Place ID: 2103
CTS #: 433639

El Paso Natural Gas Company, L.L.C.
a Kinder Morgan company

1/30/2024

FEDEX 2703 8033 6658

Ms. Karla Murrieta
Arizona Department of Environmental Quality
Air Quality Division
1110 W. Washington Street
Phoenix, AZ 85007

RECEIVED
FEB 02 2024
BY:

Re: Submittal of Class I Air Quality Permit Renewal Applications
El Paso Natural Gas Company, L.L.C.
Dutch Flat Compressor Station
Flagstaff Compressor Station

Dear Ms. Murrieta:

This submittal contains Class I Air Quality Permit renewal applications for both Dutch Flat and Flagstaff Compressor Stations. There are no changes to previous representations made for both Dutch Flat and Flagstaff Compressor Stations.

These applications contain the required application forms, emissions calculations, and other information for a complete air permit renewal application. Should you require further information or if you have any questions regarding the permit applications, please contact me at (303) 914-7616 or email address weiwen_daly@kindermorgan.com.

Sincerely,

Weiwen Daly
Air Permitting and Compliance – East

Cc: U.S. EPA Region IX (FedEx Tracking No. 2703 8065 1196)

Enclosures:
Class I Air Quality Permit Renewal Application – Dutch Flat Compressor Station
Class I Air Quality Permit Renewal Application – Flagstaff Compressor Station

CLASS I AIR QUALITY PERMIT RENEWAL APPLICATION

EL PASO NATURAL GAS COMPANY, L.L.C.

FLAGSTAFF COMPRESSOR STATION

SUBMITTED BY:

El Paso Natural Gas Company, L.L.C.
a Kinder Morgan company

SUBMITTED TO:

Arizona Department of Environmental Quality

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

Arizona Department of Environmental Quality
1110 W. Washington St.
Phoenix, AZ 85007

TABLE OF CONTENTS

TABLE OF CONTENTS

Section Name **Page Number**

LIST OF FIGURES

LIST OF TABLES

LIST OF APPENDICES

EXECUTIVE SUMMARY

The El Paso Natural Gas Company, L.L.C. (EPNG), a Kinder Morgan Company, provides natural gas transportation services for natural gas suppliers and end users throughout the southwest United States and owns and operates a large pipeline network. The Flagstaff Compressor Station (Facility) is one of such stations that provides natural gas compression to the pipeline network. Natural gas compression is needed to maintain enough pressure in the pipeline to keep the natural gas flowing. The Facility is permitted to operate 24 hours a day and 365 days a year. The Flagstaff Compressor Station is regulated by the Arizona Department of Environmental Quality (ADEQ) and currently operates pursuant to the conditions of ADEQ Class I Air Quality Permit No. 76612.

ADEQ Class I Air Quality Permit No. 76612 was issued on August 26, 2019, and expires on August 24, 2024. EPNG must submit a timely renewal application to ADEQ to maintain the authorization to operate the Flagstaff Compressor Station. Per Arizona Administrative Code (A.A.C.) R18-2-304(D)(2), a timely renewal application is one that is submitted at least 6 months, but not more than 18 months, prior to the date of permit expiration. This application is being submitted to satisfy this deadline (Application).

The information contained herein includes the applicable information requested by ADEQ's "Application Packet for Class I Permit". A complete set of forms, including the Standard Class I Permit Application Form signed by the Responsible Official, Equipment List, Emission Source Form, and Application Administrative Completeness Checklist is included in Appendix A. Table E-1 identifies each component required for a complete Class I Air Quality Permit Renewal Application and their corresponding section in the document.

Note that EPNG is not proposing a physical change or change in the method of operation as part of the Application and is not proposing any alternate operating scenarios.

EPNG has not reconsidered previous regulatory applicability determinations, except where specifically noted. In some instances, additional information regarding the applicability and compliance determinations has been added for clarification purposes. EPNG anticipates that the renewed Class I Permit will carry forward the policies and understandings set forth in the current permit, including the ability to operate at a range within its permitted capacity and to conduct routine equipment maintenance

and inspection activities without notice or prior approval by ADEQ. This was confirmed by ADEQ through approving the classification of such items as insignificant activities. EPNG further understands that changes can be made to insignificant activities without notification to ADEQ provided that such changes remain insignificant.

