	Yes
Condition 5.2	Record review, Semi-annual monitoring reports, Annual compliance certifications, EPA GHG emissions inventories, Quarterly EDR reports to EPA, NSPS semi-annual reports	I	Yes
Condition 5.3	Record review, Deviation reports (none during reporting period)	I	Yes
Condition 5.4	Record review, Excess emission reports (none during reporting period)	I	Yes
Condition 5.4.1	Record review, Excess emission reports (none during reporting period)	I	Yes
Condition 5.4.2	Record review, Excess emission reports (none during reporting period)	I	Yes
Condition 5.4.3	Procedural Regulatory Statement	I	Yes

Annual Compliance Certification Data for Operating Permit No. 2093-RN2-1AR

Permit Term or Condition Identification No.	Method(s) or other information or other facts used to determine the compliance status	Data Collection Frequency continuous (C) or intermittent (I)	In Compliance? If so type "Yes". If not type "Dev" and complete table entitled "Deviation Reporting (Part 3)"
Condition 6 0	Procedural Regulatory Statement	I	Yes
Condition 6.1	Procedural Regulatory Statement	I	Yes
Condition 6.1.1	Record review, Annual compliance certification reports	I	Yes
Condition 6.1.2	Procedural Regulatory Statement	I	Yes
Condition 6.2	Procedural Regulatory Statement	I	Yes
Condition 6.2.1	Record review, Department inspection records	I	Yes
Condition 6.2.2	Record review, Department inspection records	I	Yes
Condition 6 2.3	Record review, Department inspection records	I	Yes
Condition 6.2.4	Record review, Department inspection records	I	Yes
Condition 6 3	Record review, permit posting at facility	I	Yes
Condition 7.0	Procedural Regulatory Statement	I	Yes
Condition 7.1	Procedural Regulatory Statement	I	Yes
Condition 7.2	Procedural Regulatory Statement	I	Yes
Condition 7.2.1 through 7.2.4	Procedural Regulatory Statement	I	Yes
Condition 7.3	Procedural Regulatory Statement	I	Yes
Condition 7.4	Procedural Regulatory Statement	I	Yes

Annual Compliance Certification Data for Operating Permit No. 2093-RN2-1AR

Permit Term or Condition Identification No.	Method(s) or other information or other facts used to determine the compliance status	Data Collection Frequency continuous (C) or intermittent (I)	In Compliance? If so type "Yes". If not type "Dev" and complete table entitled "Deviation Reporting (Part 3)"
Condition 7.5	Procedural Regulatory Statement	I	Yes
Condition 8.0	Procedural Regulatory Statement	I	Yes
Condition 8 1	Procedural Regulatory Statement	I	Yes
Condition 8.1.1	Procedural Regulatory Statement	I	Yes
Condition 8 1 2	Procedural Regulatory Statement	I	Yes
Condition 8.1.3	Procedural Regulatory Statement	I	Yes
Condition 8.1.4	Procedural Regulatory Statement	I	Yes
Condition 8.2	Procedural Regulatory Statement	I	Yes
Condition 9.0	Procedural Regulatory Statement	I	Yes
Condition 9 1	Record review, Semi-annual reports, Annual compliance certifications	I	Yes
Condition 10 0	Procedural Regulatory Statement	I	Yes
Condition 10.1	Procedural Regulatory Statement	I	Yes
Condition 10.2	Procedural Regulatory Statement	I	Yes
Condition 10.3	Procedural Regulatory Statement	I	Yes
Condition 10 4	Procedural Regulatory Statement	I	Yes
Condition 11.0	Procedural Regulatory Statement	I	Yes
Condition 11.1	Procedural Regulatory Statement	I	Yes

Annual Compliance Certification Data for Operating Permit No. 2093-RN2-1AR			
Permit Term or Condition Identification No.	Method(s) or other information or other facts used to determine the compliance status	Data Collection Frequency continuous (C) or intermittent (I)	In Compliance? If so type "Yes". If not type "Dev" and complete table entitled "Deviation Reporting (Part 3)"
Condition 11.2	Record review, Maintenance records	I	Yes
Condition 12.0	Procedural Regulatory Statement	I	Yes
Condition 12.1	Procedural Regulatory Statement	I	Yes
Condition 13.0	Procedural Regulatory Statement	I	Yes
Condition 13.1	Record review, Fee payment records	I	Yes

PART 3

Deviation Reporting	
Question	(Yes/No)
Are there any deviations being reported with this annual compliance certification If yes complete the table entitled "Deviation Summary Report" (Part 4)	No
Have there been any previous deviation reports (ie "Region 6 Operating Permits Deviation Summary Report") forwarded to the EPA If yes, attach the Deviation Summary Report to this annual compliance certification or complete the table entitled "Deviation Summary Report" (Part 4)	No
Have all quarter or semiannual deviation reports been submitted to AEHD? If yes Part 4 does not need to included on your submittal to state However it is required for the EPA's review	N/A

PART 4

Deviation Report for Operating Permit No. 2093-RN2-1AR						
No	Emission Unit ID	Poll	Applicable Requirement (Include Rule Citation)	Monitoring Method (Include Rule Citation)	Monitoring Frequency	Total # of Deviations
1						
2						

No	Deviation Start		Deviation End		No. of Days	Cause of Deviation	Corrective Action Taken
	Date	Time	Date	Time			
1							
2							

**APPENDIX D. ACID RAIN PHASE II PERMIT RENEWAL APPLICATION
FORMS**

**CITY OF ALBUQUERQUE ENVIRONMENTAL HEALTH DEPARTMENT
AIR QUALITY DIVISION
ACID RAIN PROGRAM
PHASE II PERMIT APPLICATION**

For more information, see instructions and refer to 20.11.62 NMAC and 40 CFR Part 72

This submission is: **New** **Revised** **Renewal**

STEP 1: Identify the source by plant name, State and ORIS code from NADB

Plant Name	State	ORIS Code
Rio Bravo Generating Station	NM	55039

STEP 2: Enter the boiler ID# from NADB for each affected unit, and indicate whether a re-powering plan is being submitted for the unit by entering “yes or “no” at column c. For new units, enter the requested information in columns d and e.

COMPLIANCE PLAN

COLUMN A	COLUMN B	COLUMN C	COLUMN D	COLUMN E
BOILER ID #	Unit will hold Allowances in Accordance with 40 CFR Part 73	Re-powering Plan	New Units/ Commence Operation Date	New Units/Monitor Certification Deadline
GT-1	YES	NO		
	YES			
	YES			
	YES			
	YES			
	YES			
	YES			
	YES			
	YES			
	YES			

STEP 3: Check the box if the response in column c of Step 2 is Yes for any unit.

For each unit that will be re-powered, the Repowering Extension Plan Form is included and Repowering Technology Petition form has been submitted.

PLANT NAME: Rio Bravo Generating Station

STEP 4: Read the standard requirements and certification, enter the name of the designated representative, sign and date

Standard Requirements (20.11.62.12.D NMAC)

Permit Requirements

1. The designated representative of each affected source and each affected unit at the source shall:
 - a. Submit a complete Acid Rain permit application under this part in accordance with the deadlines specified in 20.11.62.14.A NMAC;
 - b. Submit in a timely manner any supplemental information that the Department determines is necessary in order to review an Acid Rain permit application and issue or deny an Acid Rain permit.
2. The owners and operators of each affected source and each affected unit at the source shall:
 - a. Operate the unit in compliance with a complete Acid Rain permit application or a superseding Acid Rain permit issued by the Department; and
 - b. Have an Acid Rain Permit.

Monitoring Requirements

1. The owners and operators and, to the extent applicable, designated representative of each affected source and each affected unit at the source shall comply with the monitoring requirements as provided in 40 CFR Part 75 and 76.
2. The emissions measurements recorded and reported in accordance with 40 CFR Part 75 and 76 shall be used to determine compliance by the unit with the Acid Rain emissions limitations and emissions reduction requirements for sulfur dioxide and nitrogen oxides under the Acid Rain Program.
3. The requirements of 40 CFR Part 75 and 76 shall not affect the responsibility of the owners and operators to monitor emissions of other pollutants or other emissions characteristics at the unit under other applicable requirements of the Act and other provisions of the operating permit for the source.

Sulfur Dioxide Requirements

1. The owners and operators of each source and each affected unit at the source shall:
 - a. Hold allowances, as of the allowance transfer deadline, in the unit's compliance subaccount (after deductions under 40 CFR 73.34(c)) not less than the total annual emissions of sulfur dioxide for the previous calendar year from the unit; and
 - b. Comply with the applicable Acid Rain emissions limitation for sulfur dioxide.
2. Each ton of sulfur dioxide emitted in excess of the Acid Rain emissions limitations for sulfur dioxide shall constitute a separate violation of the Act.
3. An affected unit shall be subject to the requirements 20.11.62.12.(3) NMAC as follows:

PLANT NAME: Rio Bravo Generating Station

- a. Starting January 1, 2000, an affected unit under 20.11.62.12.A.(1)(b) NMAC; or
- b. Starting on the later of January 1, 2000 or the deadline for monitor certification under 40 CFR Part 75, an affected unit under 20.11.62.12.A.(1)(c) NMAC.

4. Allowances shall be held in, deducted from, or transferred among ATS accounts in accordance with the Acid Rain Program.

5. An allowance shall not be deducted, in order to comply with the requirements under 20.11.62.12.(3) NMAC, prior to the calendar year for which the allowance was allocated.

6. An allowance allocated by the EPA under the Acid Rain Program is a limited authorization to emit sulfur dioxide in accordance with the Acid Rain Program. No provision of the Acid Rain Program, the Acid Rain permit application, the Acid Rain permit, or the written exemption under 20.11.62.12.B NMAC and 20.11.62.12.C NMAC and no provision of law shall be construed to limit the authority of the United States to terminate or limit such authorization.

7. An allowance allocated by the EPA under the Acid Rain Program does not constitute a property right.

Nitrogen Oxides Requirements

1. The owners and operators of the source and each affected unit at the source shall comply with the applicable Acid Rain emissions limitation for nitrogen oxides.

Excess Emissions Requirements

1. 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.
2. The owners and operators of an affected unit that has excess emissions in any calendar year shall:
 - a. Pay without demand the penalty required, and pay upon demand the interest on that penalty, as required by 40 CFR part 77; and
 - b. Comply with the terms of an approved offset plan, as required by 40 CFR part 77.

Record Keeping and Reporting Requirements.

1. Unless otherwise provided, the owners and operators of the 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 prior to the end of 5 years, in writing by the EPA or Department.

- a. The certificate of representation for the designated representative for the source and each affected unit at the source 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.

- b. All emissions monitoring information, in accordance with 40 CFR Part 75.

PLANT NAME: Rio Bravo Generating Station

- c. Copies of all reports, compliance certifications, and other submissions and all records made or required under the Acid Rain Program.
- d. Copies of all documents used to complete an Acid Rain permit application and any other submission under the Acid Rain Program or to demonstrate compliance with the requirements of the Acid Rain Program.

2. The designated representative of an affected source and each affected unit at the source shall submit the reports and compliance certifications required under the Acid Rain Program, including those under 20.11.62.19 NMAC and 40 CFR Part 75.

Liability

1. Any person who knowingly violates any requirement or prohibition of the Acid Rain Program, a complete Acid Rain permit application, an Acid Rain permit, or a written exemption under 20.11.62.12.B NMAC or 20.11.62.12.C NMAC, including any requirement for the payment of any penalty owed to the United States, shall be subject to enforcement by the EPA pursuant to Section 113(c) of the Act and by the Department pursuant to ROA 1994 § 9-5-1-99(B)(1).
2. Any person who knowingly makes a false, material statement in any record, submission, or report under the Acid Rain Program shall be subject to criminal enforcement by the EPA pursuant to Section 113(c) of the Act and 18 U.S.C. 1001 and by the Department pursuant to ROA 1994 § 9-5-1-99(B)(2).
3. No permit revision shall excuse any violation of the requirements of the Acid Rain Program that occurs prior to the date that the revision takes effect.
4. Each affected source and each affected unit shall meet the requirements of the Acid Rain Program.
5. Any provision of the Acid Rain Program that applies to an affected source (including a provision applicable to 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.
6. Any provision of the Acid Rain Program that applies to an affected unit (including a provision applicable to the designated representative of an affected unit) shall also apply to the owners and operators of such unit. Except as provided under 20.11.62.15.B NMAC (Phase II repowering extension plans), 40 CFR Part 76, 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 designated representative 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 designated representative and that is located at a source of which they are not owners or operators or the designated representative.
7. Each violation of a provision of this Part and 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 designated representative of such source or unit, shall be a separate violation of the Act.

Effect on Other Authorities

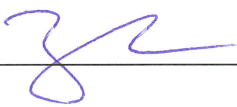
No provision of the Acid Rain Program, an Acid Rain permit application, an Acid Rain permit, or a written exemption under 20.11.62.12.B NMAC or 20.11.62.12.C NMAC shall be construed as:

PLANT NAME: Rio Bravo Generating Station

1. Except as expressly provided in Title IV of the Act, exempting or excluding the owners and operators and, to the extent applicable, the designated representative of an affected source or affected unit from compliance with any other provision of the Act, including the provisions of Title I of the Act relating to applicable National Ambient Air Quality Standards or State Implementation Plans;
2. 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 Act;
3. 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;
4. Modifying the Federal Power Act or affecting the authority of the Federal Energy Regulatory Commission under the Federal Power Act; or
5. Interfering with or impairing any program for competitive bidding for power supply in a State in which such program is established.

