

**TECHNICAL REVIEW AND EVALUATION
OF APPLICATION FOR
AIR QUALITY PERMIT No. 76600**

I. INTRODUCTION

This Class I operating permit is for the continued operation of El Paso Natural Gas Company's (EPNG) Dutch Flat Compressor Station, which is located approximately 19 miles south from Interstate 40, Exit 20, Santa Fe Ranch Road near Kingman in Mohave County, Arizona. Permit #76600 renews and supersedes Permit #60889.

A. Company Information

Facility Name: El Paso Natural Gas Company, LLC

Mailing Address: 5151 E. Broadway, Suite 1680
Tucson, AZ 85711

Facility Location: 19 miles south from Interstate 40, Exit 20, Santa Fe Ranch Road near Kingman in Mohave County, Arizona

B. Attainment Classification (Source: 40 CFR §81.303)

El Paso Natural Gas Company, Dutch Flat Compressor Station is located in an area which is in attainment or unclassified for all criteria pollutants.

II. PROCESS DESCRIPTION

EPNG provides natural gas transportation services for natural gas suppliers and end users throughout the southwestern United States. EPNG owns and operates a large pipeline network for which the Dutch Flat Station provides natural gas compression. Compression is needed to maintain enough pressure in the pipeline to keep the natural gas flowing through the pipeline network and is accomplished by two gas turbines. Primary electric power for the facility is provided by one of the two auxiliary generators. However, only one auxiliary generator is permitted be operating at any given time except during periods of startup, shutdown, periods of switching, and routine maintenance. The Dutch Flat Station has been automated and is unattended.

The facility has the potential to emit greater than the major source thresholds of nitrogen oxides (NO_x). Other emissions from the facility include sulfur dioxide (SO₂), carbon monoxide (CO), volatile organic compounds (VOCs), and hazardous air pollutants (HAPs), particulate matter with an aerodynamic diameter less than 10 microns (PM₁₀), particulate matter with an aerodynamic diameter less than 2.5 microns (PM_{2.5}), and greenhouse gases (GHGs or referred to as CO_{2e}).

There is no air pollution control equipment installed on the turbines or engines at the Dutch Flat Compressor Station.

III. LEARNING SITE EVALUATION

In accordance with ADEQ's Environmental Permits and Approvals near Learning Sites Policy, the Department is required to conduct an evaluation to determine if any nearby learning sites would be

adversely impacted by the facility. Learning sites consist of all existing public schools, charter schools and private schools the K-12 level, and all planned sites for schools approved by the Arizona School Facilities Board. The learning sites policy was established to ensure that the protection of children at learning sites is considered before a permit approval is issued by ADEQ.

This will not result in any increase in emissions as there are no changes to any equipment. Hence the facility is exempt from the learning sites evaluations.

IV. COMPLIANCE HISTORY

During the permit term nine Compliance Certifications were submitted, five field inspections were conducted, and four performance tests were performed. No deficiencies were noted during any of these reports. In addition, one permit deviation was reported on April 11, 2016. The deviation involved the facility's contracted EPA Method 9 observer having a brief lapse in the certification when conducting the quarterly visible emissions survey. Corrective actions were taken by EPNG and no enforcement action was taken.

V. 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)	Emission Change from Permit #60889	Minor NSR Thresholds	Minor NSR Triggered?
NO _x	205.0	0.0	20	No
PM ₁₀	3.0	0.0	7.5	No
PM _{2.5}	3.0	0.0	5	No
CO	62.3	0.0	50	No
SO ₂	1.5	0.0	20	No
VOC	10.7	0.0	20	No
HAPs	1.7	0.0	N/A	No

VI. MINOR NSR REVIEW

There were no modifications to equipment or operating scenarios for this renewal resulting in no changes in PTE. This resulted in none of the emissions exceeding Minor NSR thresholds, therefore Minor NSR was not triggered for this permit renewal.