Table E-1
Application Requirements Index

Application Instructions Section 2.4	Application Component	Location in Application
1, 2	Process Description	Section 2.1
3, 4	Alternate Operating Scenarios	Section 4.2
5	Process Flow Diagram	Section 2.3
7, 20	Emission Calculations	Section 3, Appendix B
8	Citations and Descriptions of all Applicable Requirements	Section 5
9	Proposed Exemptions from Otherwise Applicable Requirements	Section 5.8
10	Activity Data (process rate, fuel usage, hours of operation, etc.)	Section 4.4
11	Equipment List	Appendix A
12	Stack Information	Appendix A
13	Site Diagram	Section 2.2
14	Air Pollution Control Information	Section 4.9
16	Compliance Plan	Section 4.10
17	Compliance Certification	Section 4.11
18	Acid Rain Program Compliance Plan	N/A (1)
19	Major New Sources	Section 4.12

(1) The Flagstaff Compressor Station is not subject to the Acid Rain program requirements incorporated into A.A.C. R18-2-333.

1. INTRODUCTION

EPNG provides natural gas transportation services for natural gas suppliers and end users throughout the southwest United States and owns and operates a large pipeline network. The Flagstaff Compressor Station is one of several stations that provides natural gas compression to the pipeline network. The Facility is permitted to operate 24 hours per day and 365 days per year and is regulated by ADEQ. The Facility is a major source of hazardous air pollutants (HAPs), and emissions are above applicable significant levels for several regulated New Source Review (NSR) pollutants. The facility wide nitrogen oxide (NO_X) and carbon monoxide (CO) emissions exceed the major source threshold of 100 tons per year (tpy) described in A.A.C. R18-2-101(75)(c) and NO_X also exceeds the 250 tpy threshold described in A.A.C. R18-2-401(13)(b). Therefore, a Class I Air Quality Permit is required per A.A.C. R18-2-302(B)(1)(a). The Facility's emissions and operations are currently authorized by ADEQ Class I Air Quality Permit No. 76612.

1.1 SITE LOCATION

The Flagstaff Compressor Station is located ½ mile north of Old Highway 66 on El Paso Flagstaff Road. A site diagram of the Flagstaff Compressor Station is provided in Section 2.2.

1.2 REGULATORY JURISDICTION

The Flagstaff Compressor Station is under the jurisdiction of the following State and Federal agencies with respect to air quality requirements:

Arizona Department of Environmental Quality
Air Quality Division
1110 W. Washington Street
Phoenix, AZ 85007

United States Environmental Protection Agency – Region 9
75 Hawthorne Street
San Francisco, CA 94105

2. PROCESS DESCRIPTION AND APPLICATION OVERVIEW

The following sections provide details on current operations at the Facility, including a site diagram, relevant process flow diagrams, and an overview of the Application.

2.1 PROCESS DESCRIPTION

The Flagstaff Compressor Station is one of several stations that EPNG owns and operates to help provide natural gas compression to their pipeline network. The compression process at the Facility is accomplished with the use of two identical natural gas-fired Reciprocating Internal Combustion Engines (RICE) (Clark Model TCV-16, A-1 and A-2) that drive the compressor units. The Flagstaff Compressor Station is unattended as the RICE are automated. The Standard Industrial Classification (SIC) code for the Facility is 4922 (Natural Gas Transmission). The North American Industry Classification System (NAICS) code is 48621 (Pipeline Transportation of Natural Gas).

Compressors, driven by the natural gas fueled RICE, receive a flow of natural gas from a common pipeline system. The RICE operation is dependent on the amount of natural gas that is being transported to various customers along the pipeline system. Purchased electric power is the primary electric power used at the Facility. When purchased power is not available, a four-stroke, rich-burn (4SRB) natural gas-fired emergency generator (Cummins Model G12, Aux-1) provides power.

Depending on customer demand for natural gas, the amount of natural gas transported in the EPNG pipeline will vary. Due to this variance, the permit authorizes full operation of the RICE to meet the maximum potential demand for natural gas transportation services. However, for times when compression is not necessary due to the volume of natural gas being transported, EPNG will shut down operation of the RICE. Other factors may also require RICE shutdown, as detailed below:

- Maintenance – EPNG uses an "information-based" equipment maintenance system. EPNG collects and analyzes all available information relating to RICE conditions so that necessary or required maintenance is performed.

- Malfunctions – three typical malfunctions that could automatically shut down a unit include, but are not limited to:

    - Loss of oil pressure;
    - High temperature; and
    - Vibration.