Certification

I am authorized to make this submission on behalf of the owners and operators of the affected source or affected units for which the submission is made. I certify under penalty of law that I have personally examined, and am familiar with, the statements and information submitted in this document and all its attachments. Based on my inquiry of those individuals with primary responsibility for obtaining the information, I certify that the statements and information are to the best of my knowledge and belief true, accurate, and complete. I am aware that there are significant penalties for submitting false statements and information or omitting required statements and information, including the possibility of fine or imprisonment.

Name <i>Heath Lee</i>	
Signature 	Date <i>5-7-25</i>

**STEP 3 (optional)
Enter the source AIRS
and FINDS identification
numbers, if known**

AIRS # NM/001/00363 (from AR2093-RN2)
FINDS

APPENDIX E: CURRENT TITLE V PERMIT AND ACID RAIN PERMIT

CITY OF ALBUQUERQUE

Environmental Health Department

Mark DiMenna, PhD., Director



Heath Lee
Plant Manager
PNM Rio Bravo Generating Station
2401 Aztec Road NE
Mail Stop Z100
Albuquerque, New Mexico 87107

August 31/2021

Sent Via E-mail: Heath.Lee@pnm.com
Robin.DeLapp@pnmresources.com

Subject: Title V Operating Permit #2093-RN1-M1-3AR
Facility AIRS Number: #NM/001/00368
Facility Name: PNM Rio Bravo Generating Station
Facility Location: 725 Electric Avenue SE

Dear Heath Lee:

This letter constitutes an Administrative Revision to Operating Permit No. 2093-RN1-M1 for the PNM Rio Bravo Generating Station located at 725 Electric Avenue SE. The City of Albuquerque, Environmental Health Department – Air Quality Program (Program) has reviewed your request received on July 13, 2021 pursuant to Federal Clean Air Act (CAA), and Title 20, Chapter 11, Part 42 of Albuquerque – Bernalillo County Air Quality Control Board New Mexico Administrative Code (NMAC), Section 28, Paragraph E(1).

The Program has assigned Title V Operating Permit No. 2093-RN1-M1-3AR to the operating permit as amended by this letter. Unless specifically altered by this letter, all terms and conditions of Title V Operating Permit No. 2093-RN1-M1 are still in effect, except for the following administrative amendments:

1. Process Equipment Unit #2, Fire Pump Engine, Cummins Model # 6BTA5.9-F2, Serial # 45878044 is removed from operation and from Title V Operating Permit #2093-RN1-M1.

This letter shall be attached to Title V Operating Permit No. 2093-RN1-M1 issued by the Program on May 10, 2021 to serve as an acknowledgement by the Program that this Administrative Revision is authorized.

If you have any further questions, please do not hesitate to contact me by phone at (505) 767-5626 or via email at ppuckett@cabq.gov.

Sincerely,

A handwritten signature in cursive script that reads "Paul Puckett".

Paul Puckett
Environmental Health Scientist
Permitting Division
Air Quality Program
Environmental Health Department
City of Albuquerque



**ALBUQUERQUE/BERNALILLO COUNTY
AIR QUALITY CONTROL BOARD
TITLE V OPERATING PERMIT #2093-RN1-M1
FACILITY CDS #NM/001/00368
Facility ID: FA0003185; Record ID: PR0007418**

Issued to: Public Service Company of New Mexico
2401 Aztec Rd NE
Albuquerque, NM 87107

Certified Mail No. 7017 2680 0000 5952 2297
Return Receipt Requested

Responsible Official: Richard Threet, Director, Plant Management I

The Albuquerque Environmental Health Department (Department) and the Albuquerque/Bernalillo County Air Quality Control Board (A/BC AQCB); pursuant to the Federal Clean Air Act (CAA, also known herein as the Federal Act); the New Mexico Air Quality Control Act, NMSA 1978, as amended 74-2-4, 74-2-5.C; the Joint Air Quality control Board Ordinance, Revised Ordinances of Albuquerque 1994, 9-5-1-4; the Joint air quality Control Board Ordinance, Bernalillo County Ordinance 94-5; A/BC AQCB Regulation Title 20, New Mexico Administrative Code (NMAC), Chapter 11 (20.11 NMAC), Part 41 (20.11.41 NMAC), Construction Permits; Part 42 (20.11.42 NMAC), Operating Permits; hereby issue Operating Permit #2093-RN1-M1 to Public Service Company of New Mexico (PNM) and is hereby authorized to operate the following processes at:

Facility/Location	Process Description	SIC	NAICS
Rio Bravo Generating Station 725 Electric Avenue SE Albuquerque, New Mexico 87105 UTMN: 3877128 UTME: 350109	(1) 150 MW, Simple Cycle, Gas Turbine, Electric Generating Station (2) 110 hp emergency fire pump engine (3) 755 hp emergency generator engine	4911	221112

This Title V Operating Permit has been issued based on the review of the application received by the Albuquerque Environmental Health Department (Department), Air Quality Program (Program) on August 30, 2018 and on the National Ambient Air Quality Standards, New Mexico Ambient Air Quality Standards, and Air Quality Control Regulations for Albuquerque/Bernalillo County, as amended. This permit places enforceable limitations and standards on processes at the Facility. The term of this permit is five (5) years. It will expire five years from the date of issuance, pursuant to 20.11.42.12.C.(2) NMAC. Application for renewal of this permit is due twelve (12) months prior to the date of expiration, pursuant to 20.11.42.12.A.(2).(a).(ii) NMAC. This Title V Operating Permit #2093-RN1-M1 supersedes the Title V Operating Permit #2093-RN1 issued on August 16, 2016.

Pursuant to the New Mexico Air Quality Control Act, NMSA 1978, as amended, all terms and conditions in this permit are enforceable by the Department, including any provisions designed to limit this Facility's emissions. Furthermore, pursuant to 20.11.42.12.C.(1).(e) NMAC, all terms and conditions are enforceable under the Federal Act by the Administrator of the United States Environmental Protection Agency (EPA) and citizens, unless the term or condition is specifically designated in this permit as not being enforceable under the Federal Act.

Issued on the 10th day of May, 2021

Isreal L. Tavarez, Environmental Health Manager
Air Quality Program
Environmental Health Department
City of Albuquerque

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Definition of Abbreviations and Acronyms

<u>Abbreviation/Acronym</u>	<u>Definition</u>
A/B CAQCB --	The Albuquerque/Bernalillo County Air Quality Control Board
Administrator --	The Administrator of the United States Environmental Protection Agency
ATC --	Authority-To-Construct
CAA --	The Federal Clean Air Act
CEMS--	Continuous Emissions Monitoring System
CH ₄ --	Methane
CO--	Carbon monoxide
CO ₂ --	Carbon dioxide
Department or Director - -	The City of Albuquerque Environmental Health Department/Air Quality Program
EPA - -	United States Environmental Protection Agency
Facility - -	Public Service Company of New Mexico and the Owner/Operator or Responsible Official
Federal Act - -	The Federal Clean Air Act
GHG --	Greenhouse gas
HAP - -	Hazardous Air Pollutant
hp - -	Horsepower
kW - -	Kilowatt
lb/hr - -	Pound per Hour
NAICS - -	North American Industrial Classification System
NESHAP - -	National Emission Standards for Hazardous Air Pollutants
NMSA - -	New Mexico Statutes Annotated
NMAC - -	New Mexico Administrative Code
20.11 NMAC - -	New Mexico Administrative Code, Title 20, Chapter 11
N ₂ O--	Nitrous oxide
PM ₁₀ - -	Particulate Matter, 10 microns or less
PM _{2.5} - -	Particulate Matter, 2.5 microns or less
ppm - -	Parts per million
PTE - -	Potential to emit
REG - -	Source Registration a/k/a Certificate of Registration
SIC - -	Standard Industrial Classification
TPY - -	Tons per year
TSP - -	Total Suspended Particulate
μg/m ³ - -	Micrograms per cubic meter
VOC--	Volatile organic compounds

INTRODUCTION

This facility is a nominal 100-150 MW simple cycle combustion turbine electric power generation unit fueled with both natural gas and fuel oil.

Pursuant to 20.11.42.12.C.(1).(a) NMAC, the Department specifies, with this permit, terms and conditions upon the operation of this facility to assure compliance with all applicable requirements, as defined in 20.11.42 NMAC at the time this permit is issued or as specified in the schedule of compliance contained herein.

Permit Shield

Pursuant to 20.11.42.12.C.(9) NMAC, compliance with the conditions of this permit shall be deemed to be compliance with any applicable requirements existing as of the date of permit issuance and identified in Table 1. The requirements in Table 1 are applicable to this facility with specific requirements identified for individual emission units. Emission units with no applicable requirements are not shown in Table 1. The requirements in Table 1A are applicable to this facility, but are not federally enforceable because they are not SIP approved. The Department has determined that the requirements in Table 2 as identified in the permit application are not applicable to this source.

This permit shield does not extend to administrative amendments, to minor permit modifications, to changes made under section 502(b)(10) of the federal Act, or to permit terms for which notice has been given to reopen or revoke all or part.

The Department deems compliance with this operating permit to be compliance with Prevention of Significant Deterioration/Construction Permit (PSD/CP) #0694-M3.

[The remainder of this page shall remain blank]

TABLE I-1: APPLICABLE REQUIREMENTS FOR THIS FACILITY

{There may be other requirements than those listed here.}

Applicable Requirements	Federally Enforceable	I F
20.11.5 NMAC Visible Air Contaminants This regulation limits visible emissions from stationary sources	X	
20.11.8 NMAC Ambient Air Quality Standards This regulation adopts the Federal and State ambient air quality standards	X	
20.11.20 NMAC Fugitive Dust Control This regulation requires each person shall use reasonably available control measures or any other effective control measures during active operations or on inactive disturbed surface areas, as necessary to prevent the release of fugitive dust, whether or not the person is required by 20.11.20 NMAC to obtain a fugitive dust control permit. The use of reasonable precautions to prevent particulate matter that is generated from becoming airborne, requires permits for disturbances exceeding ¼ acre, and requires controls on dirt roads.	X	
20.11.40 NMAC Source Registration This regulation addresses registration of a stationary air pollution sources.	X	
20.11.41 NMAC Construction Permits This regulation addresses pre-construction permitting of stationary air pollution sources. (The revised regulation that went into effect January 1, 2014 has not yet been approved into the SIP by EPA and is therefore not federally enforceable. However, the previous regulation that went into effect October 1, 2002 is federally enforceable.)	X	
20.11.42 NMAC Operating Permits This regulation addresses permitting of Title V major sources	X	
20.11.47 NMAC - Emissions Inventory Requirements This regulation requires sources to provide an emissions inventory to the Department on an annual basis	X	
20.11.49 NMAC Excess Emissions This regulation pertains to any source whose operation results in an emission of a regulated air pollutant, including fugitive emissions, in excess of the quality, rate, opacity or concentration specified by an air quality regulation or permit condition	X	
20.11.61 NMAC Prevention of Significant Deterioration This regulation addresses pre-construction and modifications of major NSR air pollution sources	X	
20.11.62 Acid Rain Program Permits This regulation addresses acid rain sources.	X	

Applicable Requirements	Federally Enforceable	I F
<p>20.11.63 NMAC New Source Performance Standards for Stationary Sources This regulation pertains to the national performance standards for stationary sources and incorporates the federal NSPS regulations</p>	X	
<p>20.11.64 NMAC Emission Standards for Hazardous Air Pollutants for Stationary Sources This regulation pertains to the national emission standards for hazardous air pollutants for stationary sources and incorporates the federal NESHAP regulations.</p>	X	
<p>20.11.67 NMAC Equipment, Emissions, Limitations This regulation pertains to oil and gas burning equipment.</p>	X	
<p>20.11.90 NMAC Administrative, Enforcement, Inspection This regulation pertains to source surveillance, performance tests and administration and enforcement regulations</p>	X	
<p>40 CFR 50 National Ambient Air Quality Standards This regulation adopts Federal ambient air quality standards.</p>	X	
<p>40 CFR 60 NSPS Subpart A – General Provisions Applies to all sources subject to a standard in 40 CFR 60</p>	X	
<p>40 CFR 60 NSPS Subpart GG – Standards of Performance for Stationary Gas Turbines The provisions of this subpart are applicable to all stationary gas turbines with a heat input at peak load to or greater than 10.7 gigajoules (10 million Btu) per hour and commenced construction, modification, or reconstruction after October 3, 1977</p>	X	
<p>40 CFR – 60 NSPS Subpart IIII – Standards of Performance for Stationary Compression Ignition Internal Combustion Engines Establishes national standards of performance and emissions for stationary source compression ignition internal combustion engines that commenced construction after July 11, 2005 and were manufactured after April 1, 2006.</p>		
<p>40 CFR 63 NESHAP Subpart A – General Provisions Applies to all sources subject to a standard in 40 CFR 63</p>	X	
<p>40 CFR 63 NESHAP Subpart ZZZZ – National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (RICE) Establishes national emission limitations and operating limitations for hazardous air pollutants (HAP) emitted from stationary reciprocating internal combustion engines (RICE) located at major and area sources of HAP emissions</p>	X	

