



**TECHNICAL REVIEW AND EVALUATION
OF APPLICATION FOR
AIR QUALITY PERMIT No. 103590**

I. INTRODUCTION

This Class I Renewal permit is for the continued operation of Transwestern Pipeline Company LLC's Kingman Compressor Station. Permit No. 103590 renews and supersedes Permit No. 77319.

The uncontrolled emissions from this facility are greater than the major source thresholds identified in A.A.C. R18-2-101.75 for nitrogen oxides (NO_x). Therefore, a Class I permit is required for this facility in accordance with A.A.C. R18-2-302.B.1.a.

Permit No. 77319 had an expiration date of October 29, 2024, and the application for this permit renewal was submitted on April 30, 2024. This submission met the permit condition requiring that a complete and timely application be submitted by the Permittee at least six (6) months, but no earlier than eighteen (18) months, prior to the expiration date of the current permit.

A. Company Information

Facility Name: Transwestern Pipeline - Kingman Compressor Station

Mailing Address: 8501 Jefferson St NE
Albuquerque, NM 87112

Facility Location: 40 miles East of Kingman on I-40 in Mohave County, Arizona

B. Attainment Classification

The facility is located in Mohave County that is in attainment or unclassified for all criteria air pollutants.

II. PROCESS DESCRIPTION

Transwestern Pipeline Company provides natural gas transportation services for natural gas suppliers and end users throughout the southwestern United States. The Kingman Compressor Station provides additional compression to the Transwestern Pipeline, a natural gas transmission system that connects supplies throughout Texas, New Mexico, Colorado, and Arizona. Compression is needed to maintain enough pressure in the pipeline to keep the natural gas flowing through the pipeline network, and is accomplished at the Kingman Compressor Station by a General Electric natural gas fired turbine, which drives the compressor unit. The station has one natural gas-fired generator to provide emergency power for the facility.

III. COMPLIANCE HISTORY

A. Report Reviews

The facility received five (5) full inspections and four (4) partial inspections during the permit term. The facility submitted ten (10) compliance certifications during the permit

term. No permit deviation or excess emissions reports were submitted during the permit term.

B. Performance Tests

Under Permit No. 77319, four (4) performance tests were conducted during the permit term. All performance tests resulted in emissions below the applicable standard. The results of the performance tests conducted during the permit term are detailed in Table 2 below.

Table 1: Performance Test Results

Emission Unit	Pollutant	Date of Test	Results of Performance Test (ppm @15% O₂, ISO)	Emission Limit (ppm @15% O₂, ISO)	Pass/Fail
Compressor Turbine	NO _x	March 10, 2020	81.92	165	Pass
Compressor Turbine	NO _x	March 24, 2021	40.06	159	Pass
Compressor Turbine	NO _x	November 10, 2022	47.35	162	Pass
Compressor Turbine	NO _x	May 3, 2023	48.99	102	Pass

IV. EMISSIONS

Potential to emit (PTE) was calculated using equipment and manufacturer specifications, Compilation of Air Pollutant Emissions Factors from Stationary Sources AP-42, Section 3.1, titled Stationary Gas Turbines, and AP-42, 3.2 titled Natural Gas-fired Reciprocating Engines.

The facility has a potential-to-emit (PTE) more than the major source thresholds of NO_x. The facility's PTE is provided in Table 2 below:

Table 2: Potential to Emit (tpy)

Pollutant	Current PTE
NO _x	140.61
PM ₁₀	12.84
PM _{2.5}	12.84
CO	85.65
SO ₂	6.61
VOC	12.78
HAPs (total)	1.81

V. MINOR NEW SOURCE REVIEW (NSR)

Minor new source review is required if the emissions of a new source have the potential to emit any regulated air pollutant at an amount greater than or equal to the permitting exemption threshold (PET) in Table 2 above. Minor NSR is not triggered since there are no changes in emissions for this renewal permit.

VI. APPLICABLE REGULATIONS

Table 3 identifies applicable regulations and verification as to why that standard applies. The table also contains a discussion of any regulations the emission unit is exempt from.

Table 3: Applicable Regulations

Unit	Control Device	Rule	Discussion
Compressor Turbine	N/A	NSPS 40 CFR 60 Subpart GG	The turbine is constructed after October 3, 1977, and is therefore subject to New Source Performance Standard (NSPS) Subpart GG. NSPS Subpart KKKK is applicable to stationary combustion turbines that commenced construction, modification or reconstruction after February 18, 2005. The turbine was constructed prior to this date. Therefore, this turbine is not subject to NSPS Subpart KKKK.
Emergency Generator	N/A	NESHAP 40 CFR 63 Subpart ZZZZ A.A.C. R18-2-719	Requirements of NESHAP Subpart ZZZZ are applicable to the emergency generator. The emergency generator, manufactured prior to the applicable date of NSPS Subpart JJJJ. Therefore, the emergency generator is not subject to NSPS Subpart JJJJ. State rules from A.A.C. R18-2 719 are applicable.
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.

Unit	Control Device	Rule	Discussion
Spray Painting	Enclosures	A.A.C. R18-2-702 A.A.C. R-18-2-727	These standards are 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 REVISIONS AND CONDITIONS

Table 4 addresses the changes made to the sections and conditions from Permit No. 77319:

Table 4: Previous Permit Conditions

Section No.	Determination			Comments
	Added	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. "C"		X		Equipment List: Revised to reflect the most recent equipment operating at the facility and to include equipment information provided.