  Any one of these alarms will automatically turn off a RICE and block in the fuel line.

- Emergency Shutdown (ESD) – ESD is initiated by the hazardous gas sensors in the compressor building, glass break, pull switches, or fire eyes. When an ESD is performed at the Facility, the main inlet/outlet valve and select station valves will close to isolate portions of the Facility.

When the RICE or entire Facility is shutdown, a small volume of natural gas from the equipment and piping is vented to the atmosphere. These events, referred to as "blowdown", result in insignificant emissions.

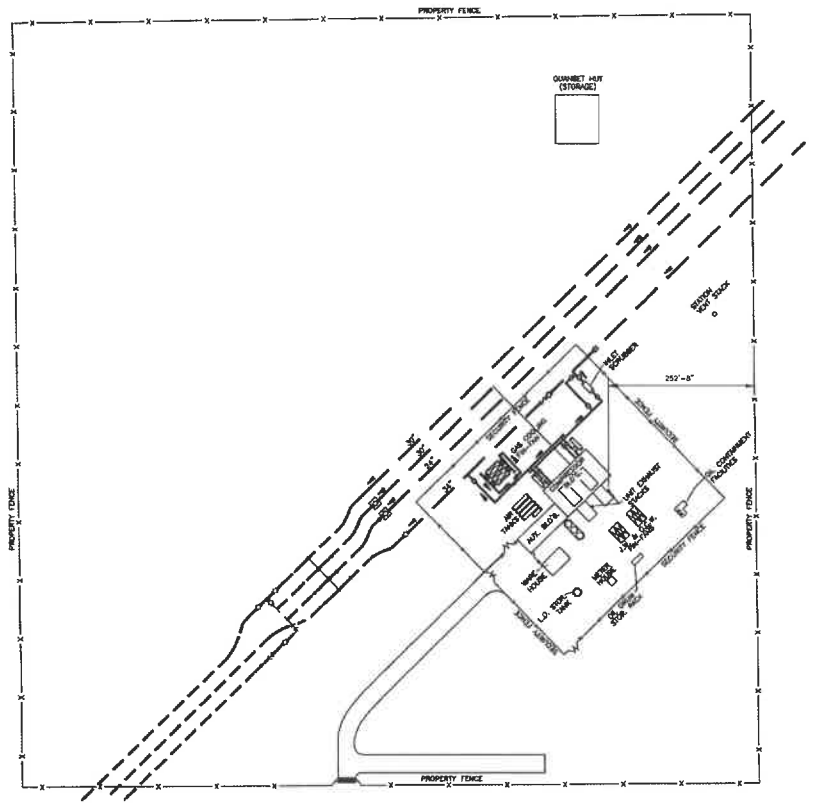
2.2 SITE DIAGRAM

There are no physical changes or changes in the method of operation to the emissions sources at the Flagstaff Compressor Station being proposed in this Application. As a result, the site-diagrams previously provided to ADEQ as part of the 2019 Renewal Application are still applicable and are provided in this section as Figures 2-1 and 2-2.

2.3 PROCESS FLOW DIAGRAMS

Operation of the facility, as detailed in other parts of this Application, is straightforward. The Clark TCV-16 reciprocating compressor engines are two-stroke, lean-burn (2SLB), natural gas fired internal combustion engines. The energy released during the combustion process drives gas compressors, raising the pressure of the incoming gas from an initial "suction" state to a more compressed "discharge" state. No processing is performed at this facility. Figure 2-3 and Figure 2-4 contain the process flow diagrams for the engines and emergency generator at the Flagstaff Compressor Station.

Figure 2-1
Site Diagram - Title V Air Permitting Site Plan



N

LOCATION: E 1/2 SW 1/4 NW 1/4 SW 1/4
E 1/2 NW 1/4 SW 1/4 SW 1/4
SE 1/4 NW 1/4 SW 1/4
NE 1/4 SW 1/4 SW 1/4
W 277 FT. OF SW 1/4 NE 1/4 SW 1/4
W 277 FT. OF NW 1/4 SE 1/4 SW 1/4
SEC. 4, T-21-N, R-8-E, B&MG&SR
COCONINO COUNTY, ARIZONA

ELEVATION: APPROX. 6,750'

E.P.N.G. IS PROVIDING THIS INFORMATION TO ASSIST A.D.E.Q. IN ITS REVIEW OF THE PERMIT APPLICATION. E.P.N.G. DOES NOT INTEND THIS INFORMATION TO BE INCLUDED IN THE PERMIT.