Applicable Requirements	Federally Enforceable	I F
40 CFR 70 State Operating Permit Programs Establishes comprehensive State air quality permitting systems consistent with the requirements of Title V of the Clean Air Act	X	
40 CFR 72 Permits Regulation Establishes certain general provisions and the operating permit program requirements for affected sources and affected units under the Acid Rain Program	X	
40 CFR 73 Sulfur Dioxide Allowance System Establishes requirements and procedures for the allocation of sulfur dioxide emission allowances	X	
40 CFR 75 Continuous Emissions Monitoring Establishes continuous emissions monitoring requirements for sources subject to the Acid Rain Program.	X	
40 CFR 98 – Mandatory Greenhouse Gas Reporting Rule Establishes mandatory greenhouse gas (GHG) reporting requirements for owners and operators of certain facilities that directly emit GHG as well as for certain suppliers.	X	

TABLE I-1A: APPLICABLE REQUIREMENTS FOR THIS FACILITY–Locally Enf

The following regulations are pending review from the United States Environmental Protection Agency's and are therefore n

Applicable Requirements	Locally Enforceable	Entire Facility	
20.11.2 NMAC Fees This regulation establishes annual emissions fees for sources with source registrations, authority-to-construct permits, and Title V operation permits. (References to Operating Permits (20.11.42 NMAC) in subsection (A) of 20.11.2.2, subsection (B) of 20.11.2.11, subsection (B) of 20.11.2.12, subsections (A) and (B) of 20.11.2.13, and subsection (B) of 20.11.2.21 are not approved into the SIP. Therefore, the sections listed above are not federally enforceable.)	X	X	

TABLE I-2: NOT APPLICABLE REQUIREMENTS

The Department has determined that the following requirements identified in the Permit Application as potentially applicable for this facility. **{The applicant may have identified more or fewer requirements than are listed here.}**

Requirements Identified as Potentially Applicable in Application	Not Applicable For T Facility ⁽¹⁾
40 CFR 60 NSPS Subpart K through Kb – New Source Performance Standards for Petroleum Liquid Storage Vessels Exempt from requirements because storage tank contents have a vapor pressure less than 3.5 kPA	
40 CFR 61 NESHAP Subpart M – Asbestos No planned activity triggers applicability of this regulation.	X
40 CFR 64 – Compliance Assurance Monitoring Rio Bravo Generating station does use a control device to achieve compliance with an emission limitation and has potential pre-control emissions greater than the major source threshold, but is exempt from any requirements under 40 CFR 64 pursuant to 40 CFR 64.2(b)(1)(iii) and (vi).	
40 CFR 68 – Chemical Accident Prevention Provisions Rio Bravo Generating Station does not currently store propane, and therefore does not require a Risk Management Plan.	X

- (1) No existing or planned operation/activity at this facility triggers the applicability of these requirements.
- (2) Although these regulations may provide guidance, they do not impose any specific requirements on the operation of the facility.

[The remainder of this page shall remain blank]

Total Emissions

The total emissions from this facility, excluding insignificant or trivial activities, are shown in the following table. Emission limitations for individual units are shown in Section 3.2.

TABLE I-3: TOTAL REGULATED POLLUTANT EMISSIONS FROM ENTIRE FACILITY*

Pollutant	Emissions (tons per year)
Nitrogen Oxides (NO _x)	530
Carbon Monoxide (CO)	505
Total Suspended Particulates (TSP)	57
Particulate Matter (PM ₁₀)	57
Particulate Matter (PM _{2.5})	52
Sulfur Dioxide (SO ₂)	69
Volatile Organic Compounds (VOC)	34
Hazardous Air Pollutants (HAPs)	8

**Table above is for information only, not an enforceable condition.*

Insignificant Activities

Activities that meet the criteria of being insignificant or de minimis pursuant to this paragraph, do not trigger modification requirements under 20.11.41 NMAC or 20.11.42 NMAC are shown in the table below. The listed insignificant activities emissions in the below table are in addition to the listed Potential-To-Emit (PTE) and are for informational purposes only. Pursuant to Albuquerque/Bernalillo County Air Quality Control Regulations Title 20, Chapter 11, Part 42 (Part 42), Operating Permits, the Director of the Environmental Health Department (Department) may list certain activities located at major source as insignificant based on the activities' actual limitations, emission rates, or production rates and approved by the Administrator of the US Environmental Protection Agency (EPA). However, the Department may not consider any activity for which applicable requirements apply as insignificant, regardless of whether the activity meets the criteria as approved by EPA. The Facility is not required to notify the Department of changes that qualify under this section; however, the Facility shall maintain sufficient records to demonstrate compliance with the provisions of this section.

TABLE I-4: ESTIMATED EMISSIONS FROM INSIGNIFICANT ACTIVITIES

Emission Units	Pollutant/Parameter*
Aboveground Fuel Oil Storage Tank	VOC < 1 tpy

* The listed insignificant activities emissions in the above table are added to the portion of the PTE in the Table entitled "Total Regulated Pollutant Emissions from Entire Facility" which equals the total PTE for this source and are for informational purposes only.

**Table above is for information only, not an enforceable condition.

PERMIT TERMS AND CONDITIONS

1.0 GENERAL CONDITIONS

1.1 The following permit terms and conditions are placed upon the permittee in accordance with 20.11.42.12.B.(2) NMAC and 20.11.42.12.C.(1).(b) NMAC:

1.1.1 The permittee shall abide by all terms and conditions of this permit, except as allowed under section 502(b)(10) of the federal Act. Any permit noncompliance is grounds for enforcement action and significant or repetitious noncompliance may result in termination of this permit. Additionally, noncompliance with federally enforceable conditions of this permit constitutes a violation of the federal Act.

1.1.2 It shall not be a defense for the permittee in an enforcement action to claim that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

1.1.3 If the Department determines that cause exists to modify, reopen and revise, revoke and reissue, or terminate this permit, this shall be done in accordance with 20.11.42.13.F NMAC.

1.1.4 The permittee shall furnish any information the Department requests in writing to determine if cause exists for reopening and revising, revoking and reissuing, or terminating the permit, or to determine compliance with the permit. This information shall be furnished within the time period specified by the Department. Additionally, the permittee shall furnish, upon request by the Department, copies of records required by the permit to be maintained by the permittee.

1.1.5 A request by the permittee that this permit be modified, revoked and reissued, or terminated, or a notification by the permittee of planned changes or anticipated noncompliance, shall not stay any conditions of this permit.

1.1.6 This permit does not convey property rights of any sort, or any exclusive privilege.

1.2 The issuance of this permit, or the filing or approval of a compliance plan, does not relieve the permittee from civil or criminal liability for failure to comply with the state or federal Acts, or any applicable state or federal regulation or law. This condition is pursuant to 20.11.42.12.C.(1).(f) NMAC and New Mexico Air Quality Control Act NMSA 1978 74-2-2 through 74-2-23.

1.3 Severability Clause - If any section, paragraph, sentence, clause or word of this permit is for any reason held to be unconstitutional or otherwise invalid by any court, the decision shall not affect the validity of remaining provisions of PSD/CP #0694-M3. This condition is pursuant to 20.11.42.12.C.(1).(a).(iv) NMAC.

1.4 The permittee shall pay fees to the Department consistent with the fee schedule in 20.11.2 NMAC - Permit Fees. The fees will be assessed and invoiced separately from this permit. This condition is pursuant to 20.11.42.12.C.(1).(a).(v) NMAC.

1.5 A responsible official (as defined in 20.11.42 NMAC) shall certify the accuracy, truth and completeness of every report and compliance certification submitted to the Department as required by this permit. These certifications shall be part of each document. This condition is pursuant to 20.11.42.12.A.(5) NMAC.

1.6 Revocation or termination of this permit by the Department terminates the permittee's right to operate this facility. This condition is pursuant to 20.11.42.2.B.(2) NMAC.

1.7 The permittee shall submit an emissions inventory annually for this facility. This condition is pursuant to 20.11.47.14.B(1) NMAC.

1.8 The source will continue to comply with all applicable requirements. For applicable requirements that will become effective during the term of the permit, the source will meet such requirements on a timely basis. This condition is pursuant to 20.11.42.12.C.(6).(c) NMAC.

1.9 The conditions of PSD/CP #0694-M3 are incorporated into this permit in addition to all other applicable requirements including emission limits.

[The remainder of this page shall remain blank]

2.0 FACILITY INFORMATION

The following conditions are placed upon the permittee pursuant to 20.11.42.12.C.(1).(g) NMAC.

2.1 Process Equipment

All of the process equipment authorized for this facility is listed in the table(s) shown below (emission units that were identified as insignificant are not included):

TABLE 2-A: PROCESS EQUIPMENT TABLE

Process Equipment Unit No.	Unit Description	Manufacturer	Model Number	Serial Number	Date of Mfg. Equipment	Rated Process Rate	
						Nameplate Capacity:	
1	Gas Turbine	General Electric	PG 7241 (FA)	297-260	1998	Nameplate Capacity:	150 MW
						Heat Input Capacity (Natural Gas):	1582.1 mmBTU/hr
						Heat Input Capacity (#2 Fuel Oil):	1680.1 mmBTU/hr
2	Fire Pump Engine	Cummins	6BTA5.9-F2	45877044	T 1999	110 HP	
3	Emergency Power Generator Engine	Cummins	QSX15-G9	80019516	2017	755 HP	

2.2 Emission Control Equipment

All the pollution control equipment required for this facility is listed in the table shown below. Each emission point is identified by the same number that was assigned to it in the permit application:

TABLE 2-B: EMISSION CONTROL EQUIPMENT

Process Equipment Number	Type of Air Pollution Control Equipment	Manufacturer	Model Number	Serial Number	Achieved Control	Control Efficiency
1a Natural Gas	Dry low NO _x	GE 7FA	PG7241	297260	15 ppmv NO _x	40 to 50% by weight NO _x
1b #2 Fuel Oil	Water Injection	GE 7FA	PG7241	297260	42 ppmv NO _x	40 to 50% by weight NO _x

3.0 REQUIREMENTS FOR INDIVIDUAL EMISSIONS UNITS

Information regarding applicable requirements, emission limits, operational limitations and requirements, work practices, and monitoring, testing and recordkeeping requirements is provided below for each emissions unit or set of similar units.

3.1 Applicable Requirements

Applicable Requirements for this facility are shown in **TABLE I-1**. Emission Unit #1 and Unit #2 are subject to the unit-specific requirements that are referenced in **TABLE I-1**. This condition is pursuant to 20.11.42.12.C.(1)(a) NMAC.

3.2 Emissions Limits

3.2.1 The Facility is subject to the following emission limits:

TABLE 3-A: CRITERIA POLLUTANTS EMISSIONS LIMIT

Emission Unit Number	NO _x lb/hr	NO _x tpy	CO lb/hr	CO tpy	SO ₂ lb/hr	SO ₂ tpy	VOC lb/hr	VOC tpy	TSP lb/hr	TSP tpy	PM ₁₀ lb/hr	PM ₁₀ tpy	PM _{2.5} lb/hr	PM _{2.5} tpy
1a Natural Gas ^A	87.5	320.1	106.5	389.8	2.2	8.1	6	22	9.0	32.9	9.0	32.9	8.2	30
1b #2 Fuel Oil ^A	288.1	207.5	159.0	114.5	84.8	61.1	17	12	34.0	24.5	34.0	24.5	30.9	22.3
2 Fire Pump Engine	1.39	0.14	0.51	0.05	0.15	0.02	0.38	0.04	0.06	0.006	0.06	0.006	0.06	0.006
3 Emergency Generator Engine	7.19 ^C	1.8 ^C	4.33	1.1	0.0074	0.0019	0.80 ^C	0.20 ^C	0.25	0.063	0.25	0.063	0.25	0.063
TOTALS	N/A^B	529.54	N/A^B	505.45	N/A^B	69.22	N/A^B	34.24	N/A^B	57.47	N/A^B	57.47	N/A^B	52.37

^A 7,320 annual operating hours on pipeline quality natural gas and 1,440 operating hours on #2 fuel oil.

^B Total lb/hr are not shown since unit will operate on either natural gas only or #2 fuel oil only, not on both fuels simultaneously.

^C The emissions for NO_x and VOC are applicable to 40 CFR §60.4202 and in accordance with §60.4205(b) and §60.4202 shall meet the emission standards in 40 CFR §89.112(a) which are a combined standard of NO_x+VOC. The NO_x and VOC emission limits in this table are an extrapolated from of this standard as 90% NO_x and 10% VOC. Refer to 3.2.1.14.

TABLE 3-B: HAZARDOUS AIR POLLUTANTS EMISSIONS LIMIT

Emission Unit Number	Formaldehyde lb/hr	Formaldehyde tpy	Total HAPS lb/hr	Total HAPS tpy
1a Natural Gas ^A	1.12	4.11	1.63	5.95
1b #2 Fuel Oil ^A	0.47	0.34	2.16	1.56
TOTALS	N/A^B	4.45	N/A^B	7.51

^A 7,320 annual operating hours on pipeline quality natural gas and 1,440 operating hours on #2 fuel oil.

^B Total lb/hr are not shown since unit will operate on either natural gas only or #2 fuel oil only, not on both fuels simultaneously.

