



NAVAJO NATION ENVIRONMENTAL PROTECTION AGENCY
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Detailed Information

Permitting Authority: NNEPA

County: McKinley

State: New Mexico

AFS Plant ID: 35-031-NAV03

Facility: El Paso Natural Gas Company - Gallup Compressor Station

Document Type: STATEMENT OF BASIS

**PART 71 FEDERAL OPERATING PERMIT
STATEMENT OF BASIS**

El Paso Natural Gas Company
Gallup Compressor Station

Permit No. NN OP 05-007

1. Facility Information

a. Permittee

El Paso Natural Gas Company - Gallup Compressor Station
Portion of NE 1/4 of Section 9, Township 19-N, Range 17-W
31 miles north of Gallup, NM

Mailing Address:

3801 Atrisco Blvd., NW
Albuquerque, New Mexico 87120

Owner:

El Paso Natural Gas Company (EPNG)
2 North Nevada Avenue
Colorado Springs, Colorado 80903

b. Contact Information

Facility Contact: Richard Duarte, Environmental Representative
Phone: (505) 831-7763
Facsimile: (505) 831-7739

Responsible Official: Sam A. Armenta, Albuquerque Division Director
Phone: (505) 831-7772
Facsimile: (505) 831-7739

c. Description of Operations, Products

The facility is a natural gas compressor station which performs gas inlet separation and natural gas compression.

d. History

This source is an existing natural gas compressor station consisting of inlet separation and natural gas compression. This plant was initially constructed in 1953 to provide gas compression for a natural gas pipeline. In 1991, El Paso Natural Gas replaced 16 existing gas engines with a used turbine purchased from another facility (Unit C-01), and a new emergency generator (Unit AUX-C01). This modification was subject to Prevention of Significant Deterioration (PSD). The facility was issued PSD Permit NM-999 by U.S. EPA on March 7, 1991 with enforceable emission limitations for NO_x and CO.

The initial Title V permit for this source was issued by U.S. EPA on December 26, 2000. The Title V renewal permit application was submitted on June 24, 2005. The supplement information was submitted on September 5, 2007.

e. Existing Approvals

The source has been operating under Part 71 Operating Permit NN-OP 00-03, issued on December 26, 2000 and the following approvals:

First Administrative Amendment, issued on January 14, 2005.

All conditions from previous approvals were incorporated into this Part 71 permit renewal, except for the following:

Conditions II.C.1 through 3 (NN-OP 00-03):The permittee has elected to use natural gas which meets the definition in 40 CFR 60.331(u) and not to monitor the total sulfur content of the natural gas combusted in turbine B-01 as allowed by 40 CFR 60.334(h)(3). The permittee has provided an excerpt from its current tariff from the Federal Energy Regulatory Commission (FERC) demonstrating that the fuel delivered to this plant satisfied the "natural gas" definition in 40 CFR 60.331(u). Therefore, Conditions II.C.1 through 3 in NN-OP 00-03, issued on December 26, 2000 have been removed.

Condition II.B.1 (NN-OP 00-03):This condition required emission point B-01 to comply with all applicable requirements of US Environmental Protection Agency (USEPA) regulations on Standards of Performance for New Stationary Sources promulgated for stationary gas turbines in Title 40 Code of Federal Regulations Part 60 (40 CFR 60), Subparts A and GG. [Permit no. PSD-NM-999 Special Provision 2] This condition is redundant, these requirements are included in this permit under Condition II.B and II.C. Therefore, Condition II.B.1 has been removed.

Condition II.A.2 (NN-OP 00-03): This condition required emission limitations for NO_x, PM, CO, VOC, and SO₂. It is stated in the condition that the limitations for PM, VOC, and SO₂ are not directly enforceable and were included only for informational purposes. On February 11, 2008, the permittee sent a letter to U.S. EPA Region IX requesting an amendment to Permit no. PSD-NM-999, issued December 26, 2000. These changes include removing the PSD language for SO₂, VOC, and PM contained in Special Provision 1, or Condition II.A.1 On June 18, 2008, U.S. EPA revised the PSD permit for EPNG-Gallup Compressor Station (PSD-NM-999). Therefore, Condition II.A.1 of this Part 71 renewal has been revised to incorporate the changes from the amended PSD permit, including removing the informational emission rate limitations for SO₂, VOC, and PM.