					ENG REC		DATE	
					DRAWN	FB	2/7/95	
					CHECK			
					CHECK			
1	PTH	5/21/02	REMOVE PUMP HOUSE/WATER TANK		PROJ.			
PRT	SEP	DATE	TO	WO	DESIGN			
PRINT RECORD					W.O.			

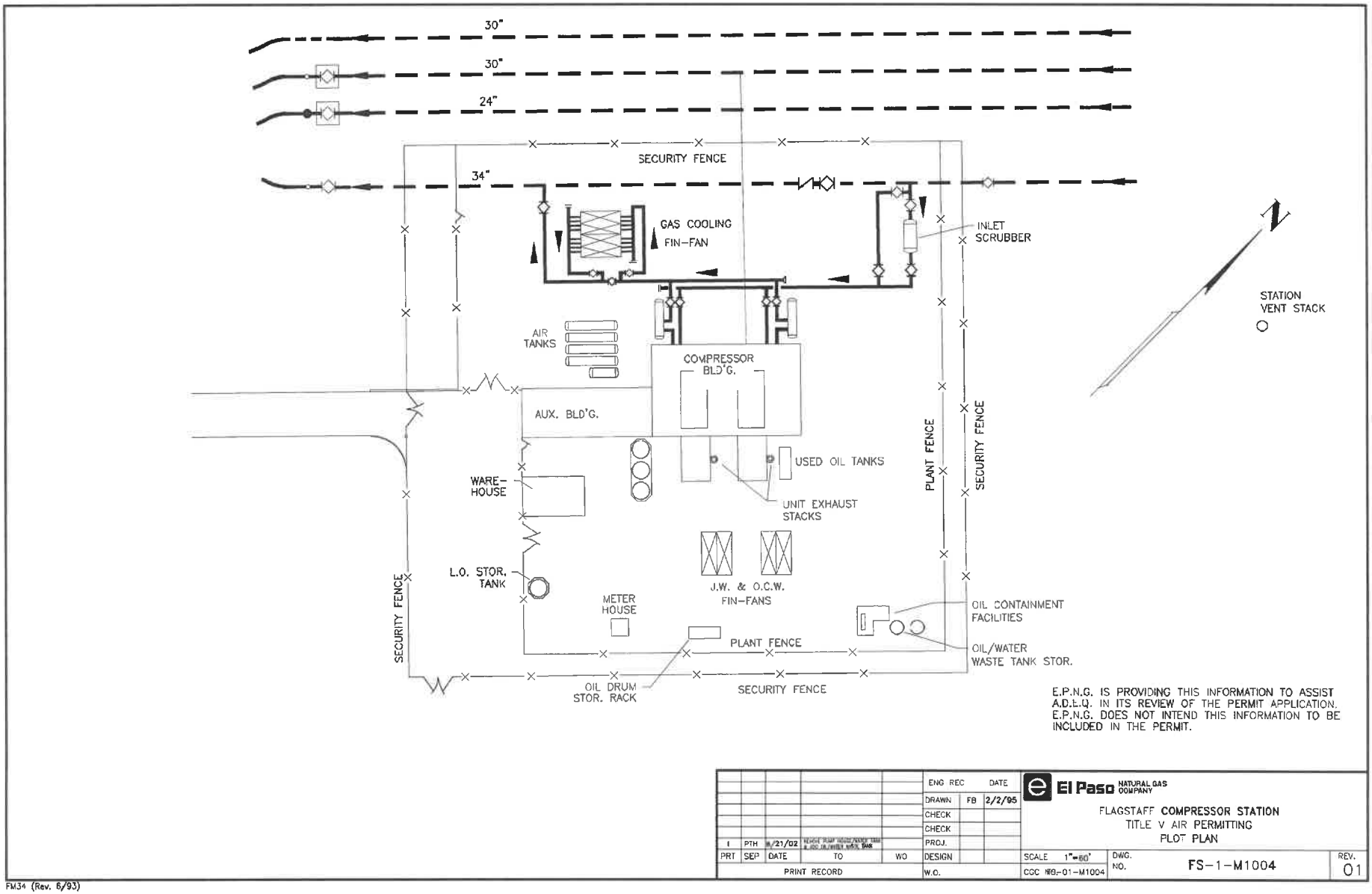
El Paso NATURAL GAS COMPANY

FLAGSTAFF **COMPRESSOR STATION**
TITLE V AIR PERMITTING
SITE PLAN

SCALE 1"=200' | DWG. NO. FS-1-M1003 | REV. 01
CGC NOS-01-M1003

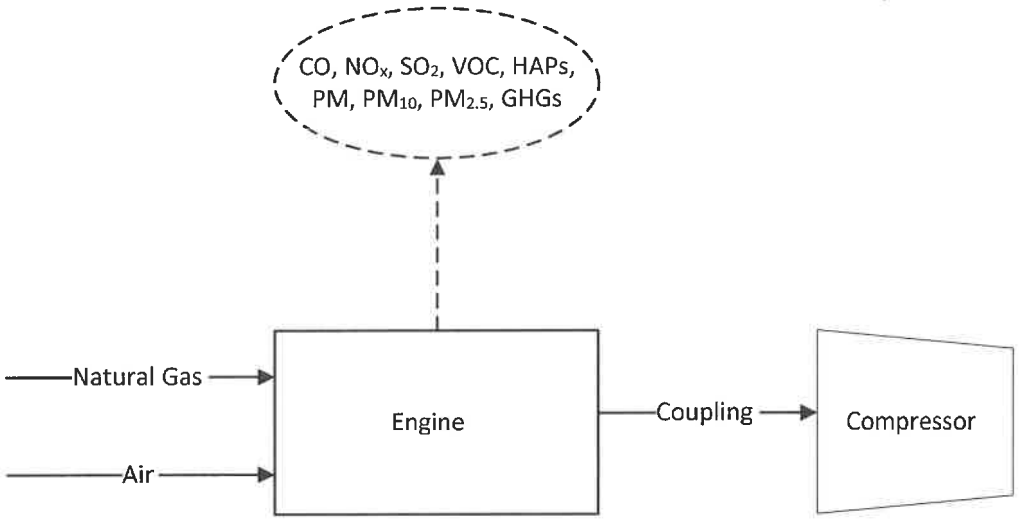
FM34 (Rev. 6/93)

Figure 2-2