TABLE 3-C: EMISSIONS LIMIT PER 40 CFR 60 SUBPART GG

Emission Unit Number	NO _x ^A	SO ₂
1a Natural Gas	109.9 ppm @ 15% O ₂	0.8% Sulfur by weight in fuel or discharged into the atmosphere, any gases which contain sulfur dioxide in excess of 0.015% by volume at 15% oxygen and on a dry basis

Emission Unit Number	NO _x ^A	SO ₂
1b #2 Fuel Oil	102.9 ppm @ 15% O ₂	0.8% Sulfur by weight in fuel or discharged into the atmosphere, any gases which contain sulfur dioxide in excess of 0.015% by volume at 15% oxygen and on a dry basis

^A Compliance with NO_x ppm 15% O₂ emission limits based on 4-hour rolling average, per 40 CFR 60.334 (j)(1)(iii)(A-C).

TABLE 3-D: EMISSIONS LIMIT PER 20.11.67 NMAC

Emission Unit Number	NO_x^C lb/million BTUs	SO₂^D lb/million BTUs	Particulate Matter (PM₁₀)^E lb/million BTUs
1a Natural Gas ^A	0.2	N/A ^B	N/A ^B
1b #2 Fuel Oil ^A	0.3	0.34	0.03

^A 7,320 annual operating hours on pipeline quality natural gas and 1,440 operating hours on #2 fuel oil. ^B 20.11.67 NMAC does not specify a limit.

^C Compliance with NO_x lb/MMBtu emission limits based on 30-day rolling average. Refer to Conditions 3.2.1.9, and 3.2.1.12. ^D Compliance with SO₂ lb/MMBtu emission limits based on 30-day rolling average. Refer to Condition 3.2.1.11. ^E Compliance with PM₁₀ lb/MMBtu emission limits based on semi-annual TPM average. Refer to Condition 3.2.1.10 and 3.2.1.6.3.

3.2.1.1 Compliance with the NO_x tpy emission limitation for Emission Unit #1 in **TABLE 3-A** of Condition 3.2.1 shall be based on a monthly rolling 12-month total. To determine compliance with the tpy emission limit for NO_x, the hourly lb/hr NO_x values measured by the CEMS shall be summed for each fuel type for each monthly rolling 12-month total. Any operation within an hour on a given fuel is included as an operating hour for that fuel.

3.2.1.2 Compliance with the NO_x lb/hr emission limitation for Emission Unit #1 in **TABLE 3-A** of Condition 3.2.1 shall be based on the hourly lb/hr NO_x values measured by the CEMS for a given hour. Any operation within an hour on a given fuel is included as an operating hour for that fuel. For any hour containing a startup or shut-down cycle, while firing on either natural gas or #2 fuel oil, an excess emission is defined as an hourly lb/hr NO_x value measured by the CEMS that exceeds 288.1 lb/hr. For all other operating hours, an excess emission is defined as an hourly lb/hr NO_x value measured by the CEMS that exceeds the applicable NO_x lb/hr emission limitation in Table 3-A of Condition 3.2.1.

3.2.1.3 Compliance with the CO and VOC lb/hr emission limitation for Emission Unit #1 in **TABLE 3-A** of Condition 3.2.1 shall be based on the averaging period specified in EPA 40 CFR 60, Appendix A, Reference Method 10 and Method 25A, respectively, or other method as approved by the Department.

3.2.1.4 Compliance with the CO and VOC tpy emission limitation for Emission Unit #1 in **TABLE 3-A** of Condition 3.2.1 shall be determined using the CO and VOC lb/hr emission rates.

3.2.1.5 Compliance with the SO₂ lb/hr emission limitation for Emission Unit #1 in **TABLE 3-A** of Condition 3.2.1 shall be based on the use of pipeline quality natural gas and #2 fuel oil with less than 0.05% sulfur by weight. The fuel sulfur content and hours of operation on each fuel shall be used to determine tons per year emissions.

3.2.1.6 Compliance with the PM_{2.5}, PM₁₀, and TSP emission limitations for Emission Unit #1 in **TABLE 3-A** of Condition 3.2.1 shall be based on compliance with Conditions 3.2.1.6.1, 3.2.1.6.2, and 3.2.1.6.3.

3.2.1.6.1 Work Practice Standards

1. Low Sulfur Fuel Oil: During oil operations, combust only low sulfur #2 fuel oil (less than 0.05% sulfur by weight) and maintain records of the sulfur content of each shipment of #2 fuel oil delivery based on the methods described in 40 CFR 75.
2. Pipeline Quality Natural Gas: During natural gas operations, combust only pipeline quality natural gas.
3. Hours of Operation: Monitoring and recordkeeping of the hours of operation on natural gas and #2 fuel oil.
4. Good Air Pollution Control Practices: At all times facility shall, to the extent practicable, maintain and operate the affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions.
5. Periodic Tuning: The permittee shall perform maintenance and inspect equipment during planned outages and shall perform turbine tuning whenever major combustion components are replaced.

3.2.1.6.2 Method 9 Opacity Readings During Oil Operations: When firing #2 fuel oil in Emission Unit #1, visible emissions from the stack shall be monitored daily in accordance with Condition 3.4.1.5.2.

3.2.1.6.3 Semi-Annual Compliance Demonstration Based on Monitoring Data

Calculate the average TPM (total particulate matter) emissions semi-annually using the following formula.

Assume TPM = TSP = PM₁₀ = PM_{2.5} for compliance purposes.

$$\text{TPM} = \text{F} + \text{W} + \text{S} + \text{O}$$

where:

- TPM = total particulate matter
- F = PM formed from fuel ash
- W = PM from dissolved solids in the NO_x control water
- S = inorganic condensable PM due to SO₃ formation
- O = organic condensable PM

Each term of the above formula shall be calculated as follows when fired on natural gas to determine the semi-annual average TPM in (lb/hr).

TABLE 3-E: HOW TO CALCULATE AVERAGE TPM WHEN USING NATURAL GAS IN LB/HR

Term	Calculation	Explanation
F	= 0	Natural gas contains no ash.
W	= 0	NO _x control water injection not used when firing on natural gas.
S	= (Q _{fuel})(S _{fuel})(F1)(3.06 lb H ₂ SO ₄ / 1 lb S)	(Q _{fuel}) = total natural gas usage / total hours of operation (scf/hr) (S _{fuel}) = sulfur concentration of fuel = (0.5 grains S/100 scf)(1 lb/ 7,000 grains) (F1) = fraction of sulfur in fuel converted to H ₂ SO ₄ which can condense into PM = (0.0005) (3.06 lb H ₂ SO ₄ / 1 lb S) = mass ratio for H ₂ SO ₄ to sulfur
O	= 5.23 (lb/hr)	100% of VOC emissions from 2000 stack test when fired on natural gas.

Each term of the above formula shall be calculated as follows when fired on #2 fuel oil to determine the semi-annual average TPM in (lb/hr).

TABLE 3-F: HOW TO CALCULATE AVERAGE TPM WHEN USING #2 FUEL OIL IN LBS/HR

Term	Calculation	Explanation
F	= (Q _{fuel})(A _{fuel})	(Q _{fuel}) = total #2 fuel oil usage / total hours of operation (lb/hr) (A _{fuel}) = fuel ash concentration from fuel oil analysis (%)
W	= (Q _{water})(TDS)	(Q _{water}) = total water used for NO _x control / total hours of operation (lb/hr) (TDS) = total dissolved solids in NO _x control water (ppm)
S	= (Q _{fuel})(S _{fuel})(F1)(3.06 lb H ₂ SO ₄ / 1 lb S)	(Q _{fuel}) = total #2 fuel oil usage / total hours of operation (lb oil/hr) (S _{fuel}) = sulfur concentration of fuel from fuel oil analysis (ppm) (F1) = fraction of sulfur in fuel converted to H ₂ SO ₄ which can condense into PM = (0.0005) (3.06 lb H ₂ SO ₄ / 1 lb S) = mass ratio for H ₂ SO ₄ to sulfur
O	= 4.77 (lb/hr)	100% of VOC emissions from 2000 stack test when fired on #2 fuel oil.

Each term of the above formula shall be calculated as follows when fired on #2 fuel oil to determine the semi-annual average TPM in (lb/MMBtu).

TABLE 3-G: HOW TO CALCULATE AVERAGE TPM WHEN SUING #2 FUEL OIL IN LB/MMBTU

Term	Calculation	Explanation
F	$(Q_{fuel})(A_{fuel})$	(Q_{fuel}) = total fuel oil usage / total heat input (lb/MMBtu) (A_{fuel}) = fuel ash concentration from fuel oil analysis (%)
W	$(Q_{water})(TDS)$	(Q_{water}) = total water used for NO _x control / total heat input (lb/MMBtu) (TDS) = total dissolved solids in NO _x control water (ppm)
S	$(Q_{fuel})(S_{fuel})(F1)(3.06 \text{ lb H}_2\text{SO}_4 / 1 \text{ lb S})$	(Q_{fuel}) = total fuel oil usage / total heat input (lb/MMBtu) (S_{fuel}) = sulfur concentration of fuel from fuel oil analysis (ppm) $(F1)$ = fraction of sulfur in fuel converted to H ₂ SO ₄ which can condense into PM = (0.0005) $(3.06 \text{ lb H}_2\text{SO}_4 / 1 \text{ lb S})$ = mass ratio for H ₂ SO ₄ to sulfur
O	$0.0033 \text{ (lb/MMBtu)}$	100% of VOC emissions from 2000 stack test when fired on #2 fuel oil.

The facility shall submit the lb/hr and lb/MMBtu TPM values in the semi-annual monitoring report as required in Section 5.0.

Annual TPM will be calculated by multiplying the average of the semi-annual TPM values during the reporting period by the operating hours during the reporting period.

3.2.1.7 In accordance with 40 CFR 60.332, when operating on natural gas or #2 fuel oil, Emission Unit #1 shall comply with the applicable NO_x standard specified in TABLE 3-C of Condition 3.2.1. Emission Unit #1, when operating on natural gas or #2 fuel oil, shall not exceed the more stringent of the applicable NO_x standard as specified in Table 3-C of Condition 3.2.1 or the lb/hr emission limit as specified in the TABLE 3-A of Condition 3.2.1.

3.2.1.8 In accordance with either 40 CFR 60.333 (a) or (b), when operating on natural gas or #2 fuel oil, Emission Unit #1 shall comply with the SO₂ standard as specified in TABLE 3-C of Condition 3.2.1. Emission Unit #1, when operating on natural gas or #2 fuel oil, shall not exceed the more stringent of the SO₂ standard as specified in TABLE 3-C of Condition 3.2.1 or the lb/hr emission limit as specified in TABLE 3-A of Condition 3.2.1.

3.2.1.8.1 Per 40 CFR 60.333 (a), Emission Unit #1 shall not cause to be discharged into the atmosphere, any gases which contain sulfur dioxide in excess of 0.015% by volume at 15% oxygen and on a dry basis.

3.2.1.8.2 Per 40 CFR 60.333 (b), Emission Unit #1 shall not burn any fuel that contains sulfur in excess of 0.8% by weight.

3.2.1.9 In accordance with 20.11.67.17 NMAC, the NO₂ emissions from Emission Unit #1 when operating on #2 fuel oil shall be limited to 0.3 pounds/million BTUs based on a 30 day rolling average. Compliance with the standard shall be based on a 30-day rolling average, updated every 24 hours from midnight to midnight, representing one turbine operating day. The 30-day rolling average shall be calculated by summing the daily averages of 30 sequential (not necessarily consecutive) valid turbine operating days divided by thirty (30). A valid turbine operating day shall have at least three (3) operating hours. Daily averages shall be calculated by averaging the hourly NO₂ values during each day from midnight to midnight, and shall not include hours in which the unit did not operate. NO₂ is a component of NO_x, therefore compliance with the standard may be shown using NO_x CEMS data.

3.2.1.10 In accordance with 20.11.67.18 NMAC, the PM₁₀ emissions from Emission Unit #1 when operating on #2 fuel oil shall be limited to 0.03 pounds/million BTUs. Compliance with the standard shall be based on the semi-annual TPM emissions calculation in TABLE 3-G of Condition 3.2.1.6.3.

3.2.1.11 In accordance with 20.11.67.19 NMAC, the SO₂ emissions from Emission Unit #1 when operating on #2 fuel oil shall be limited to 0.34 pounds/million BTUs based on a 30 day rolling average. Compliance with the standard shall be based on a 30-day rolling average, updated every 24 hours from midnight to midnight, representing one turbine operating day. The 30 – day rolling average shall be calculated by summing the daily averages of 30 sequential (not necessarily consecutive) valid turbine operating days divided by thirty (30). A valid turbine operating day shall have at least three (3) operating hours. Daily averages shall be calculated by averaging the hourly SO₂ values during each day from midnight to midnight, and shall not include hours in which the unit did not operate.

3.2.1.12 In accordance with 20.11.67.20.A NMAC, the NO₂ emissions from Emission Unit #1 when operating on natural gas shall be limited to 0.2 pounds/million BTUs based on a 30 day rolling average. Compliance with the standard shall be based on a 30-day rolling average, updated every 24 hours from midnight to midnight, representing one turbine operating day. The 30-day rolling average shall be calculated by summing the daily averages of 30 sequential (not necessarily consecutive) valid turbine operating days divided by thirty (30). A valid turbine operating day shall have at least three (3) operating hours. Daily averages shall be calculated by averaging the hourly NO₂ values during each day from midnight to midnight, and shall not include hours in which the unit did not operate. NO₂ is a component of NO_x, therefore compliance with the standard may be shown using NO_x CEMS data.

