



**TECHNICAL REVIEW AND EVALUATION
OF APPLICATION FOR
AIR QUALITY PERMIT No. 77583**

I. INTRODUCTION

This Class I, Title V, renewal operating permit renewal is for the operation of El Paso Natural Gas Company, L.L.C.'s (EPNG) Bowie Compressor Station, which is located on Country Club Road, five miles east of I-10 Exit 344, in Cochise County, Arizona. Permit #77583 renews and supersedes Permit #61136.

A. Company Information

Facility Name: El Paso Natural Gas Company, L.L.C.
Bowie Compressor Station

Mailing Address: El Paso Natural Gas Company, L.L.C.
5151 E. Broadway, Suite 1680
Tucson, AZ 85711

Facility Location: N 32° 19' 00", W 109° 41' 16"
Country Club Road, 5 miles E of I-10 exit 344
Willcox, Cochise County, Arizona 85643

B. Attainment Classification

The facility location in Cochise County is classified in 40 CFR 81.303 as attainment or unclassifiable for all criteria pollutants.

II. PROCESS DESCRIPTION

A. EPNG provides natural gas transportation services for natural gas suppliers and end users throughout the southwestern United States.

The Bowie Station provides natural gas compression for EPNG's large pipeline network. Compression is needed to maintain enough pressure in the pipeline to keep the natural gas flowing through the pipeline network. One (1) General Electric gas-fired combustion turbine drives a centrifugal compressor. The turbine also drives a generator to provide primary electric power to the station. Two (2) Waukesha auxiliary generator engines provide electric power when the turbine is not running. The Bowie Station has been automated and the location is unattended.

The facility has a potential to emit greater than the major source threshold of nitrogen oxides (NO_x). Other emissions from the facility include carbon monoxide (CO), hazardous air pollutants (HAP), particulate matter with an aerodynamic diameter less than or equal to ten microns (PM₁₀), particulate matter with an aerodynamic diameter less than or equal to 2.5 microns (PM_{2.5}), volatile organic compounds (VOC), and sulfur dioxide (SO₂). The gas turbine is the primary source of air pollutant emissions.

III. COMPLIANCE HISTORY

Since the issuance of Permit No. 61136, the facility is in compliance with the applicable permit conditions. The facility has submitted nine (9) semi-annual compliance certifications on time with no deficiencies noted. The facility has also undergone (4) inspections on March 4, 2015, July 20, 2016, August 22, 2017, and September 19, 2018. No deviations from permit conditions were observed during these inspections.

The General Electric turbine underwent a performance test observed by the Arizona Department of Environmental Quality (ADEQ) on January 25, 2017. No deficiencies were noted during the report review.

No air quality cases or violations were issued during the permit term.

IV. EMISSIONS

The facility has a potential-to-emit (PTE) more than the major source thresholds of nitrogen oxides (NO_x). The facility's PTE is provided in Table-1 below:

Table 1: Potential to Emit

Pollutant	Emissions (tons per year)
NO _x	314.76
PM ₁₀	2.93
PM _{2.5}	2.93
CO	82.91
SO ₂	1.37
VOC	3.81
HAPs	0.99

V. MINOR NSR REVIEW

This renewal permit does not result in any changes to existing equipment or operating conditions. Consequently, this renewal permit will not result in any increase in emissions as seen in Table 1 above. As a result, this renewal permit does not trigger minor NSR.

VI. APPLICABLE REGULATIONS

Table 2 identifies applicable regulations and verification as to why that standard applies.

Table 2: Applicable Regulations

Unit & year	Control Device	Rule	Discussion
A-1 Gas Turbine (1971)	None	Arizona Administrative Code (A.A.C) R18-2-719	<p>These standards are applicable to existing stationary rotating machinery.</p> <p>The GE gas turbine was manufactured prior to October 3, 1977, and is therefore not subject to NSPS Subpart GG and is not subject to NSPS subpart KKKK because it was manufactured before February 18, 2005.</p> <p>The facility is an area source of HAP, therefore not subject to NESHAP Subpart YYYYY which is applicable to gas turbines located at stationary sources which are major for HAP.</p>
Aux-1 Generator Waukesha F1905 GRU (1987)	None	A.A.C. R18-2- 719 40 CFR 63 Subpart ZZZZ	<p>These standards are applicable to existing stationary rotating machinery.</p> <p>This engine is subject to the noted sections of NESHAP Subpart ZZZZ, because it is a spark ignition, four stroke rich burn, < 500 hp, at an area source of HAP emissions, constructed before June 12, 2006.</p> <p>This engine is not subject to New Source Performance Standards (NSPS) Subpart JJJJ because it was constructed prior to June 12, 2006.</p>
Aux-2 Generator Waukesha F18G (2012)	Non-Selective Catalytic Reduction	40 CFR 60 Subpart JJJJ 40 CFR 63 Subpart ZZZZ	<p>Owners and operators of stationary SI RICE that commence construction after June 12, 2006, where the SI RICE is manufactured on or after July 1, 2008, with a maximum engine hp less than 500 are subject to the rule. 40 CFR 60.4230(a)(4)(iii)</p> <p>SI RICE, 4 Stroke Rich Burn, < 500 hp, located at an area source of HAP and constructed after June 12, 2006 meets the requirements of this rule by complying with 40 CFR 60 Subpart JJJJ</p>

