

**TECHNICAL REVIEW AND EVALUATION
 AIR QUALITY PERMIT NO. 63249
 El Paso Natural Gas Company**

I. INTRODUCTION

This Class I, Title V renewal permit is issued to El Paso Natural Gas Company (EPNG) for the continued operation of the Seligman compressor station located 9 miles east of Seligman in Yavapai County, Arizona. This permit renews and supersedes Permit No. 48823.

A. Company Information

Facility Name: Seligman Compressor Station

Facility Address: 9 miles east of Seligman on Crookton Road
 Seligman, Yavapai County, Arizona 85337
 N 35 17' 12", W 112 45' 26"

Mailing Address: El Paso Natural Gas Company
 5151 East Broadway, Suite 1680
 Tucson, AZ 85711

B. Attainment Classification

The area is attainment 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 Seligman 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. An auxiliary generator is maintained to provide electricity during outages and turbine downtime. The Seligman Station has been automated and is unattended.

GE Lean Head End Liners are installed and operated to minimize NO_x emissions from the General Electric gas turbine. A catalytic converter is installed and operated to minimize the emissions of CO from the auxiliary generator.

III. EMISSIONS

The emissions from this facility are the result of the combustion of natural gas in the gas turbines and auxiliary generator. Table-1 below provides the facility's potential to emit (PTE).

Table 1: PTE of Facility

Pollutant	Total Tons per year (tpy)
-----------	------------------------------

Pollutant	Total Tons per year (tpy)
NO _x	236
CO	116
VOC	3
SO ₂	3
PM _{10/2.5}	5
Total HAPS	<25

Note: PTE is based on continuous operation of gas turbines and 450 hours per year of operation of the auxiliary generator.

IV. 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: Verification of Applicable Regulations

Unit	Control Device	Rule	Verification
General Electric Gas Turbine	None	A.A.C. R18-2-719.B A.A.C. R18-2-719.C.1 A.A.C. R18-2-719.E A.A.C. R18-2-719.J	These standards are applicable to existing stationary rotating machinery. The GE gas turbine was constructed prior to October 3, 1977, and is therefore not subject to New Source Performance Standard (NSPS) Subpart GG or KKKK. NESHAP Subpart YYYY is not applicable because the Seligman Station is not a major source of HAPS.
Solar Gas Turbine	None	NSPS Subpart GG 40 CFR 60.332(a)(2) 40 CFR 60.332(c) 40 CFR 60.333(b) 40 CFR 60.334(h)(3)(i)	The Solar gas turbine was built after October 3, 1977, and has a heat input greater than 10 million Btu per hour. NESHAP Subpart YYYY is not applicable because the Seligman Station is not a major source of HAPS.
Generac Generator	Catalytic converter	40 CFR 63 Subpart ZZZZ	The generator is not subject to NSPS Subpart IIII because it is not a compression ignition engine. The generator is not subject to NSPS Subpart JJJJ because it was constructed prior to January 1, 2009. The National Emission Standard for Hazardous Air Pollutants (NESHAP) Subpart ZZZZ is

Unit	Control Device	Rule	Verification
			applicable per 40 CFR 63.6603(a) which applies to an existing stationary generator located at an area source of HAPs.
Fugitive dust sources	Water and other reasonable precautions	A.A.C. R18-2-604.A,B A.A.C. R18-2-605.A,B A.A.C. R18-2-606 A.A.C. R18-2-607.A,B A.A.C. R18-2-614 A.A.C. R18-2-702.B	These are applicable to fugitive dust sources at the facility.
Mobile sources	Water Sprays/Water Truck for dust control	A.A.C. R18-2-801.A,B A.A.C. R18-2-802.A,B A.A.C. R18-2-804.A,B	These are applicable to off-road mobile sources, which either move while emitting air pollutants or are frequently moved during the course of their utilization.
Spray Painting	N/A	A.A.C. R18-2-702.B A.A.C. R-18-2-727.A,B,C,D	These standards are applicable to any spray painting operation.
Abrasive Blasting	Wet blasting, Dust collecting equipment or other approved methods	A.A.C. R-18-2-702.B A.A.C. R-18-2-726	These standards are applicable to any abrasive blasting operation.
Demolition or Renovation Operations	N/A	A.A.C. R18-2-1101.A.8	This standard is applicable to any asbestos related demolition or renovation operations.

V. PREVIOUS PERMIT CONDITIONS

Permit No. 48823 was issued on May 23, 2011, for the continued operation of this facility. Table 3 below illustrates if a section in Permit No. 48823 was revised, kept, or deleted.

Table 3: Permit No. 48823

Section No.	Determination			Comments
	Revised	Keep	Delete	
Att. A	X			General Provisions - Revised to represent most recent template language.
Att. B, Condition I	X			Facility Wide Requirements – Revised to include ALT-082 method for measuring opacity.
Att. B, Condition II	X			Stationary Rotating Machinery – This section included conditions for the Non-NSPS turbine and the emergency generator. It was broken into two sections; Section II for the Non-NSPS turbine and Section IV for the emergency generator.

Section No.	Determination			Comments
	Revised	Keep	Delete	
Att. B, Condition III		X		NSPS Gas Turbine – The contents of this section were kept.
Att. B, Condition IV		X		Fugitive Dust Requirements – The contents of this section were kept but moved to Section V.
Att. B, Condition V		X		Mobile Source Requirements – The contents of this section were kept but moved to Section VI.
Att. B, Condition VI		X		Other Periodic Activities – The contents of this section were kept but moved to Section VII.