3.2.1.13 Compliance with the lb/hr emission limits for Emission Unit #2 in **TABLE 3-A** of Condition 3.2.1, shall be shown by meeting the requirements of 40 CFR 63 Subpart ZZZZ. Compliance with the 12-month rolling total tpy emission limits for Emission Unit #2 in **TABLE 3-A** of Condition 3.2.1, shall be shown by multiplying the lb/hr emission rate from the table for each pollutant by Emission Unit #2’s total operating hours for the 12-month reporting period.

3.2.1.14 In accordance with 40 CFR 60, Subpart IIII §60.4205(b), owner and operators of 2007 model year and later emergency stationary diesel-powered engines with a displacement of less than 30 liters per cylinder that are not fire engines must comply with the emission standards for new nonroad diesel engines in 40 CFR §60.4202, for all pollutants, for the same model year and maximum engine power for their 2007 model year and later emergency stationary diesel engine. In accordance with §60.4205(b), and §60.4202 Emission Unit #3 shall comply with the emission standards in 40 CFR §89.112(a) for the same model year and maximum engine power. Per 40 CFR §89.112(a) Emission Unit #3 must meet emission standards of 3.5 g/kW-hr (2.6 g/hp-hr) CO, 6.4 g/kW-hr (4.8 g/hp-hr) NMHC+NO_x, and 0.2 g/kW-hr (0.15 g/hp-hr) PM)

TABLE 3-H: 40 CFR 60 SUBPART IIII LIMITS, REQUESTED EMISSION RATE, AND PERMITTED EMISSION LIMITS

Pollutant	40 CFR 60 Subpart IIII Limit (40 CFR 89.112)		Requested Emission Rate		Permitted Emission Limits		Permitted Emission Limits In Compliance with NSPS?
	g/kW-hr	g/hp-hr	g/kW-hr	g/hp-hr	g/kW-hr	hp-hr	
CO	3.5	2.6	3.5	2.6	3.5	4.33	Yes
NMHC+NO _x	6.4	4.8	6.4	4.8	6.4	8.0	Yes
PM	0.2	0.15	0.2	0.15	0.2	0.25	Yes

3.2.1.15 For Emission Unit #3, compliance with NO_x, CO, VOC, TSP, PM₁₀, and PM_{2.5} pound per hour (lb/hr) emissions limits shall be shown by purchasing an engine certified to the emission standards in 40 CFR §89.112(a) in accordance with 40 CFR §60.4211(c). Compliance with the SO₂ pound per hour (lb/hr) emissions, shall be shown by using fuel meeting the requirement in Condition 3.3.3.4.

3.2.2 The Facility is subject to the following visible emission limits:

3.2.2.1 Emission Unit #1 is subject to the following opacity limits during any six (6) minute timed average pursuant to 20.11.5 NMAC, 20.11.67.18.A NMAC, and 20.11.67.18.C.(1).

TABLE 3-I: OPACITY LIMIT FOR EMISSION UNIT #1

Unit #	Operational Condition	Percent Opacity Limitation	Applicable Requirement
1	Normal Operations ^A	20	20.11.5.12 NMAC 20.11.67.18.A NMAC
1	Changing Fuels	27 ^B	20.11.67.18.C.(1) NMAC

^ANormal operations includes both natural gas firing and fuel oil firing.

^BOpacity limit is for a period or periods aggregating not more than 6 minutes in any 60-minute period.

3.2.2.2 Emission Unit #2 shall not cause or allow visible air emissions to exceed 20 percent opacity for any six (6) minute timed average. During the first twenty (20) minutes of cold start-up, the visible emissions shall not exceed 40 percent opacity for any (6) minute timed average. No increase of load shall be applied so as to cause an emission having opacity greater than 40 percent during any time interval. This condition is pursuant to 20.11.5.13.C NMAC.

3.2.2.3 Emission Unit #3 shall not cause or allow visible air emissions from any stationary diesel powered engine to exceed 20 percent opacity for any six (6) minute timed average. During the first twenty (20) minutes of cold start-up, the visible emissions shall not exceed 40 percent opacity for any (6) minute timed average. No increase of load shall be applied so as to cause an emission having an opacity greater than 40 percent during any time interval. This condition is pursuant to 20.11.5.13.C NMAC.

Conditions of Section 3.2 are pursuant to 40 CFR 50, 40 CFR 60, 20.11.5.13.C NMAC, 20.11.42.12.C.(1).(a), (g) and (h) NMAC and PSD/CP #0694-M3.

3.3 Operational Requirements

3.3.1 Emission Unit #1 is subject to the following operational requirements and limitations:

TABLE 3-J: OPERATIONAL REQUIREMENTS

Unit#	Maximum 12 Month Rolling Total Operating Hours
1a Natural Gas	7,320
1b #2 Fuel Oil	1,440

3.3.2 Emission Unit #2 is subject to the following operational requirements and limitations:

3.3.2.1 In accordance with 40 CFR 63 Subpart ZZZZ, §63.6640(f)(1), there is no time limit on its use in emergency situations. However, in order for the engine to be considered an emergency engine, non-emergency operation is limited to the following:

3.3.2.1.1 Maintenance checks and readiness testing on Emission Unit #2 is limited to 100 hours per year.

3.3.2.1.2 Emission Unit #2 may operate for other non-emergency purposes for 50 hours per year, but counts towards hours for non-emergency operation. The 50 hours of operation cannot be used for peak shaving or non-emergency demand response, or to generate income for a facility to an electric grid or otherwise supply power as part of a financial arrangement with another entity.

3.3.2.2 For Emission Unit #2, in accordance with 40 CFR 63 Subpart ZZZZ §63.6603(a), the Facility must comply with the requirements in 40 CFR 63 Subpart ZZZZ Table 2d, line 4 that apply:

3.3.2.2.1 Change oil and filter every 500 hours of operation or annually, whichever comes first;

3.3.2.2.2 Inspect air cleaner every 1000 hours of operation or annually, whichever comes first and replace as necessary;

3.3.2.2.3 Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.

3.3.2.3 In accordance with 40 CFR 63 Subpart ZZZZ §63.6625(e)(3), the Facility must operate and maintain Emission Unit #2 according to the manufacturer's emission-related written instructions or the Facility may develop their own maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions.

3.3.2.4 In accordance with 40 CFR 63 Subpart ZZZZ §63.6625(h), the Facility must minimize the time Emission Unit #2 is spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes.

3.3.3 Emission Unit #3 is subject to the following operational requirements and limitations

3.3.3.1 In accordance with 40 CFR 63 Subpart ZZZZ §63.6590(c), an affected source that is a new or reconstructed stationary RICE located at an area source "must meet the requirements of this part by meeting the requirements of 40 CFR 60 Subpart IIII, for compression ignition engines." The permittee shall comply with the specific requirements of Subpart IIII applicable to new stationary compression ignition internal combustion engines. meeting the definition of a new engine.

3.3.3.2 Emission Unit #3 is subject to Federal New Source Performance Standards (NSPS), 40 CFR 60 Subpart IIII Operating Permit #2093-RN1-M1

- Standards of Performance for Stationary Compression Ignition Internal Combustion Engines, and Subpart A - General Provisions. Emission Unit #3 will commence construction after July 11, 2005 and will be manufactured after April 1, 2006. Accordingly, Emission Unit #3 shall comply with all applicable requirements of 40 CFR 60 Subparts A and IIII.

3.3.3.3 Emission Unit #3 shall be restricted to a maximum of 500 hours of operation based on a 12-month rolling total, and shall only be operated during loss of commercial power and as required by the manufacturer for engine exercising/maintenance. Pursuant to 40 CFR 60 Subpart IIII §60.4211(f), Emission Unit #3 shall be limited to 100 hours per year of maintenance checks and readiness testing. Emission Unit #3 may operate up to 50 hours per year in non-emergency situations, but those 50 hours are counted towards the 100 hours per year provided for maintenance and testing. The 50 hours per year for non-emergency situations cannot be used for peak shaving or to generate income for the facility to supply power to an electric grid or otherwise supply non-emergency power as part of a financial arrangement with another entity. Routine or non-emergency operation of the unit or operation for any other purposes, except as stated above, shall be a violation of this permit.

3.3.3.4 In order to comply with 40 CFR 60, Subpart IIII §60.4207(b), the diesel fuel used in Emission Unit #3 shall meet the following per-gallon standards per 40 CFR 1090.305 for nonroad diesel fuel:

3.3.3.4.1 Sulfur Standard: Maximum sulfur content of 15 ppm. and

3.3.3.4.2 Cetane index or aromatic content. Diesel fuel must meet one of the following standards:

3.3.3.4.2.1 Minimum cetane index of 40; or

3.3.3.4.2.2 Maximum aromatic content of 35 volume percent.

3.3.3.5 The permittee shall operate and maintain Emission Unit #3 according to the manufacturer's written instructions or procedures developed by the permittee that have been approved by the manufacturer. In addition, the permittee may only change those settings that are allowed by the manufacturer. The permittee must also meet the requirements of 40 CFR Parts 89, 94, and/or 1068 as they apply. This condition is Pursuant to 40 CFR 60 Subpart IIII §60.4211.

3.3.4 All equipment shall be maintained per manufacturer specifications to ensure the emissions remain at or below the permitted levels.

Conditions of Section 3.3 are pursuant to 20.11.42.12.C.(1).(a), (g) and (h) NMAC and PSD/CP #0694-M3.

3.4 Emissions Monitoring and Testing Requirements

The following monitoring and/or testing requirements (except those requirements involving direct sampling of exhaust from an emission unit, and except those requirements that originate in an applicable requirement) shall be used as indicators of compliance with applicable requirements and emission limits. Monitoring that indicates a facility may not be in compliance with those applicable requirements will require additional monitoring and/or testing of the affected emission units to be determined by the Department, and may result in a determination of non-compliance with the applicable requirement. Failure to perform the monitoring or testing required by this permit is non-compliance with this permit.

3.4.1 Specific Monitoring Requirements

Emission Unit #1, Emission Unit #2 and Emission Unit #3 are subject to the following emissions monitoring requirements:

TABLE 3-K: MONITORING AND TESTING REQUIREMENTS

Unit #	Parameters to Monitor	To Comply With Condition(s)	Monitoring Required	Monitoring Method and Frequency
1	NO _x	3.2.1.1	Continuous Emissions Monitoring (CEMS)	See Condition 3.4.1.1
		3.2.1.2		
		3.2.1.7		
		3.2.1.9		
		3.2.1.12		
1	CO and VOC	3.2.1.3	Periodic Emissions Testing or Fuel Usage	See Condition 3.4.1.2
		3.2.1.4		
1	SO ₂	3.2.1.5	Fuel Sulfur Content and Fuel Usage	See Condition 3.4.1.3
		3.2.1.8		
		3.2.1.11		
1	Total Particulate Matter (TSP, PM ₁₀ , PM _{2.5})	3.2.1.6	Semi-Annual Compliance Demonstration Method	See Condition 3.4.1.4
		3.2.1.10		
1, 2, 3	Visible Emissions	3.2.2.1	Opacity	See Condition 3.4.1.5
		3.2.2.2		
		3.2.2.3		
1	Operating Hours	3.3.1	Operations	See Condition 3.4.1.6
2	Operating Hours	3.2.1.13	Operations	See Condition 3.4.1.7
		3.3.2.1		
1	NO _x , SO ₂ , CO	Conditions 6(d) or 6(e) of PSD/CP #0694-M3	Conditional Emission Testing	See Condition 3.4.1.8
1	NO _x and SO ₂	40 CFR 60, Subpart A and GG	CEMS, Fuel Sulfur Content, and Fuel Usage	See Condition 3.4.1.9
1	CO ₂ , CH ₄ , and N ₂ O	40 CFR 98 Mandatory Greenhouse Gas Reporting Subpart A - <u>General Provisions</u> and Subpart C - <u>General Stationary Fuel Combustion Sources</u> .	Recordkeeping	See Condition 3.4.1.10

3.4.1.1 Emission Unit #1 is equipped with a Continuous Emissions Monitoring System (CEMS) for monitoring NO_x emissions as required by 40 CFR 75. The permittee shall demonstrate compliance with Conditions 3.2.1.1, 3.2.1.2, 3.2.1.7, 3.2.1.9, and 3.2.1.12 using NO_x CEMS data.

3.4.1.2 For Emission Unit #1, the permittee shall demonstrate compliance with Conditions 3.2.1.3 and 3.2.1.4 by conducting periodic emission tests for CO and VOC or monitoring fuel usage required in Condition 3.4.1.4.1. Fuel usage shall be monitored with flow meters. Annual compliance testing has not been imposed at this time. An initial performance test of Emission Unit #1 was conducted in June 2000. The initial performance test was conducted in accordance with EPA Method 10 for CO, EPA Method 25A for VOC, and the methods contained in Appendix A of 40 CFR 60. Additional emission testing may be re-imposed if inspections indicate noncompliance with permit conditions. Any additional emission tests shall be conducted in accordance with EPA Method 10, 25A, and the methods contained in Appendix A of 40 CFR 60, unless otherwise approved by the Department.