Condition II.C.10 (NN-OP 00-03): On February 11, 2008, the permittee sent a letter to U.S. EPA Region IX requesting an amendment to Permit no. PSD-NM-999, issued December 26, 2000, to incorporate changes to NSPS Subpart GG. Subpart GG was revised on July 8, 2004. The Permittee is requesting that the Permit PSD-NM-999 be revised to be consistent with the revisions to Subpart GG. Condition II.C.10 required fuel sulfur content monitoring of the fuel being fired in the turbines. The changes to Subpart GG included changes to sulfur and nitrogen monitoring requirements. 40 CFR 60.334(h)(3) was changed to allow the source to opt out of monitoring sulfur content, provided the permittee can demonstrate that their fuel meets the definition of natural gas in 40 CFR 60.331. The Permittee uses natural gas meeting the definition. El Paso Natural Gas can demonstrate compliance with the emission requirements of NSPS, Subpart GG without performing fuel sulfur monitoring. On June 18, 2008, U.S. EPA revised the PSD permit for EPNG-Gallup Compressor Station (PSD-NM-999), to address the requested revisions. U.S. EPA agreed to remove the fuel sulfur content monitoring requirement (Special Provision 10). Therefore, NNEPA has not included Special Provision 10 in the Part 71 renewal.

f. Permitted Emission Units and Control Equipment

Unit ID/ Stack ID	Unit Description	Maximum Capacity	Commenced Construction Date	Control Device
B-01	One (1) natural gas-fired regenerative-cycle turbine	76.7 MMBtu/hr 9,620 hp	1966 and modified in 1991	N/A
C-01	One (1) natural gas-fired simple cycle turbine	170.2 MMBtu/hr 25,310 hp	prior to 1977	N/A
AUX-C01	One (1) natural gas-fired RICE*, for auxiliary power generation	2.9 MMBtu/hr 400 hp	1991	N/A

* RICE= reciprocating internal combustion engine.

g. Unpermitted Emission Units and Control Equipment

No unpermitted emission units were found to be operating at this source during this review process.

h. New Emission Units and Control Equipment

There are no new emission units or pollution control equipment included in this Part 71 operating permit renewal.

i. Insignificant Activities

This stationary source also includes the following insignificant activities as defined in 40 CFR 71.5(c)(11)(ii), which is defined as emission units with potential to emit of each criteria pollutant less than 2 tons per year and potential to emit a single HAP less than 0.5 tons per year or the de minimis level established under CAA 112(g), whichever is less:

- (i) Fugitive VOC emissions from connections, flanges, open-ended lines, valves, and other components.
- (ii) Emergency shut down system and pressure relief valves.
- (iii) Blowdown activities (during startup & shutdown).
- (iv) Any emissions unit, operation, or activity that handles or stores a VOC or HAP organic liquid with a vapor pressure less than 1.5 psia.

j. Enforcement Issues

There are no known noncompliance issues that must be addressed in this permitting action. Therefore, the renewal can be proposed and issued.

k. Emission Calculations

See Appendix A of this document for detailed calculations (pages 1 through 4).

l. Potential to Emit

Potential to emit (PTE) means the maximum capacity to emit any air pollutant (Clean Air Act criteria pollutants or hazardous air pollutants) under a facility's physical and operational design. Any physical or operational limitations on the maximum capacity of this plant to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or on the type or amount of material combusted, stored, or processed, may be treated as a part of its design

if the limitation is enforceable by US EPA. Actual emissions are typically lower than PTE.

Process/facility	Potential to Emit (tons/year)						
	PM	PM-10	SO ₂	NO _x	VOC	CO	HAPs
Unit B-01	2.22	2.22	1.14	198	0.71	31.2	0.35
Unit C-01	4.92	4.92	0.30	679	1.7	106	0.77
Unit AUX-C01	0.03	0.03	0.001	17.7	0.05	25.7	0.06
Insignificant Activities*	Less than 5.00	Less than 5.00	-	-	Less than 5.00	-	Negligible
PTE of the Entire Source	12.2	12.2	1.44	894	7.32	163	1.17
Title V Major Source Thresholds	NA	100	100	100	100	100	10 for a single HAP and 25 for total HAPs

*Note: This is an estimate of the PM/PM10 emissions from the blowdown, pressure relief systems, and the fugitive VOC emissions from equipment leaks.