VI. MONITORING AND RECORDKEEPING 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. Non-NSPS Turbine (General Electric Turbine)

1. The Permittee is required to show compliance with the opacity standard in Attachment "B", Section II by having a Method 9 certified observer perform a quarterly survey of visible emissions from the stacks of the stationary rotating machinery. The observer is required to conduct a 6-minute Method 9 observation if the results of the initial survey appear on an instantaneous basis to exceed the applicable standard.
2. The Permittee is required to keep records of the name of the observer, the time, date, and location of the observation and the results of all surveys and observations.
3. The Permittee is required to keep records of any corrective action taken to lower the opacity of any emission point and any excess emission reports.
4. The Permittee is required to maintain appropriate documentation to demonstrate compliance with the fuel sulfur requirements and fuel heating value monitoring requirements.
5. The Permittee is required to install and maintain a CEMS to record the hourly NO_x emission rate in lbs/hr as well as tons per rolling 365-day total for the General Electric gas turbine.
6. The Permittee is required to operate a fuel flow meter for the General Electric gas turbine.

C. NSPS Gas Turbine (Solar Gas Turbine)

1. The Permittee is required to maintain appropriate documentation to demonstrate compliance with the fuel sulfur requirements.
2. The Permittee is required to record monthly records of natural gas consumption.

D. Internal Combustion Engines (Generac Auxiliary Generator)

1. The Permittee is required to show compliance with the opacity standard in Attachment "B", Section IV by having a Method 9 certified observer perform a quarterly survey of visible emissions from the stacks of the stationary rotating machinery. The observer is required to conduct a 6-minute Method 9 observation if the results of the initial survey appear on an instantaneous basis to exceed the applicable standard.
2. The Permittee is required to keep records of the name of the observer, the time, date, and location of the observation and the results of all surveys and observations.
3. The Permittee is required to keep records of any corrective action taken to lower the opacity of any emission point and any excess emission reports.
4. The Permittee is required to maintain appropriate documentation to demonstrate compliance with the fuel sulfur requirements and fuel heating value monitoring requirements.
5. The Permittee is required to keep a rolling 12-month total of hours of generator usage.

E. Fugitive Dust

1. The Permittee is required to keep record of the dates on which any of the dust control measures contained in Attachment "B", Conditions V.B.1.c(1) through V.B.1.c(9) are employed.
2. The Permittee is required to show compliance with the opacity standards in Attachment "B", Section V by having a Method 9 certified observer perform a quarterly survey of visible emission from fugitive dust sources. The observer is required to conduct a 6-minute Method 9 observation if the results of the initial survey appear on an instantaneous basis to exceed the applicable standard.
3. The Permittee is required to keep records of the name of the observer, the time, date, and location of the observation and the results of all surveys and observations.
4. The Permittee is required to keep records of any corrective action taken to lower the opacity of any emission point and any excess emission reports.

F. Mobile Sources

The Permittee is required to keep records of all emission related maintenance performed on the mobile sources.

G. 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, and 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.

VII. TESTING REQUIREMENTS

- A. The Permittee is required to conduct semi-annual EPA Method 20 performance tests for NO_x on the Solar gas turbine and shall perform annual evaluations of the NO_x CEMS for the GE turbine.
- B. The Permittee is required to conduct a once per permit term Method 7 performance test for NO_x on the generator during the first year of the permit term.
- C. The Permittee is required to conduct a once per permit term Method 10 performance test for CO on the General Electric gas turbine and the Solar gas turbine.

VIII. COMPLIANCE HISTORY

Since Permit No. 48823 was issued on May 23, 2011, thirty four inspections (file reviews, report reviews, facility inspections, and test report reviews) have been conducted to ensure compliance with applicable permit conditions. All inspections resulted in no ADEQ agency action.

IX. COMPLIANCE ASSURANCE MONITORING (CAM) (40 CFR 64):

CAM only applies to emission units with an add-on control device. While the GE turbine has a control device to reduce NO_x emissions, the CAM rule states: “For purposes of this part, a control device does not include passive control measures that act to prevent pollutants from forming, such as...the use of combustion or other process design features or characteristics”. The GE turbine is fitted with a Lean Head End Liner, which is considered a combustion process design feature. Therefore, CAM does not apply.

The auxiliary generator has a catalytic converter, which is an add-on control device, to control CO emissions. However, the CAM rule states: “The unit uses a control device to achieve compliance with any such emission limitation or standard.” There are no emissions limitations or standards for CO for the auxiliary generator, and therefore, CAM does not apply.

X. LIST OF ABBREVIATIONS

A.A.C.....	Arizona Administrative Code
ADEQ.....	Arizona Department of Environmental Quality
CAM.....	Compliance Assurance Monitoring
CFR.....	Code of Federal Regulations
CO.....	Carbon Monoxide
EPA.....	Environmental Protection Agency
EPNG.....	El Paso Natural Gas Company
HAPS.....	Hazardous Air Pollutants
MSDS.....	Material Safety Data Sheet
NESHAP.....	National Emission Standards for Hazardous Air Pollutants
NO _x	Nitrogen Oxides
NSPS.....	New Source Performance Standards
PM.....	Particulate Matter

PM_{10/2.5}..... Particulate Matter with an aerodynamic diameter less than 10 microns
PTE..... Potential-to-Emit
SO₂..... Sulfur Dioxide
TPY Tons per Year
VOC..... Volatile Organic Compound

DRAFT