3.4.1.3 For Emission Unit #1, the permittee shall demonstrate compliance with Conditions 3.2.1.5, 3.2.1.8, 3.2.1.11 by monitoring fuel sulfur content and fuel usage. Monitoring of the sulfur content of natural gas fuel shall be conducted in accordance with 40 CFR 60.334(i)(3). Monitoring of the sulfur content of #2 fuel oil shall be conducted in accordance with 40 CFR 75 Appendix D Section 2.2.4. Fuel usage shall be monitored with flow meters for Emission Unit #1

3.4.1.4 For Emission Unit #1, the permittee shall demonstrate compliance with Conditions 3.2.1.6 and 3.2.1.10 using the Semi-Annual Compliance Demonstration Method contained in Condition 3.2.1.6.1 through 3.2.1.6.3. The permittee shall monitor the following parameters used in the calculations required in Condition 3.2.1.6.3:

3.4.1.4.1 Operational hours, hourly fuel usage, and fuel type on a daily basis.

3.4.1.4.2 Fuel oil ash content data for each shipment of #2 fuel oil using ASTM-D482 or equivalent test method.

3.4.1.4.3 Fuel oil sulfur content for each shipment of #2 fuel oil based on the methods described in 40 CFR 75.

3.4.1.4.4 TDS value of water used for NO_x control based on laboratory analysis every 6 months, value used in calculation will be lab results or minimum laboratory detection limit if results are non-detect.

3.4.1.4.5 Hourly water injection rate used during #2 fuel oil combustion.

3.4.1.5 The permittee shall demonstrate compliance with Conditions 3.2.2.1, 3.2.2.2, and 3.2.2.3 by monitoring visible emissions as follows:

3.4.1.5.1 For Emission Unit #1, Monitoring of visible emissions when firing on natural gas shall require monitoring and recording the amount of natural gas used on an hourly basis.

3.4.1.5.2 For Emission Unit #1, In accordance with 20.11.5.15 NMAC monitoring of visible emissions when firing on #2 fuel oil shall be performed daily utilizing 40 CFR 60 Appendix A, Method 9 and shall include two six-minute observation periods. Daily opacity monitoring is not required when conditions do not meet the position criteria described in Section 2.1 of 40 CFR 60 Appendix A, Method 9, including the requirement that the qualified observer stand with the sun oriented in the 140° sector to his back.

3.4.1.5.3 For Emission Unit #2, monitoring of visible emissions shall be conducted annually utilizing 40 CFR 60 Appendix A, Method 9.

3.4.1.5.4 For Emission Unit #3, monitoring of visible emissions shall be conducted annually utilizing 40 CFR 60 Appendix A, Method 9.

3.4.1.6 The permittee shall demonstrate compliance with Condition 3.3.1 by monitoring the monthly hours of operation for Emission Unit#1 for each fuel.

3.4.1.7 Emission Unit #1 shall comply with the general monitoring requirements of the Federal Mandatory Operating Permit #2093-RN1-M1

Greenhouse Gas Reporting Rule 40 CFR 98 Subpart A - General Provisions, and Subpart C – General Stationary Fuel Combustion Sources.

3.4.1.8 For Emission Unit #1, additional emission testing may be required by Conditions 6(d) or 6(e) of PSD/CP #0694-M3, and shall be conducted in accordance with Conditions 6(g), 6(h), and 6(i) of PSD/CP #0694-M3.

3.4.1.9 For Emission Unit #1, the permittee shall meet the applicable monitoring requirements of 40 CFR 60, Subpart A and GG.

3.4.1.10 The permittee shall demonstrate compliance with Condition 3.2.1.13 and 3.3.2.1 by monitoring hours of operation for Emission Unit #2 using a non-resettable hour meter.

3.4.1.11 The permittee shall demonstrate compliance with Condition 3.2.1.15 and 3.3.3.3 by monitoring hours of operation for Emission Unit #3 using a non-resettable hour meter.

3.4.2 General Monitoring Requirements

3.4.2.1 The permit shall contain all emissions monitoring requirements, and analysis procedures or test methods required to assure and verify compliance with the terms and conditions of the permit and applicable requirements including any procedures and methods promulgated by the Administrator. This condition is pursuant to 20.11.42.12.C.(3)(a) NMAC.

3.4.2.2 Where the applicable requirement does not require periodic testing or instrumental or non-instrumental monitoring (which may consist of recordkeeping designed to serve as monitoring), the permit shall require periodic monitoring sufficient yield reliable data from the relevant time period that are representative of the source's compliance with the permit. Such monitoring requirements shall assure use of terms, test methods, units, averaging periods, and other statistical conventions consistent with the applicable requirement. This condition is pursuant to 20.11.42.12.C.(3)(b) NMAC.

3.4.2.3 The permit shall also contain specific monitoring requirements concerning the use, maintenance, and, when appropriate, installation of monitoring equipment or methods. This condition is pursuant to 20.11.42.12.C.(3)(c) NMAC.

Conditions of Section 3.4 are pursuant to 20.11.42.12.C.(3) NMAC, 40 CFR 60 Subpart GG, 40 CFR 75 and PSD/CP #0694-M3.

4.0 RECORDKEEPING

4.1 Specific Recordkeeping Requirements

The permittee shall follow the record keeping requirements listed below and provide any other information the Department may request to demonstrate the accuracy of the monitoring.

4.1.1 Emission Unit #1 Gas Turbine Recordkeeping

4.1.1.1 For Emission Unit #1 as required by 40 CFR 75.12(c) the permittee shall calculate the hourly, quarterly, and annual NO_x emission rates (in lb/mmBtu) by combining the NO_x concentration (in ppm), diluent concentration (in percent O₂ or CO₂), and percent moisture (if applicable) measurements according to the procedures in appendix F of 40 CFR Part 75. The permittee shall maintain records of the NO_x emission rate calculations and records of the measurements used in the calculations.

4.1.1.2 Maintain records of periodic emission testing for CO and VOC in accordance with Condition 3(f) of PSD/CP #0694-M3.

4.1.1.3 Maintain records of sulfur content of fuel and fuel usage consistent with Condition 3.4.1.3.

4.1.1.4 Maintain records of the parameters monitored in Condition 3.4.1.4 for the Semi-Annual Compliance Demonstration Method.

4.1.1.5 Maintain records of visible emissions monitoring for Emission Unit #1 consistent with Condition 3.4.1.5.

4.1.1.6 Maintain and record the monthly operating hours for each type of fuel for Emission Unit #1. These records shall also show the total hours of operation in any given 12-month period for each type of fuel.

4.1.1.7 Maintain records of emission testing required by Condition 3.4.1.8 in accordance with Condition 3 (f) of PSD/CP #0694-M3.

4.1.1.8 Maintain records in accordance with 40 CFR 60 Subpart A and GG.

4.1.1.8.1 Maintain a file of all measurements including performance test measurements in a permanent form suitable for inspection. The file shall be retained for at least two years following the date of such measurements, maintenance, reports, and records in accordance with 40 CFR 60 Subpart A §60.7(f).

4.1.1.8.2 Maintain records of fuel sulfur content required by Condition 3.4.1.3, 40 CFR 60.334(i)(3) for natural gas fuel and 40 CFR 75 Appendix D Section 2.2.4 for #2 fuel oil.

4.1.1.8.3 Maintain records for excess emissions and downtime required by 40 CFR 60.334(j)(iii).

4.1.1.9 The permittee shall comply with the general recordkeeping requirements found in 40 CFR 98.3. Maintain records of Greenhouse Gas emissions as specified in 40 CFR 98.37. The permittee shall comply with the recordkeeping requirements of 40 CFR 98.3(g) and §98.37.

4.1.1.10 Maintain records of turbine tuning, maintain record of maintenance and maintain records of inspect of equipment during planned outages and whenever major combustion components are replaced conducted per Condition 3.2.1.6.1.

4.1.1.11 Maintain records of the occurrence and duration of any startup, shutdown, or malfunction in the operation of an affected facility; any malfunction of the air pollution control equipment; or any periods during which a continuous monitoring system or monitoring device is inoperative in accordance with 40 CFR 60 Subpart A §60.7(b)

4.1.2 Emission Unit #2 Fire Pump Engine Recordkeeping

4.1.2.1 Maintain an accurate monthly log for Emission Unit #2 hours of operation, both as a monthly total and as a 12-month rolling total.

4.1.2.2 In accordance with 40 CFR 63 Subpart ZZZZ §63.6655(d) and Table 6, line 9, the Facility must keep records showing Emission Unit #2 was operated and maintained according to the manufacturer's emission-related operation and maintenance instructions or a maintenance plan developed by the Facility per 40 CFR 63 Subpart ZZZZ §63.6625(e)(3).

4.1.2.3 In accordance with 40 CFR 63 Subpart ZZZZ §63.6655(f), the Facility must keep records of the hours of operation of Emission Unit #2 recorded through the non-resettable hour meter. The Facility must document how many hours are spent for emergency operation; including what classified the operation as emergency and how many hours are spent for non-emergency operation.

4.1.2.4 Maintain records of visible emissions monitoring for Emission Unit #2 consistent with Condition 3.4.1.5.

4.1.2.5 Maintain records of maintenance and inspections required in Condition 3.3.2.2.

4.1.3 Emission Unit #3 Emergency Generator Engine Recordkeeping

4.1.3.1 Install a non-resettable hour meter prior to the startup of Emission Unit #3. This condition is pursuant to 40 CFR 60 Subpart IIII §60.4209(a).

4.1.3.2 Maintain an accurate monthly log for Emission Unit #3 hours of operation, both as a monthly total and as a 12-month rolling total.

4.1.3.3 Maintain records of visible emissions monitoring for Emission Unit #3 consistent with Condition 3.4.1.5.

Conditions of Section 4.1 are pursuant to 20.11.42.12.C.(4) NMAC, 40 CFR 60, 40 CFR 63, 40 CFR 75 and PSD/CP #0694-M3.

4.2 General Recordkeeping Requirements

4.2.1 Data Recording Requirements

All sampling and measured data required by this permit for the emissions units in this facility shall be recorded. The minimum information to be included in these records is:

4.2.1.1 the date, place as defined in the permit, and time of sampling or measurements;

4.2.1.2 the date(s) analyses were performed;

4.2.1.3 the company or entity that performed the analyses;

4.2.1.4 the analytical techniques or methods used;

4.2.1.5 the results of such analyses; and

4.2.1.6 the operating conditions existing at the time of sampling or measurement.

Condition 4.2.1 is pursuant to 20.11.42.12.C.(4)(a) NMAC.

4.2.2 Maintenance of Records

The permittee shall keep copies of all monitoring and measurement data, equipment calibration and maintenance records, original strip charts for Continuous Emission Monitoring instruments if used, other supporting information, and reports required by this permit for at least five (5) years from the time the data was gathered or the reports written. Each record shall show clearly to which emissions unit and/or piece of monitoring equipment it applies, and the date the data was gathered. This condition is pursuant to 20.11.42.12.C.(4)(b) NMAC.

4.2.3 Off Permit Changes

The permittee shall keep a record describing off permit changes made at this source that result in emissions of a regulated air pollutant subject to an applicable requirement, but not otherwise regulated under this permit, and the emissions resulting from those changes. This condition is pursuant to 20.11.42.12.C.(8)(b) NMAC.

Conditions of Section 4.0 are pursuant to 20.11.42.12.C.(4) and 20.11.42.12.C.(8) NMAC, 40 CFR 60 Subpart A and GG, 40 CFR 75, and PSD/CP #0694-M3.

5.0 REPORTING

5.1 Monitoring Reports

5.1.1 Emission Unit #1 Gas Turbine Reporting

5.1.1.1 Reports of monitoring of NO_x emissions for Emission Unit #1 shall be expressed as NO_x in tpy and lb/hr, NO_x in ppm @15%O₂, and as NO₂ in lb/MMBtu based on the averaging times and rolling total specified by Conditions 3.2.1.1, 3.2.1.2, 3.2.1.7, 3.2.1.9 and 3.2.1.12.

5.1.1.2 Reports records of periodic CO and VOC emission tests, if required, in accordance with Conditions 6(g), 6(h), and 6(i) of PSD/CP #0694-M3.

5.1.1.3 Report records of fuel sulfur content and fuel usage as specified in Condition 3.4.1.3.

5.1.1.4 Report records of the parameters monitored in Condition 3.4.1.4 for the Semi-Annual Compliance Demonstration Method.

5.1.1.5 Report records of visible emissions monitoring for Emission Unit #1, Unit #2, and Unit #3.

5.1.1.6 Report monthly operating hours for Emission Unit #1 for each type of fuel.

5.1.1.7 Report records of any emission testing required by Condition 3.4.1.8 in accordance with Conditions 6(g), 6(h), and 6(i) of PSD/CP #0694-M3.

5.1.1.8 Report records of turbine tuning whenever major combustion components are replaced per Condition 3.2.1.6.1.

5.1.1.9 The permittee shall comply with the general reporting requirements found in 40 CFR 98.3. Annual Greenhouse Gas emission reports shall comply with 40 CFR 98.46. The annual report shall comply with the data reporting requirements specified in 40 CFR 98.36(b) and, if applicable §98.36(c)(2) or (c)(3).

5.1.1.10 The permittee shall comply with any relevant reporting requirements under the provisions of the Acid Rain Program.

5.1.1.11 The permittee shall comply with the reporting requirements found in 40 CFR 60.7(d) and 40 CFR 60.334(j).

5.1.2 Emission Unit #2 Fire Pump Engine Reporting

5.1.2.1 Report records of monthly hours of operation for Emission Unit #2 on a 12-month rolling total.

5.1.2.2 Report records of maintenance and inspections required in Condition 3.3.2.2 which demonstrate compliance with Condition 3.3.2.3.

5.1.2.3 Report records of hours spent for emergency operation, including what classified the operation as emergency and how many hours are spent for non-emergency operation.