Table 2: Applicable Regulations

Unit & year	Control Device	Rule	Discussion
Fugitive dust sources	Water Trucks Dust Suppressants	A.A.C. R18-2- Article 6 A.A.C. R18-2- 702	These standards are applicable to all fugitive dust sources at the facility.
Abrasive Blasting	Wet blasting; Dust collecting equipment; Other approved methods	A.A.C. R-18-2- 702 A.A.C. R-18-2- 726	These standards are applicable to any abrasive blasting operation.
Spray Painting	Enclosures	A.A.C. R18-2- 702 A.A.C. R-18-2- 727	This standard is applicable to any spray painting operation.
Demolition/renovation operations	N/A	A.A.C. R18-2- 1101.A.8	This standard is applicable to any asbestos related demolition or renovation operations.

VII. PREVIOUS PERMIT AND CONDITIONS

Table 3 compares the sections in Permit #61136 with the conditions in this renewal permit:

Table 3: Previous Permit Conditions

Section No.	Determination		Comments
	Revised	Delete	
Att. "A"	X		General Provisions: Revised to represent the most recent template language
Att. "B" Section I	X		Facility wide requirements: Revised to represent the most recent template language
Att. "B" Section III	X		Auxiliary Generator Subject To 40 CFR 63 Subpart ZZZZ: Combined Section "B" and "C" into one section for Particulate Matter (PM) and Opacity.
Att. "B" Section V	X		Fugitive Dust: Revised to represent the most recent template language
Att. "B" Section VI		X	Mobile Source Requirements: This section has been removed. As a result, the numbering for the proceeding sections has been updated
Att. "C"	X		Equipment List: Revised to reflect the most recent equipment operating at the facility and to include equipment information provided.

VIII. MONITORING, RECORDKEEPING, AND REPORTING REQUIREMENTS**A. Facility Wide**

1. Along with the semiannual compliance certification, the Permittee is required to submit reports of all recordkeeping, monitoring and maintenance required by the permit.
2. The Permittee is required to maintain, on-site, records of the manufacturer's specifications or an Operation and Maintenance Plan for all equipment listed in the permit.
3. The Permittee is required to maintain appropriate records documenting the maximum sulfur content of the fuel is 20.0 grains per 100 standard cubic feet (scf) or less.

B. Gas Turbine

The Permittee is required to maintain appropriate records documenting the lower heating value of the fuel.

C. Generator Subject to NESHAP Subpart ZZZZ

1. The Permittee is required to maintain appropriate records documenting the lower heating value of the fuel.
2. The Permittee is required to keep records of the maintenance conducted on the engine.

D. Generator Subject to NSPS Subpart JJJJ

The Permittee must keep a maintenance plan for the engine and records of conducted maintenance.

E. Fugitive Dust

The Permittee is required to keep record of the dates and types of dust control measures employed.

F. Periodic Activities

1. The Permittee is required to record the date, duration and pollution control measures of any abrasive blasting project.
2. The Permittee is required to record the date, duration, quantity of paint used, any applicable safety data sheet (SDS), and pollution control measures of any spray painting project.

3. The Permittee is required to maintain records of all asbestos related demolition or renovation projects. The required records include the “NESHAP Notification for Renovation and Demolition Activities” form and all supporting documents.

IX. TESTING REQUIREMENTS

The Permittee is required to conduct a performance test for NO_x on the gas turbine engine within the first year of the permit term. If the gas turbine engine is not operated in the first year, the performance test for NO_x shall be conducted within 6 months of startup.

X. LIST OF ABBREVIATIONS

A.A.C.	Arizona Administrative Code
ADEQ	Arizona Department of Environmental Quality
CFR	Code of Federal Regulations
CO	Carbon Monoxide
EPNG	El Paso Natural Gas Company
HAP	Hazardous Air Pollutant
hp	Horsepower
NO _x	Nitrogen Oxides
PM	Particulate Matter
PM _{2.5}	Particulate Matter Nominally less than 2.5 Micrometers
PM ₁₀	Particulate Matter Nominally less than 10 Micrometers
SO ₂	Sulfur Dioxide
VOC	Volatile Organic Compound