- (i) The potential to emit of NO_x and CO are equal to or greater than 100 tons per year. Therefore, this source is considered a major source under 40 CFR 71 (Federal Operating Permit Program).
- (ii) This source is located in an attainment area and is not in one of the 28 source categories defined in 40 C.F.R. 52.21(b)(1)(i)(a). This source is an existing major source under the Prevention of Significant Deterioration (PSD) program.
- (iii) This source is not in one of the 28 listed source categories under 40 CFR 52.21(b)(1)(iii). However, there is an applicable New Source Performance Standard (NSPS) that was in effect on August 7, 1980 (NSPS, Subpart GG). This NSPS includes emission limits for NO_x and SO₂.

m. Actual Emissions

The following table shows the actual emissions from the source. This information reflects the 2004 emission inventory data submitted by the permittee.

Pollutant	Actual Emissions (tons/year)
PM	Not Reported
PM10	5.5
SO ₂	0.9
VOC	3.8
NO _x	403
Formaldehyde	4.2
Acetaldehyde	4.2

2. Navajo Tribal Information

a. General

The reservation of the Navajo Nation is one of the largest Indian reservations in the country, covering more than 27,000 square miles in three states: Arizona, Utah, and New Mexico. The Navajo Nation currently is home to more than 260,000 people. Industries on the reservation include oil and natural gas production, coal mining, electric generation and distribution, and tourism.

b. Local air quality and attainment status

All areas of the Navajo Nation are currently designated as attainment or unclassifiable for all pollutants for which a National Ambient Air Quality Standard (NAAQS) has been established.

3. Prevention of Significant Deterioration (PSD) Applicability

El Paso Natural Gas Gallup compressor station was constructed in 1953 and modified in 1991. This existing source is not in one of the 28 source categories defined in 40 CFR 52.21(b)(1)(iii) and has potential to emit NO_x greater than 250 tons per year. Therefore, this source is an existing PSD major source. The initial construction of this source in the 1950s predated the PSD applicability date. In 1991, El Paso Natural Gas replaced 16 existing gas engines with a used turbine purchased from another facility (Unit C-01), and a new emergency generator (Unit AUX-C01). Unit B-01 was modified to increase the maximum capacity. The modifications that occurred in 1991 are subject to Prevention of Significant Deterioration (PSD), and were permitted in PSD Permit NM-999, issued by U.S. EPA on March 7, 1991. This PSD permit included federally enforceable emission limitations for NO_x and CO. The initial Title V permit for this source was issued by U.S. EPA on December 26, 2000. The PSD Permit (PSD-NM-999) was concurrently modified by U.S. EPA at this time.

On February 11, 2008, the permittee sent a letter to U.S. EPA Region IX requesting an amendment to Permit no. PSD-NM-999, issued December 26, 2000, to incorporate changes to NSPS Subpart GG. Subpart GG was revised on July 8, 2004. The Permittee is requesting that the Permit PSD-NM-999 be revised to be consistent with the revisions to Subpart GG. The changes to Subpart GG included changes to sulfur and nitrogen monitoring requirements. 40 CFR 60.334(h)(3) was changed to allow the source to opt out of monitoring sulfur content, provided the permittee can demonstrate that their fuel meets the definition of natural gas in 40 CFR 60.331. The Permittee uses natural gas meeting the definition. El Paso Natural Gas can demonstrate compliance with the emission requirements of NSPS, Subpart GG without performing fuel sulfur monitoring. On June 18, 2008, U.S. EPA revised the PSD permit for EPNG-Gallup Compressor Station (PSD-NM-999), to address the revisions requested in EPNG's February 11, 2008 letter. Since the facility satisfies the requirement to use a fuel that meets the definition of "natural gas" in 40 C.F.R. 60.331(u) and has provided the

documentation required by 40 C.F.R. 60.334(h)(3), U.S. EPA agreed to remove the fuel sulfur content monitoring requirement (Special Provision 10). Therefore, NNEPA has not included Special Provision 10 in the Part 71 renewal.