Site Diagram - Title V Air Permitting Plot Plan



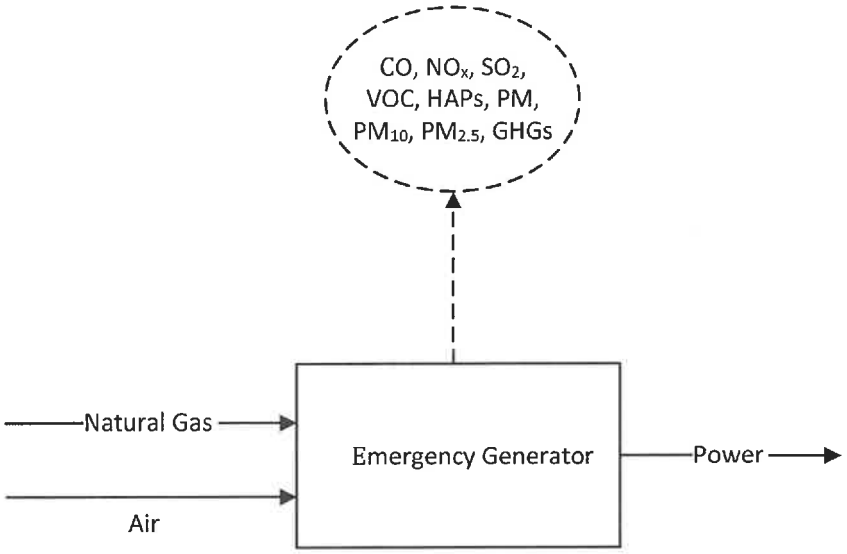
FM34 (Rev. 6/93)

Figure 2-3
Engines Process Flow Diagram



Nitrogen Oxides (NO_X)
Carbon Monoxide (CO)
Sulfur Dioxide (SO_2)
Particulate Matter (PM)
Particulate Matter with an aerodynamic diameter less than 10 microns (PM_{10})
Particulate Matter with an aerodynamic diameter less than 2.5 microns ($PM_{2.5}$)
Volatile Organic Compounds (VOC)
Hazardous Air Pollutants (HAP)
Greenhouse Gases (GHG)