5.1.3 Emission Unit #3 Emergency Generator Engine Reporting

5.1.3.1 Report records of monthly hours of operation for Emission Unit #3 on a 12 month rolling total.

5.1.3.2 Report records of hours spent for emergency operation, including what classified the operation as emergency and how many hours are spent for non-emergency operation.

5.2 Reporting Schedule

Reports of all required monitoring activities for this facility shall be submitted to the Department on the following schedule.

TABLE 5-A: REPORTING SCHEDULE REQUIREMENTS

Report Content	Submittal Date
Sections 5.1.1 and 5.1.2	Within 45 days of June 30th and December 31st. Period between report submittal not to exceed 6 months during transition from reporting schedule based on permit issuance date to defined date reporting schedule listed above.
Section 6.1.1	The annual compliance certification report submitted to the Department and to EPA every 12 months. This report is due no later than 30 days after June 30th of every year. Period between compliance certification report submittal not to exceed 12 months during transition from reporting schedule based on permit issuance date to defined date reporting schedule listed above
See Condition 5.1.1.9	The annual GHG report shall be submitted no later than March 31 of each calendar year for GHG emissions in the previous year
See Condition 5.1.1.10	The quarterly Electronic Data Reports shall be submitted no later than 30 days following the end of each calendar quarter.
See Condition 5.1.1.11	The semi-annual excess emissions and monitoring system report shall be submitted no later than 30 days following the end of each six-month period.

This condition pursuant to 20.11.42.12.C.(5)(a) NMAC, 40 CFR 60, 40 CFR 75 and PSD/CP #0694-M3.

All instances of deviations from permit requirements, including emergencies, shall be clearly identified in these reports.

5.3 Reporting Deviations

The permittee shall submit reports of all deviations (including emergencies) from permit requirements to the Department when they occur. The permittee shall communicate initial notice of the deviation to the Department within twenty-four (24) hours of the start of the first business day following the start of the occurrence via telephone or facsimile. Within ten (10) calendar days of the start of the first business day following the start of the occurrence, written notice using the Excess Emissions Form (attached to this permit) shall be submitted to the Department. This condition is pursuant to 20.11.42.12.C.(5)(b) NMAC.

5.4 Reporting Excess Emissions

The permittee shall submit reports of all excess emissions to the Department. The permittee shall report the excess emissions to the Department with written notice using the Excess Emission Reporting Form (attached to this permit). The permittee of a source having excess emissions shall report the following information to the Department:

5.4.1 INITIAL REPORT: The permittee shall file an initial report, no later than the end of the next regular business day after the time of discovery of an excess emission pursuant to 20.11.49.15.A(1) NMAC;

5.4.2 FINAL REPORT: The permittee shall file a final report, no later than 10 days after the end of the excess emission. If the period of an excess emission extends beyond 10 days, the permittee shall submit the final report to the Department within 72 hours of the date and time the excess emission ceased. This condition is pursuant to 20.11.49.15.A(2) NMAC and 20.11.49.15.C NMAC; and,

5.4.3 ALTERNATIVE REPORTING: If the facility is subject to the reporting requirements of 40 CFR Parts, 60, 61, and 63 and the federal requirements duplicate the requirements of 20.11.49.15 NMAC, then the federal reporting requirements shall suffice. This condition is pursuant to 20.11.49.15.D NMAC.

This condition is pursuant to 20.11.49 NMAC.

6.0 COMPLIANCE

6.1 Compliance Certification

6.1.1 The permittee shall submit compliance certification reports certifying the compliance status of this facility with respect to all applicable requirements. These reports shall be made on copies of the Compliance Certification Report Form (attached to this permit) and submitted to the Department and to EPA every 12 months. This report is due no later than 30 days after June 30th of every year. Period between compliance certification report submittal not to exceed 12 months during transition from reporting schedule based on permit issuance date to defined date reporting schedule listed above. This condition is pursuant to 20.11.42.12.C.(5)(c) NMAC.

6.1.2 For sources that have submitted air dispersion modeling that demonstrates compliance with state and federal standards in accordance with sections 20.11.8.11 NMAC and 20.11.8.12 NMAC, compliance with the terms and conditions of this permit regarding source emissions and operation shall be deemed to be compliance with state and federal ambient air quality standards (20.11.8 NMAC Ambient Air Quality Standards and 40 CFR 50 NAAQS).

6.2 Inspections

The permittee shall allow representatives of the Department, upon presentation of credentials and other documents as may be required by law, to do the following:

6.2.1 enter the permittee's premises where a source or emission unit is located, or where records that are required by this permit to be maintained are kept,

6.2.2 have access to and copy, at reasonable times, any records that are required by this permit to be maintained,

6.2.3 inspect any facilities, equipment (including monitoring and air pollution control equipment), work practices or operation regulated or required under the permit, and

6.2.4 sample or monitor any substances or parameters for the purpose of assuring compliance with this permit or applicable requirements or as otherwise authorized by the federal Act.

Conditions of Section 6.2 are pursuant to 20.11.42.12.C.(6).(a) NMAC.

6.3 Posting of Permit

A copy of this permit shall be kept at the permitted facility and shall be made available to Department personnel for inspection upon request. This condition is pursuant to 20.11.42.12.C.(6).(c) NMAC.

7.0 EMERGENCIES

7.1 An "emergency" means any situation arising from sudden and reasonably unforeseeable events beyond the control of the permittee, including acts of God, which situation requires immediate corrective action to restore normal operation of the facility or emissions unit, and that causes exceedances of emissions limits specified in this permit. An emergency shall not include noncompliance to the extent caused by improperly designed equipment, lack of preventive maintenance, or careless or improper operation.

7.2 An emergency constitutes an affirmative defense to an action brought for noncompliance with such technology-based emission limitations if the permittee has demonstrated through properly signed, contemporaneous operating logs, or other relevant evidence that:

7.2.1 an emergency occurred and that the permittee can identify the cause(s) of the emergency,

7.2.2 the permitted facility was at the time being properly operated,

7.2.3 during the period of the emergency the permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards or other requirements in the permit, and

7.2.4 The permittee fulfilled notification requirements under Subparagraph (b), of Paragraph (5), of Subsection C of 20.11.42.12 NMAC. This notice must contain a description of the emergency, any steps taken to mitigate emissions, and corrective actions taken.

7.3 In any enforcement proceeding, the permittee seeking to establish the occurrence of an emergency has the burden of proof.

7.4 The permittee shall identify and report all emergencies to the Department in accordance with Section 5.2 of this permit.

7.5 In any enforcement proceeding, the permittee has the burden of proof in seeking to establish the occurrence of an emergency.

Conditions of Section 7.0 are pursuant to 20.11.42.12.E.(1) and (4) NMAC.

8.0 PERMIT REOPENING AND REVOCATION

8.1 This permit will be reopened and revised when any one of the following conditions occurs, and may be revoked and reissued when Conditions 8.1.3 or 8.1.4 occurs:

8.1.1 Additional requirements under the federal Act become applicable to this source three (3) or more years before the expiration date of this permit. If the effective date of the requirement is later than the expiration date of this permit, then the permit is not required to be reopened unless the original permit or any of its terms and conditions has been extended due to the Department's failure to take timely action on a request by the permittee to renew this permit.

8.1.2 Additional requirements, including excess emissions requirements, become applicable to this source under Title IV of the federal Act (the acid rain program). Upon approval by the Administrator, excess emissions offset plans will be incorporated into this permit.

8.1.3 The Department or the Administrator determines that the permit contains a material mistake or that inaccurate statements were made in establishing the terms and conditions of the permit.

8.1.4 The Department or the Administrator determines that the permit must be revised or revoked and reissued to assure compliance with an applicable requirement.

Conditions of Section 8.1 are pursuant to 20.11.42.13.F.(1).(a) NMAC.

8.2 Proceedings to reopen or revoke this permit shall affect only those parts of this permit for which cause to reopen or revoke exists. Emissions units for which permit conditions have been revoked shall not be operated until new permit conditions have been issued for them. This condition is pursuant to 20.11.42.13.F.(1).(b) NMAC.

9.0 CERTIFICATION

9.1 A responsible official, as defined in 20.11.42 NMAC shall certify the accuracy, truth, and completeness of every report and compliance certification submitted to the Department or to the EPA as required by any permit condition or applicable requirement. This condition is pursuant to 20.11.42.12.A.(5) NMAC.

10.0 CONFIDENTIAL INFORMATION

10.1 Any records, reports, or information obtained by the Department shall be available to the public, except upon the Facility's ability to demonstrate to the Department that records, reports, or information, or particular sections thereof, would divulge confidential business records, methods, or processes entitled to protection as a trade secret. However, emission data will not be treated as confidential information. Confidential information, upon request, shall be disclosed to any officer, employee, or other authorized representative of the Department, the New Mexico Environment Department, or the EPA, or during any relevant proceedings under the A/BCAQCB Regulations, the Air Quality Control Act, or the Federal Act. (74-2-11 NMSA)

10.2 All confidentially claims made regarding material submitted to the Department under 20.11.42.12.B NMAC shall be reviewed in accordance with the provisions of the Joint Air Quality Board Ordinances pursuant to the New Mexico Air Quality Control Act, 74-2-11 NMSA 1978, and the New Mexico Inspection of Public Records Act, 14-2-1 et seq. NMSA 1978.

10.3 In the case where an applicant or Facility has submitted information to the Department under a claim of confidentiality, the Department may also require the applicant or Facility to submit a copy of such information directly to the Administrator. 20.11.42.12.B NMAC.

10.4 An operating permit is a public record, and not entitled to protection under Section 114(c) of the Federal Act.

Conditions of Section 10.0 are pursuant to 20.11.42 NMAC and 74-2-11 NMSA.

11.0 AIRBORNE PARTICULATE MATTER

11.1 The permittee shall be subject to the requirements found in 20.11.20 NMAC – Fugitive Dust Control if it is engaged with new construction or site modification involving active operations that result in disturbed surface areas or involve bulk material handling to prevent or abate injury to human health and animal and plant life and to prevent or abate unreasonable interference with public welfare, visibility and the reasonable use of property.

11.2 Each person shall use reasonably available control measures or any other effective control measure to prevent a violation of the national ambient air quality standards and meet the objective established in 20.11.20.6 NMAC, whether or not the person has been issued a fugitive dust control permit. No person shall allow fugitive dust, track out, or transported material from any active operation, open storage pile, paved or unpaved roadway or disturbed surface area, or inactive disturbed surface area to be carried beyond the property line, right-of-way, easement or any other area under control of the person generating or allowing the fugitive dust if the fugitive dust will: 1) adversely affect the health, public welfare or safety of the residents of Bernalillo county; or 2) impair visibility or the reasonable use of property; or 3) be visible longer than a total of 15 minutes in any one hour observation period using the visible fugitive dust detection method in 20.11.20.26 NMAC or an equivalent method approved in writing by the department. To mitigate fugitive dust, all inactive disturbed surface areas must be stabilized and maintained in stable condition by the owner, operator, or person responsible for maintenance of the disturbed surface. Failure to comply with this condition shall be a violation of 20.11.20 NMAC.

Conditions of Section 11.0 are pursuant to 20.11.20 NMAC.

12.0 CREDIBLE EVIDENCE

12.1 Notwithstanding any other provisions of any applicable rule or regulation or requirement of this permit that state specific methods that may be used to assess compliance with applicable requirements, pursuant to 40 CFR 70 and EPA's Credible Evidence Rule, 62 Fed. Reg. 8314 (Feb. 24, 1997), any credible evidence or information relevant to whether a source would have been in compliance with applicable requirements if the appropriate performance or compliance test or procedure had been performed shall be considered for purposes of Title V compliance certifications. Furthermore, for purposes of establishing whether or not a person has violated or is in violation of any emissions limitation or standard or permit condition, nothing in this permit shall preclude the use, including the exclusive use, by any person of any such credible evidence or information.”

13.0 ANNUAL FEES

13.1 This condition has been placed in the permit in accordance with 20.11.2 NMAC to allow the Department to determine compliance with the terms and conditions of the permit. Compliance will be based on the receipt of the annual emissions fee due each year to the Department pursuant to 20.11.2 NMAC. Every owner or operator of a source that is required to obtain a source registration, an Authority-to-Construct, an operating permit, or a preconstruction permit shall pay an annual emissions fee pursuant to 20.11.2 NMAC, 20.11.40 NMAC, 20.11.41 NMAC, 20.11.42 NMAC, 20.11.60 NMAC, 20.11.61 NMAC, or 20.11.62 NMAC.

TABLE 13-A: FACILITY WIDE FEE POLLUTANTS IN TONS PER YEAR

Fee Pollutant	Facility Wide Fee Pollutant Totals in Tons per Year (TPY)
Carbon Monoxide (CO)	505
Oxides of Nitrogen (NO _x)	530
Total Suspended Particulate Matter (TSP)	57
Oxides of Sulfur (SO _x)	69
Volatile Organic Compounds (VOC)	34
Hazardous Air Pollutants (HAPs)	8
Facility Wide Fee Pollutants Totals (TPY)	1,203

APPEAL PROCEDURES

Any person who participated in this permitting action before the Department and who is adversely affected by the action taken by the Department concerning this permit, may file a petition for a hearing before the Albuquerque/Bernalillo County Air Quality Control Board ("board"). The petition must be made in writing to the board within thirty (30) days from the date notice is given of the Department's action. This petition must specify the portions of the permitting action to which the petitioner objects and certify that a copy of the petition has been mailed or hand-delivered as required by 20.11.42.13.D.(1).(b) NMAC; a copy of the permitting action for which review is sought must be attached to the petition. Upon receipt of the appeal notice, the petitioner must mail or deliver a copy of the petition to the Department, and to the applicant or permittee if the petitioner is not the applicant/permittee. Requests for a hearing shall be sent to:

Secretary, Albuquerque/Bernalillo County Air Quality Control Board
One Civic Plaza
400 Marquette, NW
P.O. Box 1293
Albuquerque, New Mexico 87103

Unless a timely request for a hearing is made, the decision of the Department will be final. If a timely request for hearing is made, the board will hold a hearing within ninety (90) days of receipt of the petition in accordance with the New Mexico Air Quality Control Act NMSA 1978 74-2-7 and 20.11.42.13.D.(1).(c) NMAC.

