



**TECHNICAL REVIEW AND EVALUATION
OF APPLICATION FOR
AIR QUALITY PERMIT No. 76597**

I. INTRODUCTION

This Class I, Title V operating permit renewal permit is for the operation of El Paso Natural Gas Company, LLC's (EPNG) Mohave Topock Compressor Station, which is located at 5255 East Needle Mountain Road, Topock, AZ in Mohave County. Permit #76597 renews and supersedes Permit #60544.

A. Company Information

Facility Name: El Paso Natural Gas Company, LLC

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

Facility Location: 5255 West Needle Mountain Road
Topock, Arizona 86436

B. Attainment Classification

Mohave County, where EPNG Mohave Topock Compressor Station is located, is shown as unclassified or attainment 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 Mohave Topock Station provides natural gas compression for EPNG's large pipeline network. Compression is needed to maintain enough pressure to keep the natural gas flowing through the pipeline network. Three (3) natural-gas fired Cooper Bessemer engines are used to power compressors. Two (2) Caterpillar natural gas fired electric generators (one primary / one standby) provide primary electrical power. One (1) emergency generator is maintained to provide electricity during outages.

The facility has the potential to emit greater than the major source thresholds of nitrogen oxides (NO_x), carbon monoxide (CO), volatile organic compounds (VOCs), and hazardous air pollutants (HAPs). Other emissions from the facility include sulfur dioxide (SO₂), 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}).

III. COMPLIANCE HISTORY

Since the issuance of Permit No. 60544, 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 full inspections on February 24, 2015, April 18, 2016, and February 21, 2018. No deviations from permit conditions were observed during these inspections.

Annual Performance tests for the Cooper-Bessemer engines and the Caterpillar engines have been conducted in accordance with the testing schedules required in the permit. All performance tests have had passing results.

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), carbon monoxide (CO), volatile organic compounds (VOCs), and hazardous air pollutants (HAPs). The facility's PTE is provided in Table-1 below:

Table 1: Potential to Emit

Pollutant	Emissions (tons per year)
NO _x	348
PM ₁₀	20.96
PM _{2.5}	20.96
CO	443
SO ₂	0.28
VOC	95
HAPs	37.00
CO _{2e}	55,587

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 displays the applicable requirements for each permitted piece of equipment along with an explanation of why the requirement is applicable.

Table 2: Applicable Regulations

Unit & year	Control Device	Rule	Discussion
Cooper Bessemer Engines & Caterpillar Generators	N/A	Arizona Administrative Code (A.A.C) R18-2-719	<p>These standards are applicable to existing stationary rotating machinery.</p> <p>The engines and generators are not subject to NSPS Subpart IIII because they are not compression ignition engines.</p> <p>The engines and generators are not subject to NSPS Subpart JJJJ because they were constructed prior to July 1, 2008.</p> <p>The Cooper Bessemer engines and Caterpillar generators do not have any requirements under 40 CFR 63 Subpart ZZZZ because they are existing 2-stroke and 4 stroke lean burn engines, respectively with a site rating of greater than 500 horsepower located at a major source for HAPs. In accordance with 40 CFR 63.6590(b)(3)(i) and (ii).</p>
Emergency Generator	N/A	40 CFR 63 Subpart ZZZZ	National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocal Internal Combusting Engines. The engine is subject to 40 CFR 63 Subpart ZZZZ because it is less than 500 horsepower and located at a major source for HAPs with a date of manufacture prior to June 12, 2006.
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 No. 60544 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 II	X		Stationary Rotating Machinery: This section has been split up into two sections, Section II for Stationary Rotating Machinery and Section III for the Emergency Engine. As a result, the numbering for the proceeding sections has been updated.
Att. "B" Section III	X		Fugitive Dust: Revised to represent the most recent template language
Att. "B" Section IV		X	Mobile Source Requirements: This section has been removed. As a result, the numbering for the proceeding sections has been updated.
Att. "B" Section V	X		Other Periodic Activities: Revised to represent the most recent template language
Att. "C"	X		Equipment List: The 10 hp Onan Emergency Generator has been removed.

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.

B. Stationary Rotating Machinery

1. The Permittee is required to make a record of the dates and times of operation of each Caterpillar generator.
2. The Permittee is required to report any daily period during which the sulfur content of the fuel being fired in the stationary rotating machinery exceeds 0.8% by weight.
3. The Permittee is required to maintain of a current tariff sheet or transportation contract for the gaseous fuel. The records shall specify that the maximum total sulfur content of the fuel is 20.0 grains per 100 standard cubic feet (scf) or less.
4. The permit requires to conduct a survey of visible emissions emanating from the stacks of the stationary rotating machinery during the performance test.

C. Emergency Generator

1. The Permittee is required to report any daily period during which the sulfur content of the fuel being fired in the stationary rotating machinery exceeds 0.8% by weight.
2. The Permittee is required to maintain of a current tariff sheet or transportation contract for the gaseous fuel. The records shall specify that the maximum total sulfur content of the fuel is 20.0 grains per 100 standard cubic feet (scf) or less.
3. The Permittee is required to maintain all records for a period of 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record.
4. The Permittee is required to keep records of the maintenance on the in order to demonstrate compliance with the operation and maintenance requirements.
5. The Permittee is required to keep records of the hours of operation of the ICE recorded through the non-resettable hour meter. The records will include the date, start and stop times, hours spent for emergency operation, including what classified the operation as emergency and how many hours are spent for non-emergency operation.

D. Fugitive Dust

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 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

A. NO_x

The Permittee is required to conduct an EPA Method 7E test for NO_x emissions on each Cooper Bessemer engine and each Caterpillar generator twice per permit term. The testing schedule for the engines is shown in Table 1 of Attachment “B” in the permit.

B. CO

The Permittee is required to conduct an EPA Method 10 test for CO emissions on each Cooper Bessemer engine and each Caterpillar generator twice per permit term. The testing schedule for the engines is shown in Table 2 of Attachment “B” in the permit.

C. VOCs

The Permittee is required to conduct an EPA Method 25A or ASTM 6348 to test for VOC emissions on each Cooper Bessemer engine and each Caterpillar generator. VOC testing is required once per permit term within the first year of permit issuance.

X. 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
CO _{2e}	Carbon Dioxide Equivalent
EPNG	El Paso Natural Gas Company
FERC	Federal Energy Regulatory Commissions
GHG	Greenhouse Gasses
HAP	Hazardous Air Pollutant
hp	Horsepower
lb/hr	Pound per Hour
NO _x	Nitrogen Oxides
PM	Particulate Matter
PM _{2.5}	Particulate Matter Nominally less than 2.5 Microns
PM ₁₀	Particulate Matter Nominally less than 10 Microns
PTE	Potential to Emit
scf	Standard Cubic Feet
SDS	Safety Data Sheet
SO	Sulfur Dioxide
SO _x	Sulfur Oxides
VOC	Volatile Organic Compound