Figure 2-4
Emergency Generator Process Flow Diagram



2.4 RENEWAL APPLICATION OVERVIEW

This submittal is an application for renewal of ADEQ Class I Air Quality Permit No. 76612. The permit was issued on August 26, 2019 and expires on August 24, 2024. Per A.A.C. R18-2-322, EPNG must submit a timely renewal application to ADEQ to avoid the expiration of the permit thereby terminating the source's right to operate. Per A.A.C. R18-2-304(D)(2), a renewal application is considered timely if it is submitted at least six months, but not more than 18 months prior to the date of permit expiration. Therefore, the renewal application is due by February 24, 2024. The submittal of this renewal Application in a timely manner will allow the Facility to continue to operate past the permit expiration date until a new permit has been issued.

There are no physical changes or changes in the method of operation being proposed at this time. Additionally, EPNG is not requesting any changes to the permit.

The information contained in this Application includes the applicable information requested by ADEQ's "Application Packet for Class I Permit" document. Required forms have been included in Appendix A, including the Standard Class I Permit Application Form, Equipment List, Emission Source Form, and Application Administrative Completeness Checklist.

3. EMISSIONS ANALYSIS

The following section describes how the sitewide Potential to Emit (PTE) was calculated for each source and activity associated with the Facility. There are no physical modifications or changes in the method of operation proposed with this Application. Therefore, there are no emissions increases and Federal NSR is not applicable. For this reason, a discussion of emissions increases for the determination of Prevention of Significant Deterioration (PSD) review applicability has not been included in this section.

3.1 EMISSIONS CALCULATION APPROACH

Operations and equipment at the Facility have the potential to emit NO_X, CO, SO_2, PM, PM_{10}, $PM_{2.5}$, VOC, HAP, and GHGs. Emissions associated with the various emissions units are calculated using the methodologies described in the following sections. Detailed emissions calculations are provided in Appendix B.

3.1.1 Reciprocating IC Engine Emissions

Emissions from the Clark TCV-16 RICE (Equipment IDs: A-1. A-2) are calculated based on the heat input, operating hours, emissions test results, the emissions factors from the U.S Environmental Protection Agency (U.S. EPA), AP-42 Section 3.2, "Natural Gas-Fired Reciprocating Engines," dated July 2000, and 40 CFR Part 98 for (Mandatory Greenhouse Gas Reporting).

NO_X and CO:

Emissions of NO_X and CO from the RICE are determined based on the highest results obtained during 1995 testing with a 20% safety factor applied. The data is expressed in pounds per hour (lb/hr). Therefore, the short-term emissions rates are set equal to these values. Annual emissions, in tons per year (tpy), are based on the unit operating continuously at these emissions rates for 8,760 hours per year.

- *Hourly Emissions (lb/hr) = 1995 Test w/ 20% safety factor (lb/hr)*
- *Annual Emissions (tpy) = Hourly Emissions (lb/hr) * 8,760 (hours/yr) * 1/2000 (tons/pound)*

VOC, SO_2, PM, PM_{10}, $PM_{2.5}$, and HAPs

Emissions of VOC, SO_2, PM, PM_{10}, $PM_{2.5}$, and HAPs from the RICE are calculated utilizing emissions factors from AP-42 Section 3.2. Specifically, the factors that were utilized are those for 2SLB natural gas-fired RICE located in Table 3.2-1. These emissions factors are expressed as pounds of pollutant per million British Thermal Units of fuel (lb/MMBtu). Therefore, to calculate emissions, a heat input to the RICE is necessary. This heat input has been set equal to the maximum firing rate specified by the manufacturer. Annual emissions are based on the unit operating continuously for 8,760 hours per year.

- *Hourly Emissions (lb/hr) = Emissions factor (lb/MMBtu) * RICE Heat Input (MMBtu/hr)*
- *Annual Emissions (tpy) = Hourly Emissions (lb/hr) * 8,760 (hours/yr) * 1/2000 (tons/pound)*

Greenhouse Gases:

Emissions of GHGs [carbon dioxide (CO_2), methane (CH_4), and nitrous oxide (N_2O)] from the RICE are calculated utilizing emissions factors from Tables C-1 and C-2 in 40 CFR Part 98, Subpart C (General Stationary Fuel Combustion Sources). The emissions factors are expressed as kilograms of pollutant per MMBtu of fuel (kg/MMBtu). Therefore, to calculate emissions, a heat input to the RICE is necessary. The same heat input that was utilized for determining emissions of SO_2, particulate matter species, and HAPs has been utilized for calculating emissions of GHGs. The total GHG emissions are converted to carbon dioxide equivalents (CO_2e) by multiplying each individual GHG by the global warming potential (GWP) from Table A-1 of 40 CFR Part 98, Subpart A (General Provisions).