The following conditions are included from the PSD permit:

- a. Pursuant to PSD-NM-999, issued on March 7, 1991, as last amended December 27, 2000, the Permittee shall not exceed the emissions listed in the table below. The hourly NOx and CO emission rates listed below are directly enforceable. Any proposed increase in emission rates may require an application for a modification of the facilities covered by permit no.PSD-NM-999. [Permit PSD-NM-999 Special Prov. 1]

Emission Unit ID#	Unit Description	NOx		CO	
		lb/hr	tons/year	lb/hr	tons/year
B-01	One (1) natural gas-fired regenerative-cycle turbine	45.1	197.5	7.12	31.2
C-01	One (1) natural gas-fired simple cycle turbine	155.0	678.9	24.26	106.3
AUX C-01	One (1) natural gas-fired RICE, for auxiliary power generation	29.4	17.7	42.8	25.7

- b. The emission concentration of nitrogen oxides (NOx) in the stack gases from the gas turbine identified as emission point B-01 shall not exceed 322 parts per million by volume (ppmv). Measured stack concentrations shall be expressed on a dry basis at 15 percent oxygen and adjusted to ISO standard day conditions as specified in 40 CFR 60.335(c)(1). [Permit no. PSD-NM-999 Special Provision 3]
- c. The emission concentration of nitrogen oxides (NOx) in the stack gases from the gas turbine identified as emission point C-01 shall not exceed 258 parts per million by volume (ppmv). Measured stack concentrations shall be expressed on a dry basis at 15 percent oxygen and adjusted to ISO standard day conditions as specified in 40 CFR 60.335(c)(1). [Permit no. PSD-NM-999 Special Provision 4]
- d. Operation of the emergency generator, identified as AUX C-01 shall not exceed 1,200 hours per year, to be enforced on a 12 month rolling basis. [Permit no. PSD-NM-999 Special Provision 8]

4. Federal Rule Applicability

- a. **New Source Performance Standard (NSPS) for Stationary Gas Turbines (40 CFR 60.330-60.335, Subpart GG):**

There are two (2) turbines (B-01 and C-01) at this source. Turbine C-01 was constructed before October 3, 1977, prior to the applicability date of NSPS, Subpart GG. Therefore, turbine C-01 is not subject to the requirements of this NSPS. Turbine B-01 was constructed in 1966 and modified to increase horsepower in 1991. The uprate in 1991 for turbine B-01 is considered a modification under 40 CFR 60 because it resulted in an increase in emissions of a regulated pollutant for which a standard existed.

Turbine B-01 was modified after October 3, 1977 and has a maximum heat input capacity greater than 10 MMBtu/hr. Therefore, Turbine B-01 is subject to the requirements of 40 CFR, Subpart GG and the general provisions of 40 CFR 60, Subpart A. However, pursuant to 40 CFR 60.332(l), turbine B-01 is exempt from the NO_x limitations of this standard because the unit is classified as a regenerative cycle turbine and has a heat input less than 100 MMBtu per hour. Turbine B-01 is subject to the sulfur requirements in 40 CFR 60, Subpart GG. Pursuant to 40 CFR 60.333(b), the total sulfur contained in the fuel combusted shall not exceed 0.8 percent by weight (8,000 ppmw).

Since turbine B-01 is not subject to the NO_x limitations of 60.332(a), there are no applicable continuous monitoring requirements for the NO_x emissions from turbine B-01.

The permittee has elected not to monitor the total sulfur content of the natural gas combusted in turbine B-01 by using the natural gas which meets the definition in 40 CFR 60.331(u), pursuant to 40 CFR 60.334(h)(3). The permittee has provided an excerpt from its current tariff from the Federal Energy Regulatory Commission (FERC) demonstrating that the fuel delivered to this plant satisfied the "natural gas" definition in 40 CFR 60.331(u). No further compliance monitoring requirements under this NSPS are applicable to turbine B-01. The permittee has performed a compliance stack test for turbine B-01 in 2004.