Any person who is adversely affected by an administrative action taken by the board pursuant to 20.11.42.13.D.(1).(a) NMAC may appeal to the Court of Appeals in accordance with New Mexico Air Quality Control Act NMSA 1978 74-2-9. Petitions for judicial review must be filed no later than thirty (30) days after the administrative action. This condition is pursuant to 20.11.42.13.D.(2) NMAC and New Mexico Air Quality Control Act NMSA 1978 74-2-9.

SUBMITTAL OF REPORTS AND CERTIFICATIONS

Compliance notifications, monitoring results and reports, emissions sampling and measurement data, monitoring activity reports, compliance schedule progress reports, test protocols, excess emission forms, and test reports, if any and any other compliance status information required by this permit shall be certified by the responsible official and submitted to:

Compliance Supervisor, Enforcement and Compliance Division
Albuquerque Environmental Health Department
Air Quality Program

Mailing Address:

P. O. Box 1293
Albuquerque, NM 87103

Physical Address:

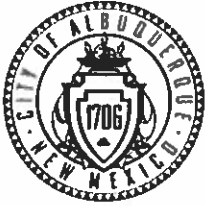
1 Civic Plaza NW
City/County Building
3rd Floor, Room 3023
Phone: (505) 768-1972
Fax: (505) 768-1977

EPA Address -- All correspondence to the EPA required by this permit shall be sent to the following address:

Director, Compliance Assurance and Enforcement Division
U.S. EPA, Region 6
1201 Elm St
Dallas, TX 75270

Questions about this permit should be referred to Paul Puckett of the Permitting Division of the Air Quality Program in Albuquerque at (505) 767-5626 or ppuckett@cabq.gov.

- Attachments:**
- 1) Excess Emission Reporting Form and Instructions
 - 2) Deviation from Title V Permit Requirements and Emergency Notification Form
 - 3) Compliance Certification Report Form
 - 4) PSD/CP #0694-M3



Timothy M. Keller, Mayor

ALBUQUERQUE/BERNALILLO COUNTY
AIR QUALITY CONTROL BOARD
ACID RAIN PERMIT #AR2093-RN2
FACILITY CDS #NM/001/00368
Facility ID: FA0003185 ; Record ID: PR0012186



Angel Martinez, Jr. Director

Issued to: Public Service Company of New Mexico
414 Silver Avenue SW
Albuquerque, NM 87102

Certified Mail #7003 2260 0003 0856 4945
Return Receipt Requested

The Albuquerque Environmental Health Department (Department) and the Albuquerque/Bernalillo County Air Quality Control Board (A/BCAQCB); pursuant to the Federal Clean Air Act (CAA, also known herein as the Federal Act); the New Mexico Air Quality Control Act, NMSA 1978, as amended 74-2-4, 74-2-5.C; the Joint Air Quality control Board Ordinance, Revised Ordinances of Albuquerque 1994, 9-5-1-4; the Joint Air Quality Control Board Ordinance, Bernalillo County Ordinance 94-5; A/BCAQCB Regulation Title 20, New Mexico Administrative Code (NMAC), Chapter 11 (20.11 NMAC), chapter 11, Part 42 (20.11.42 NMAC), Operating Permits; and Part 62 (20.11.62 NMAC) Acid Rain; hereby issue Acid Rain Permit #AR2093-RN2 to the Public Service Company's (Permittee), Rio Bravo Power Generating Station (Facility).

Table with 2 columns: Affected Source, Designated Representative, ORIS Code, Effective date, Affected Units.

This acid rain permit has been issued based on the review of the renewal application received by the Albuquerque Environmental Health Department (Department), Air Quality Program (Program) on March 14, 2023. The term of this permit shall be the same as the Rio Bravo Operating Permit, 2093-RN1-M1 (modification and second renewal were issued concurrently), issued on May 10, 2021. This Permit will expire on May 10, 2026 which is five years from the date of issuance of 2093-RN1-M1 (the current Title V Operating Permit which includes Administrative Amendements and is 2093-RN1-M1-3AR, but now the Operating Permit shall be known as 2093-RN2-1AR which includes an Administrative Amendment for this Acid Rain permit renewal), pursuant to 20.11.62.18.D.(1) NMAC and 20.11.42.13.E.(1) NMAC. This Acid Rain permit AR2093-RN2 supersedes permit AR2093-RN1 issued on September 28, 2018. Application for renewal of this Acid Rain permit is due by November 10, 2025 which is six (6) months prior to the date of expiration of the Title V Operating Permit 2093-RN2-1AR, pursuant to 20.11.62.14.A.(3) NMAC and 20.11.42.12.A.(2) NMAC. This permit is deemed to incorporate the definitions under 40 CFR 72.2.

Issued on the 19th day of December, 2023

Angela Lopez, Environmental Health Manager, Permitting
Air Quality Program
Environmental Health Department
City of Albuquerque

**ACID RAIN PHASE II ALLOWANCE ALLOCATIONS
(40 CFR 73.10)**

The affected unit subject to the provisions of the Acid Rain Program has been allocated sulfur dioxide emission allowances that allow for the tracking of any transfer or sale of an allowance. The Administrator is responsible for allocated allowances to the unit account for each affected unit for the years 2000 – 2009 and for the years 2010 and thereafter. The Facility has been allocated Phase II Allowances:

State	Plant Name	Boiler	Year 2010 and Beyond	
			(E) Auction Reserve Deduction	(F) ¹ Total Annual Phase II
NM	Rio Bravo Generating Station	GT-1	0	0

¹Column (F) is calculated as follows: Adjusted basic allowances for 2010 (not shown) – Column (E) + Additional basic (section 405(a)(3)) (not shown)

Standard Requirements:

(1) Permit Requirements:

- (a) The designated representative of each affected source and each affected unit at the source shall:
 - (i) submit a complete Acid Rain permit application in accordance with the deadlines specified in Subsection A of 20.11.62.13 NMAC,
 - (ii) submit in a timely manner any supplemental information that the Department determines is necessary in order to review an Acid Rain permit application.
- (b) The owners and operators of each affected source and each affected unit at the source shall:
 - (i) operate the unit in compliance with a complete Acid Rain permit application or a superseding Acid Rain permit issued by the Department,
 - (ii) have an Acid Rain Permit.

(2) Monitoring Requirements:

- (a) The owners and operators and, to the extent applicable, designated representative of each affected source and each affected unit at the source shall comply with the monitoring requirements as provided in 40 CFR Part 75 and 76.
- (b) The emissions measurements recorded and reported in accordance with 40 CFR Part 75 and 76 shall be used to determine compliance by the unit with the Acid Rain emissions limitations and emissions reduction requirements for sulfur dioxide and nitrogen oxides under the Acid Rain Program.
- (c) The requirements of 40 CFR Part 75 and 76 shall not affect the responsibility of the owners and operators to monitor emissions of other pollutants or other emissions characteristics at the unit under other applicable requirements of the Act and other provisions of the operating permit for the source.

(3) Sulfur Dioxide Requirements:

- (a) The owners and operators of each source and each affected unit at the source shall:
 - (i) hold allowances, as of the allowance transfer deadline, in the unit's compliance sub-account (after deductions under 40 CFR 73.34(c)) not less than the total annual emissions of sulfur dioxide for the previous calendar year from the unit, and
 - (ii) comply with the applicable Acid Rain emissions limitation for sulfur dioxide.
- (b) Each ton of sulfur dioxide emitted in excess of the Acid Rain emissions limitations for sulfur dioxide shall constitute a separate violation of the Act.

- (c) An affected unit shall be subject to the requirements Subparagraph (a), of Paragraph (3), of Subsection D of 20.11.62.12 NMAC as follows:
 - (i) starting January 1, 2000, an affected unit under Subparagraph (b), of Paragraph (1), Subsection A of 20.11.62.12 NMAC,
 - (ii) starting on the later of January 1, 2000 or the deadline for monitor certification under 40 CFR Part 75, an affected unit under Subparagraph (c), Paragraph (1), Subsection A of 20.11.62.12 NMAC.
- (d) Allowances shall be held in, deducted from, or transferred among ATS accounts in accordance with the Acid Rain Program.
- (e) An allowance shall not be deducted, in order to comply with the requirements under Item (i), of Subparagraph (a), of Paragraph (3), Subsection D of 20.11.62.12 NMAC prior to the calendar year for which the allowance was allocated.
- (f) An allowance allocated by the EPA under the Acid Rain Program is a limited authorization to emit sulfur dioxide in accordance with the Acid Rain Program. No provision of the Acid Rain Program, the Acid Rain permit application, the Acid Rain permit, or the written exemption under Subsections A B of 20.11.62.12 NMAC and no provision of law shall be construed to limit the authority of the United States to terminate or limit such authorization.
- (g) An allowance allocated by the EPA under the Acid Rain Program does not constitute a property right.
- (4) Nitrogen Oxides Requirements:** The affected units are subject to the nitrogen oxide requirements of the Acid Rain program.
- (5) Excess Emissions Requirements:**
 - (a) The designated representative of an affected unit that has excess emissions in any calendar year shall submit a proposed offset plan to the EPA, as required under 40 CFR Part 77, and submit a copy to the Department.
 - (b) The owners and operators of an affected unit that has excess emissions in any calendar year shall:
 - (i) pay to the EPA without demand the penalty required, and pay to the EPA upon demand the interest on that penalty, as required by 40 CFR Part 77, and
 - (ii) comply with the terms of an approved offset plan, as required by 40 CFR Part 77.
- (6) Recordkeeping and Reporting Requirements:**
 - (a) Unless otherwise provided, the owners and operators of the 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 prior to the end of 5 years, in writing by the EPA or Department.
 - (i) The certificate of representation for the designated representative for the source and each affected unit at the source 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.
 - (ii) All emissions monitoring information, in accordance with 40 CFR Part 75.
 - (iii) Copies of all reports, compliance certifications, and other submissions and all records made or required under the Acid Rain Program.
 - (iv) Copies of all documents used to complete an Acid Rain permit application and any other submission under the Acid Rain Program or to demonstrate compliance with the requirements of the Acid Rain Program.
 - (b) The designated representative of an affected source and each affected unit at the source shall submit the reports and compliance certifications required under the Acid Rain Program, including those under 20.11.62.19 NMAC and 40 CFR Part 75.
- (7) Liability:**
 - (a) Any person who knowingly violates any requirement or prohibition of the Acid Rain Program, a complete Acid Rain permit application, an Acid Rain permit, or a written exemption under Subsections B or C, of 20.11.62.12 NMAC, including any requirement for the payment of any

- penalty owed to the United States, shall be subject to enforcement by the EPA pursuant to Section 113(c) of the Act and by the Department pursuant to ROA 1994 9-5-1-99(B)(1).
- (b) Any person who knowingly makes a false, material statement in any record, submission, or report under the Acid Rain Program shall be subject to criminal enforcement by the EPA pursuant to Section 113(c) of the Act and 18 U.S.C. 1001 and by the Department pursuant to ROA 1994 9-5-1-99(B)(2).
 - (c) No permit revision shall excuse any violation of the requirements of the Acid Rain Program that occurs prior to the date that the revision takes effect.
 - (d) Each affected source and each affected unit shall meet the requirements of the Acid Rain Program.
 - (e) Any provision of the Acid Rain Program that applies to an affected source (including a provision applicable to 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.
 - (f) Any provision of the Acid Rain Program that applies to an affected unit (including a provision applicable to the designated representative of an affected unit) shall also apply to the owners and operators of such unit. Except as provided under Subsection B of 20.11.62.15NMAC (Phase II Repowering Extension plans), 40 CFR Part 76, 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 designated representative 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 designated representative and that is located at a source of which they are not owners or operators or the designated representative.
 - (g) Each violation of a provision of this Part and 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 designated representative of such source or unit, shall be a separate violation of the Act.
- (8) Effect On Other Authorities:** No provision of the Acid Rain Program, an Acid Rain permit application, an Acid Rain permit, or a written exemption under Subsections B or C, of 20.11.62.12 NMAC shall be construed as:
- (a) except as expressly provided in Title IV of the Act, exempting or excluding the owners and operators and, to the extent applicable, the designated representative of an affected source or affected unit from compliance with any other provision of the Act, including the provisions of Title I of the Act relating to applicable National Ambient Air Quality Standards or State Implementation Plans,
 - (b) 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 Act,
 - (c) 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,
 - (d) modifying the Federal Power Act or affecting the authority of the Federal Energy Regulatory Commission under the Federal Power Act, or
 - (e) interfering with or impairing any program for competitive bidding for power supply in a State in which such program is established.