VII. 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
Solar Gas Turbines, Models- Taurus 60 and Centaur H (1992)	N/A	NSPS Subpart GG 40 CFR 60.332(a)(2) 40 CFR 60.332(c) 40 CFR 60.333(b)	The Solar gas turbines were originally built after October 3, 1977, and have a heat input greater than 10 million Btu per hour and below 100 MMBtu/hr. 40 CFR 60, Subpart GG is applicable to these turbines. The turbines were not constructed, modified, or reconstructed after February 18, 2005, and are therefore not subject to New Source Performance Standard (NSPS) Subpart KKKK.
Auxiliary Engines (Prior to 1993)	N/A	Arizona Administrative Code (A.A.C.) R18-2-719	These standards are applicable to existing stationary rotating machinery.
Auxiliary Engines (Prior to 1993)	N/A	40 CFR 63 Subpart ZZZZ	Subpart ZZZZ of the NESHAPS is applicable to reciprocating internal combustion engines. These engines were manufactured prior to June 12, 2006, and therefore are existing units and applicable to the subpart pursuant to 40 CFR 60.6590(a)(1)(iii). The auxiliary generators were manufactured prior to 1993, and are therefore not subject to New Source Performance Standard (NSPS) Subpart JJJJ.
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.

Unit & year	Control Device	Rule	Discussion
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.

VIII. PREVIOUS PERMIT AND CONDITIONS

A. Previous Permit Conditions

In Table 3, the changes to conditions in Permit No. 60889 with the renewal to Permit No. 76600 can be seen in addition to an explanation for each change.

Table 3: Permit Conditions

Section No.	Determination		Comments
	Revised	Deleted	
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		Removed visible emission observations at specific intervals because this facility is unmanned. Requiring travel to the site to conduct visible emission observations would create additional fugitive dust.
Att. "B" Section V		X	Mobile Source Requirements: This section was removed from the renewal permit.
Att. "B" Section VI	X		Removed visible emission observations at specific intervals because this facility is unmanned. Requiring travel to the site to conduct visible emission observations would create additional fugitive dust.
Att. "C"	X		Equipment List: Revised to reflect the most recent equipment naming convention at the facility.

IX. MONITORING, RECORDKEEPING, AND REPORTING REQUIREMENTS

A. Facility Wide

- The Permittee shall maintain, on-site, records of the manufacturer supplied operations and maintenance instructions or Operation and Maintenance Plan.
- The Permittee shall submit reports of all recordkeeping and monitoring required within this Attachment "B" along with the semiannual compliance certifications required by Section VII of Attachment "A".

B. Stationary Rotating Machinery

Sulfur Dioxide

The Permittee shall demonstrate compliance with the sulfur dioxide fuel limitation in Section II of Attachment “B” by maintaining a valid purchase contract, tariff sheet, or transportation contract specifying the maximum total sulfur content of the fuel is 20 grains/100 SCF or less.

C. Auxiliary Engines

1. Sulfur Dioxide

The Permittee is required demonstrate compliance with the sulfur dioxide fuel limit and reporting requirements by maintaining a valid purchase contract, tariff sheet, or transportation contract specifying the maximum total sulfur content of the fuel is 20 grains/100 SCF or less.

2. Particulate Matter

The Permittee is required keep records of a current valid purchase contract, tariff sheet, or transportation contract specifying the lower heating value of the fuel.

3. Hazardous Air Pollutants

a. Monitor the operating hours of the engines and perform the following maintenance:

(1) Change the oil and filters every 1,440 hours or annually, whichever comes first, in lieu of oil/filter change, conduct oil analysis procedure as per Subpart ZZZZ regulations;

(2) Inspect the spark plugs every 1,440 hours or annually, whichever comes first, and replace as necessary;

(3) Inspect the hoses and belts every 1,440 hours or annually, whichever comes first, and replace as necessary;

b. Keep records of any deviations from operation and maintenance requirements and provide a timely report to the Department describing the deviation and actions taken to prevent further deviations.

D. Fugitive Dust

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

E. 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 MSDS, 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.

X. TESTING REQUIREMENTS

Gas Turbines

The Permittee is required to conduct annual EPA Reference Method 7E or EPA Reference Method 20 tests for NO_x emissions on the gas turbines to demonstrate compliance with the 40 CFR 60 Subpart GG NO_x emission limit.

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XI. LIST OF ABBREVIATIONS

A.A.C.	Arizona Administrative Code
ADEQ	Arizona Department of Environmental Quality
Btu/ft ³	British Thermal Units per Cubic Foot
Btu/hr	British Thermal Units per Hour
CFR	Code of Federal Regulations
CO	Carbon Monoxide
EPNG	El Paso Natural Gas Company
FERC	Federal Energy Regulatory Commissions
HAP	Hazardous Air Pollutant
hp	Horsepower
lb/hr	Pound per Hour
NO _x	Nitrogen Oxides
PM	Particulate Matter
PM ₁₀	Particulate Matter Nominally less than 10 Micrometers
SO _x	Sulfur Oxides
VOC	Volatile Organic Compound
CO _{2e}	Carbon Dioxide Equivalent