- b. New Source Performance Standard (NSPS) for Stationary Compression Ignition Internal Combustion Engines (40 CFR 60.4200-4219, Subpart IIII):**
On January 10, 2008, the New Source Performance Standards (NSPS) for Stationary Compression Ignition Internal Combustion Engines (40 CFR 60.4200-4219, Subpart IIII) were promulgated. This subpart applies to stationary compression ignition internal combustion engines that commenced construction or have been modified or reconstructed after July 11, 2005 and were manufactured after April 1, 2006. (In this subpart, “commence construction” means when the engine was ordered by the manufacturer.) This subpart does not apply to the engines at EPNG since they were installed prior to 2005 and have not been modified or reconstructed since July 11, 2005.
- c. New Source Performance Standard (NSPS) for Stationary Spark Ignition Internal Combustion Engines (40 CFR 60.4230-4248, Subpart JJJJ):**
On January 10, 2008, the New Source Performance Standards (NSPS) for Stationary Spark Ignition Internal Combustion Engines (40 CFR 60.4230-4248, Subpart IIII) were promulgated. This subpart applies to stationary SI ICE that are manufactured on or after July 1, 2007 or modified or reconstructed after June 12, 2006. This subpart does not apply to the engines at EPNG since they were installed prior to June 12, 2006.
- d. New Source Performance Standard (NSPS) for Stationary Combustion Turbines (40 CFR 60.4230-4248, Subpart KKKK):**
On January 10, 2008, the New Source Performance Standards (NSPS) for Stationary Combustion Turbines (40 CFR 60.4300-4420, Subpart KKKK) were promulgated. This subpart applies to stationary internal combustion turbines that commenced construction, modification, or reconstruction after February 18, 2005. This subpart does not apply to the engines at EPNG since they were installed prior to February 18, 2005.
- e. National Emission Standards for Hazardous Air Pollutants (NESHAP) for Oil and Natural Gas Production (40 CFR 63.760-779, Subpart HH):**

This source does not meet the definition of an oil and natural gas production facility as specified in 40 CFR 63.760(a). Therefore, this source is not subject to the requirements of the NESHAP in Subpart HH.
- f. NESHAP for Natural Gas Transmission and Storage (40 CFR 63.1270-1287, Subpart HHH):**

This source does not have glycol dehydration units. Therefore, this source is not subject to the requirements of the NESHAP in Subpart HHH, pursuant to 40 CFR 63.1270(c).
- g. NESHAP for Combustion Turbines (40 CFR 63.6080-63.6175, Subpart YYYY):**

This source is an existing HAP minor source. The potential to emit HAPs from this source is less than 10 tons per year of a single HAP and 25 tons per year of combined HAPs. Therefore, the two (2) turbines (B-01 and C-01) are not subject to the requirements of the NESHAP in Subpart YYYY.

h. NESHAP for Reciprocating Internal Combustion Engines (40 CFR 63.6580 - 63.6675, Subpart ZZZZ):

This source is an existing HAP area source. The one (1) reciprocating internal combustion engine (AUX-C01) was constructed in 1991 and previously designated as an emergency generator. Pursuant to 40 CFR 63.6590(b)(3), a stationary RICE that is considered an existing emergency stationary RICE or is an existing compression ignition (CI) RICE does not have to meet the requirements of 40 CFR 63, Subpart ZZZZ and no initial notification is necessary. Therefore, the existing one (1) reciprocating internal combustion engine (AUX-C01), which commenced construction before June 12, 2006, is not subject to this subpart.

i. Acid Rain Program (40 CFR 72 through 40 CFR 80)

This source does not have any affected units specified in 40 CFR 72.6(a). Therefore, the turbines at this source are not subject to requirements of the Acid Rain Program (40 CFR 72 through 40 CFR 80).

j. Continuous Assurance Monitoring (CAM) Program (40 CFR 64)

None of the emission units at this source use an add-on control device as defined in 40 CFR 64.1. Therefore, the requirements of 40 CFR 64 (CAM) are not applicable.

k. Asbestos NESHAP (40 CFR 61, Subpart M):

The permittee is subject to the requirements of the Asbestos NESHAP and the applicable requirements are specified in the permit document.

l. Protection of Stratospheric Ozone (40 CFR 82):

The permittee is subject to the requirements of 40 CFR 82 and the applicable requirements are specified in the permit document.