- *Hourly Emissions (lb/hr) = Emissions factor (kg/MMBtu) * RICE Heat Input (MMBtu/hr) * 1/0.4536 (lb/kg)*
- *Annual Emissions (tpy) = Hourly Emissions (lb/hr) * 8,760 (hours/yr) * 1/2000 (tons/pound)*
- *Annual Greenhouse Gas Equivalents, CO_2e (tpy): CO_2 Annual Emissions (tpy) * CO_2 GWP + CH_4 Annual Emissions (tpy) * CH_4 GWP + N_2O Annual Emissions (tpy) * N_2O GWP*

3.1.2 Emergency Generator Emissions

Emissions from the Cummins G12 natural gas-fired emergency generator (Equipment ID: Aux-1) is calculated based on the heat input, operating hours, the emission factors from U.S. EPA AP-42 Section 3.2, "Natural Gas-fired Reciprocating Engines," dated July 2000, and 40 CFR Part 98.

NO_X, CO, VOC, SO_2, PM, PM_{10}, $PM_{2.5}$ and HAPs:

Emissions of NO_X, CO, VOC, SO_2, PM, PM_{10}, $PM_{2.5}$ and HAPs from the generator are calculated utilizing emissions factors from AP-42 Section 3.2. Specifically, the emissions factors are for 4SRB engines located in Table 3.2-3, expressed as lb/MMBtu. Therefore, to calculate emissions, a heat input to the generator is necessary. This heat input has been quantified utilizing the engine's brake specific fuel consumption (BSFC) and horsepower (hp). Annual emissions are based on the unit operating for 500 hours per year.

- *Generator Heat Input (MMBtu/hr) = BSFC (Btu/hp-hr) * Horsepower (hp) * 1/10^6 (MMBtu/Btu)*
- *Hourly Emissions (lb/hr) = Emissions factor (lb/MMBtu) * Generator Heat Input (MMBtu/hr)*
- *Annual Emissions (tpy) = Hourly Emissions (lb/hr) * 500 (hours/yr) * 1/2000 (tons/pound)*

Greenhouse Gases:

Emissions of CO_2, CH_4, and N_2O from the generator are calculated utilizing emissions factors from Tables C-1 and C-2 in 40 CFR Part 98 Subpart C. The emissions factors are expressed as kg/MMBtu. Therefore, to calculate emissions, a heat input to the generator is necessary. The same heat input utilized for determining emissions of the other pollutants has been utilized for calculating emissions of GHGs. Annual emissions are based on the unit operating for 500 hours per year. The total GHG emissions are converted to CO_2e by multiplying each individual GHG by its GWP taken from Table A-1 of 40 CFR Part 98 Subpart A.

- *Hourly Emissions (lb/hr) = Emissions factor (kg/MMBtu) * Generator Heat Input (MMBtu/hr) * 1/0.4536 (lb/kg)*
- *Annual Emissions (tpy) = Hourly Emissions (lb/hr) * 500 (hours/yr) * 1/2000 (tons/pound)*
- *Annual Greenhouse Gas Equivalents, CO_2e (tpy): CO_2 Annual Emissions (tpy) * CO_2 GWP + CH_4 Annual Emissions (tpy) * CH_4 GWP + N_2O Annual Emission (tpy) * N_2O GWP*

3.1.3 Fugitive Emissions

Equipment leak fugitive VOC, HAP, and GHG emissions are quantified based on default component counts from GRI-HAPCalc Version 3.01, which uses a worst-case default number of connectors, flanges, open-ended lines, valves, and other components in gas service for a typical natural gas compression facility. The default numbers were doubled as a conservative estimate. Fugitive emissions are calculated using the

total hydrocarbon (THC) emissions factor from Table 2-4 of the U.S. EPA's Protocol for Equipment Leak Emission Estimates (November, 1995) and a representative weight percent of VOCs, HAPs, CO_2, and CH_4. The weight percent of VOC was conservatively assumed to be equal to 4%. For HAPs, CO_2, and CH_4, the weight percents were set equal to the percentage determined from a recent gas analysis. Supporting calculations are provided in Appendix B. Annual emissions are based on the Facility continuously operating for 8,760 hours per year.