VIII. MONITORING, RECORDKEEPING, AND REPORTING REQUIREMENTS

Table 5 contains an inclusive but not an exhaustive list of the monitoring, recordkeeping and reporting requirements prescribed by the air quality permit. The table below is intended to provide insight to the public for how the Permittee is required to demonstrate compliance with the emission limits in the permit. Records are required be kept for a minimum of 5 years as outlined in Section XII of Attachment “A” of the permit.

Table 5: Permit No. 103590

Emission Unit	Pollutant or Standard	Emission Limit	Monitoring Requirements	Recordkeeping Requirements	Reporting Requirements
Compressor Turbine	NO _x	NSPS GG Equation Based	Conduct annual performance testing.	Keep data and test reports for monitoring.	Report test results. Submit excess emissions and deviations reports if applicable.
Emergency Generator	PM	40% opacity – for any period greater than 10 seconds	Conduct periodic opacity monitoring on a quarterly basis.	Maintain records of the lower heating value of the fuel.	Report all 6-minute periods which the opacity exceeded 15%.
	SO ₂	1.0 lb/MMBtu	N/A	Record the daily sulfur content of the fuel used in the engines.	Report to the Director any daily period which the sulfur content exceeds 0.8%.
Fugitive Dust	PM	40% Opacity	A Method 9 observer is required to conduct a monthly survey of visible emissions.	Record of the dates and types of dust control measures employed, and if applicable, the results of any Method 9 observations, and any corrective action taken to lower the opacity of any excess emissions.	N/A

Emission Unit	Pollutant or Standard	Emission Limit	Monitoring Requirements	Recordkeeping Requirements	Reporting Requirements
Abrasive Blasting	PM	20% Opacity	N/A	Record the date, duration and pollution control measures of any abrasive blasting project.	N/A
Spray Painting	VOC	20% Opacity Control 96% of the overspray	N/A	Maintain records of the date, duration, quantity of paint used, any applicable MSDS, and pollution control measures of any spray painting project.	N/A
Demolition/ Renovation	Asbestos	N/A	N/A	Maintain records of all asbestos related demolition or renovation projects including the “NESHAP Notification for Renovation and Demolition Activities” form and all supporting documents	N/A

IX. COMPLIANCE ASSURANCE MONITORING (CAM)

The CAM rule applies to pollutant-specific emission units (PSEU) at a major Title V source if the unit meets all of the following criteria:

- A. The unit is subject to an emission limit or standard for the applicable regulated air pollutant;
- B. The unit uses a control device to achieve compliance with the emission limit or standard; and
- C. The unit has "potential pre-control device emissions" of the applicable regulated air pollutant equal to or greater than 100% of the amount (tons/year) required for a source to be classified as a major source. "Potential pre-control device emissions" means potential to emit (PTE, as defined in Title V) except emissions reductions achieved by the applicable control device are not taken into account.

The general purpose of monitoring required by the CAM rule is to assure compliance with emission standards by ensuring that control devices meet and maintain the assumed control efficiencies. Compliance is ensured through requiring monitoring of the operation and maintenance of the control equipment and, if applicable, operating conditions of the pollutant-specific emissions unit. For the PSEUs that have post control potential to emit equal to or greater than 100 percent of the amount, in tons per year, required for a source to be classified as a major source, for each parameter monitored, the facility shall collect four or more data values equally spaced over each hour. Such units are defined as "large" PSEUs. For all other PSEUs ("small" PSEUs), the monitoring shall include some data collection at least once per 24-hour period.

The facility does not use a control device to meet a standard. Consequently, CAM requirements do not apply, and CAM plans are not necessary.

X. LEARNING SITE EVALUTATION

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 in 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 renewal will not result in an increase in emissions and thus, it is exempt from a learning sites evaluation.

XI. ENVIRONMENTAL JUSTICE ANALYSIS

The EPA (Environmental Protection Agency) defines Environmental Justice (EJ) to include the fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income with respect to the development, implementation, and enforcement of environmental laws, regulations, and polices. The goal of completing an EJ assessment in permitting is to provide an opportunity for overburdened populations or communities to allow for meaningful participation in the permitting process. Overburdened is used to describe the minority, low-income, tribal and

indigenous populations or communities that potentially experience disproportionate environmental harms and risks due to exposures or cumulative impacts or greater vulnerability to environmental hazards. The renewal permit does not allow or permit any increases in emissions and will not result in any additional impacts.

LIST OF ABBREVIATIONS

A.A.C.	Arizona Administrative Code
ADEQ	Arizona Department of Environmental Quality
AQD	Air Quality Division
A.R.S.	Arizona Revised Statutes
Btu/ft ³	British Thermal Units per Cubic Foot
CAM	Compliance Assurance Monitoring
CFR	Code of Federal Regulations
CO	Carbon Monoxide
EPA	Environmental Protection Agency
ft	Feet
HAP	Hazardous Air Pollutant
hp	Horsepower
hr	Hour
IC	Internal Combustion
kW	Kilowatt
MW	Megawatts
NAAQS	National Ambient Air Quality Standard
NO _x	Nitrogen Oxides
NO ₂	Nitrogen Dioxide
NSPS	New Source Performance Standards
Pb	Lead
PM	Particulate Matter
PM ₁₀	Particulate Matter less than 10 µm nominal aerodynamic diameter
PM _{2.5}	Particulate Matter less than 2.5 µm nominal aerodynamic diameter
PTE	Potential to Emit
SO ₂	Sulfur Dioxide Significant Impact Levels
TPY	Tons per Year
VOC	Volatile Organic Compound
yr	Year