Summary of Applicable Federal Requirements

Federal Air Quality Requirement	Current or Future Requirement
PSD NM-999, issued March 7, 1991; amended June 18, 2008	Current
NSPS, Subpart GG	Current

Asbestos NESHAP (40 CFR 61, Subpart M)	Current
Protection of Stratospheric Ozone (40 CFR 82)	Current

5. Endangered Species Act

Pursuant to Section 7 of the Endangered Species Act (ESA), 16 U.S.C. § 1536, and its implementing regulations at 50 CFR Part 402, USEPA is required to ensure that any action authorized, funded, or carried out by USEPA is not likely to jeopardize the continued existence of any Federally listed endangered species or threatened species or result in the destruction or adverse modification of any such species' designated critical habitat. NNEPA is issuing this federal Part 71 permit pursuant to a delegation from USEPA. However, this permit does not authorize the construction of new emission units, or emission increases from existing units, nor does it otherwise authorize any other physical modifications to the facility or its operations. Therefore, NNEPA and USEPA have concluded that the issuance of this permit will have no effect on listed species or their critical habitat.

6. Use of All Credible Evidence

Determinations of deviations, continuous or intermittent compliance status, or violations of the permit are not limited to the testing or monitoring methods required by the underlying regulations or this permit; other credible evidence (including any evidence admissible under the Federal Rules of Evidence) must be considered by the source, NNEPA, and U.S. EPA in such determinations.

7. NNEPA Authority

Authority to administer the Part 71 Permit Program was delegated to the Navajo Nation EPA by USEPA Region IX in part on October 13, 2004 and in whole on March 21, 2006.

8. Public Participation

a. Public Notice

As described in 40 C.F.R. § 71.11(a)(5) and Navajo Nation Operating Permit Regulations (“NNOPR”) Subpart IV § 403(A), all draft operating permits shall be publicly noticed and made available for public comment. The public notice requirements for permit actions and the public comment period are described in 40 C.F.R. § 71.11(d) and NNOPR Subpart IV.

There is a 30-day public comment period for actions pertaining to a draft permit. Public notice will be given for this draft permit by mailing a copy of the notice to the permit applicant, U.S. EPA, and the affected state (Arizona). A copy of the notice will also be provided to all persons who submitted a written request to be included on the mailing list. The request should be made to the following:

Charlene Nelson
Navajo Nation Operating Permit Program
P.O. Box 529
Fort Defiance, AZ 86504

E-mail: charlenenelson@navajo.org

Public notice will be published in a daily or weekly newspaper of general circulation in the area affected by this source.

b. Opportunity for Comment

Members of the public may review a copy of the draft permit prepared by NNEPA, this statement of basis for the draft permit, the application, and all supporting materials submitted by the source at:

Navajo Nation Air Quality Control Program
Route 112 North, Bldg No. F004-51
Fort Defiance, AZ 86504

Copies of the draft permit and this statement of basis can also be obtained free of charge from NNEPA's website

www.navajonationepa.org/airqty/permits

or by contacting Charlene Nelson at the NNAQCP address listed above or by telephone at (928) 729-4247. All documents will be available for review at the NNAQCP office indicated above during regular business hours.

If you have comments on the draft permit, you must submit them during the 30-day public comment period. All significant comments received during the public comment period and all significant comments made at any public hearing will be considered in arriving at a final decision on the permit. The final permit is a public record that can be obtained by request. A statement of reason for changes made to the draft permits and responses to comments received will be sent to persons who commented on the draft permit.

If you believe that any condition of the draft permit is inappropriate, you must raise all reasonably ascertainable issues and submit all arguments supporting your position by the end of the comment period. Any supporting documents must be included in full and may not be incorporated by reference, unless they are already part of the administrative record for this permit or consist of tribal, state or federal statutes or regulations, or other generally available referenced materials.

c. Opportunity to Request a Hearing

A person may submit a written request for a public hearing to Charlene Nelson, at the address listed in Section 8(a) above, by stating the nature of the issues to be raised at the public hearing. Based on the number of hearing requests received, NNEPA will hold a public hearing whenever it finds there is a significant degree of public interest in a draft operating permit. If a public hearing is held, NNEPA will provide public notice of the hearing and any person may submit oral or written statements and data concerning the draft permit.

d. Mailing List

If you would like to be added to our mailing list to be informed of future actions on this or other Clean Air Act permits issued on the Navajo Nation, please send your name and address to Charlene Nelson at the address listed above.