

Technical Support Document
Title V Permit
El Paso Natural Gas Company
Oracle Compressor Station; Permit # V20641.000

1. Disclaimer

The provisions of this technical support merely provide background information with respect to the underlying permit. The provisions of this document are not intended to enlarge, limit or modify the provisions of the permit.

2. Agency Authority

Under ARS §49-479 *et seq.*, Pinal County has adopted a "unitary" permit program that regulates both the construction and operation of stationary sources of air pollution. The Pinal County Air Quality Control District ("PCAQCD") constitutes the administrative branch of County government that administers the program.

Under Clean Air Act ("CAA") §110 and 40 CFR §51.166, the EPA has approved the pre-construction review aspects of Pinal County's attainment-area permitting program, such that PCAQCD has the primary authority to issue, administer and enforce pre-construction permits as required under the Prevention of Significant Deterioration (PSD) provisions of the CAA.

Under CAA §501 *et seq.* and 40 CFR Part 70, the EPA has granted interim approval for the "operating permit," aspects of PCAQCD's unitary permitting program that affect major sources, such that Pinal County has the primary authority to issue, administer and enforce permits required under the Title V provisions of the CAA.

3. Applicant

El Paso Natural Gas Company
5151 E. Broadway, Suite 1680
Tucson, AZ 85711

4. Attainment Classification

This facility is located in an area currently in attainment for all pollutants. The SO₂ nonattainment area of Oracle-San Manuel has recently been redesignated as "maintenance".

5. Permitting History

The following is a list of permits issued to this facility since the original Title V:

Permit/Revision	Type	Issuance	Reason for Revision
V20608.000	Title V	7/31/00	New Title V permit; Conversion to simple cycle.
V20608.R01	Revision	8/17/01	Install Compressor Wheel as alternative scenario.
V20622.000	Renewal	5/26/05	NA

6. Compliance/Enforcement History

The last inspection of this facility was conducted in October of 2008. The facility was in compliance. The last performance test for NO_x emissions was conducted in 2009. Results indicate that NO_x emissions are at approximately 22% of the NSPS limitation of 500 ppm.

This facility does not have any history of compliance problems or enforcement.

7. Project Description

This is a permit renewal for the Title V permit at the Oracle Compressor Station. No facility changes are

being processed during this renewal, but there are some changes to the permit. This technical support document only summarizes any changes made to the permit through this renewal. For more in-depth discussion on this permit see the TSDs for previous revisions of this permit.

The Oracle compressor station was built in 1971. That antedates any construction-permit requirements under either the Clean Air Act, Arizona statutes, or local rules. The source includes a natural gas fired turbine rated at 10,300 horsepower at 80° F. The turbine is fueled with pipeline quality natural gas, drawn from the natural gas pipeline.

Also, the source is allowed to operate a 170 kW natural gas emergency generator. The small generator at the facility could qualify, under District regulations, an insignificant activity. However, the continued "insignificance" would hinge upon actual usage; the definition limits operation to 72 hours per year. Rather than run the risk of inadvertently violating the "insignificance" ceiling, the Permittee has elected to voluntarily accept a limit on generator operation, allowing up to 500 hours of operation per year.

8. Permit Changes

- **Nonattainment Status**

The SO₂ nonattainment area of Oracle-San Manuel has recently been designated a "maintenance" area for SO₂, and therefore no longer nonattainment.

- **Turbine Model Number**

El Paso Natural Gas has requested that we update the permit to reflect the correct nomenclature for the turbine. There have been no changes to the actual turbine, but historically the model number has been labeled incorrectly in the air quality permit.

- **Opacity**

During the 5 years of the previous permit term, PCAQCD has adopted a new opacity standard of 20%. This standard has not been adopted into the State Implementation Plan as of the date of this document and is therefore "locally enforceable" only. The standard does not apply to emission units which currently have another opacity requirement from an existing performance standard.

- **Reasonable Precautions**

The reasonable precaution rule was recently submitted for approval into the State Implementation Plan, as it is expected to be approved before this permit is issued, or approximately around the time of issuance. This rule is applicable to any dust-generating activities conducted on site and it merely states that reasonable precautions must be taken before generating airborne dust.

- **Plant-Wide Requirements**

Historically, the Oracle Compression station permit included certain activities as "Insignificant Activities", including abrasive blasting, architectural coatings and other spray painting. Since these activities are subject to applicable requirements, they are not true Insignificant Activities. The applicable requirements which apply to these activities have been included in the permit as "Facility-Wide" activities.

This measure also allows El Paso Natural Gas some flexibility in conducting abrasive blasting. In the past, such activity has created confusion as to whether separate notifications had to be submitted. Now, since the applicable requirements are in the permit, El Paso can conduct these activities as needed (for maintenance only) as long as emissions are tracked and submitted on an annual basis.

- **Testing Schedule**

Results of the last performance test conducted in 2009 indicate that NO_x emissions from the turbine are at 22% of the NSPS limitation. Therefore, testing is required within 5 years of the previous one. If future tests results indicate an upwards trend in emissions, the Department may, usually at renewal time, require that for future permit terms testing is conducted on a more frequent basis.

9. Emissions

- Actual Emissions (2008) in Tons per Year

NOx	CO	VOC	SO2	PM10	PM2.5	HAPs
139.10	0.20	1.30	1.20	2.40	2.40	2.20

- Allowable Emissions (tons per year)

Emissions Unit	NOx	CO	VOC	SO2	PM10	PM2.5	Formaldehyde	HAPs
GE Unit	236.5	34.8	2.30	0.35	5.43	5.43	3.23	5.02
Waukesha Generator	3.5	6.2	0.55	0.01	0.005	0.005	0.005	0.017
TOTAL	240	41.0	2.85	0.36	5.435	5.435	3.235	5.037

10. Ambient Impact Assessment

No Ambient Impact Assessment has been conducted for this renewal since there have been no changes to the facility.

11. List of Common Abbreviations

AP-42	.....
“Compilation of Air Pollutant Emission Factors, Volume 1: Stationary Point and Area Sources”, 5 th Edition	
CAA	..... Clean Air Act
CAM	..... Compliance Assurance Monitoring
CFR	..... Code of Federal Regulations
CO	..... Carbon Monoxide
hr	..... Hour
kW	..... kilowatts
lb	..... Pound
MACT	..... Maximum Achievable Control Technology
MMBTU	..... Million British Thermal Units
Mod.	..... Modification
MSDS	..... Material Safety Data Sheet
NOX	..... Nitrogen Oxides
NSPS	..... New Source Performance Standard
NSR	..... New Source Review
PCAQCD	..... Pinal County Air Quality Control District
PGCAQCD	..... Pinal-Gila Counties Air Quality Control District
PM10	..... Particulate Matter nominally less than 10 Micrometers
PSD	..... Prevention of Significant Deterioration
SIC	..... Standard Industrial Code
SIP	..... State Implementation Plan
SOX	..... Sulfur Dioxide
tpy	..... tons per year
TSD	..... Technical Support Document
VOC	..... Volatile Organic Compound
yr	..... year