- *Hourly Emissions (lb/hr) = Emissions Factor (lb/hr-component) * # of components * Weight Percent (%) / 100*
- *Annual Emissions (tpy) = Hourly Emissions (lb/hr) * 8,760 (hours/yr) * 1/2000 (tons/pound)*

3.1.4 Startup and Shutdown Emissions

As described in Section 2.1, there are several scenarios which involve the shutdown and startup of the RICE. When this occurs, small amounts of natural gas are vented to atmosphere. EPNG has identified three different events that will result in the venting of natural gas: (1) blowdowns during shutdown of the RICE; (2) venting of gas during subsequent startup; (3) and venting during an emergency shutdown. The volume of gas vented during each activity and the number of events are based on the Facility's engineering judgment and experience. A representative gas analysis was utilized to quantify VOC, HAP, CO_2, and CH_4 present in the gas when vented. These compositions and the volume of gas vented were utilized to represent emissions from the startup and shutdown activities. The representations made are not intended to create specific limits or restrict how often they occur. As described in Section 4.14, these emissions have been quantified for the purposes of demonstrating that these emissions are insignificant. For this reason, only annual total emissions have been provided.

- *Annual VOC Emissions (tpy) = Annual Volume of Gas Vented (Mscf/yr) * VOC Content of Gas (lb/scf) * 1,000 (scf/Mscf) * 1/2,000 (tons/pound)*

3.2 SITEWIDE EMISSIONS SUMMARY

Table 3-1 contains a summary of the sitewide PTE emissions. The sitewide PTE of NO_X is above the source-wide NSR major source threshold of 250 tpy as defined in in A.A.C. R18-2-401(13)(b) and the sitewide PTE of both NO_X and CO are greater than the Title V major source threshold of 100 tpy defined in A.A.C. R18-2-101(75)(c). In addition, the Facility is a major source of HAP emissions as its sitewide PTE of HAPs is

greater than 10 tpy for formaldehyde and greater than 25 tpy for all HAPs combined. Emissions of NO_X, CO, VOC, PM_{10}, and $PM_{2.5}$ exceed their permitting exemption thresholds and their corresponding significant levels. Due to the sitewide PTE of NO_X, CO, and HAPs exceeding an associated major source threshold in A.A.C. R18-2-101(75)(a)-(c), the Facility is currently and will continue to be authorized by a Class I Air Quality Permit. Detailed calculations can be found in Appendix B.

Table 3-1
Potential to Emit Emissions Rates
Sitewide Summary
El Paso Natural Gas Company, L.L.C.
Flagstaff Compressor Station - Flagstaff, Arizona

Pollutant	Potential Emissions (tpy)					A.A.C. R18-2-101(75)(a) Major Source Thresholds (tpy)	A.A.C. R18-2-101(75)(b),(c) Major Source Thresholds (tpy)	A.A.C. R18-2-101(131) Significant Levels (tpy)	Permitting Exemption Thresholds (tpy)
	Engine (A-1)	Engine (A-2)	Emergency Generator (Aux-1)	Fugitives [a]	Total				
NO_x	584.20	584.20	0.86	-	1,169.26	250	100	40	20
CO	118.74	118.74	1.44	-	238.92	250	100	100	50
VOC	20.39	20.39	0.01	1.27	42.07	250	100	40	20
SO_2	0.10	0.10	2.28E-04	-	0.20	250	100	40	20
PM	8.21	8.21	7.51E-03	-	16.43	250	100	25	N/A
PM_{10}	8.21	8.21	7.51E-03	-	16.43	250	100	15	7.5
$PM_{2.5}$	8.21	8.21	7.51E-03	-	16.43	250	100	10	5
Total HAPs	13.54	13.54	0.01	2.40E-03	27.09	-	25	N/A	N/A
CO_2e	19,900	19,900	45	710	40,555	75,000	100,000	75,000	N/A

[a] Fugitive emissions from equipment leaks have been included per Section 2.4, Item 7.a on ADEQ's "Application Packet for a Class I Permit".

4. CLASS I PERMIT APPLICATION COMPONENTS

The following section includes information requested in Section 2.4 of the "Application Packet for Class I Permit" as required by R18-2-304(B).

4.1 PROCESS INFORMATION

A description of the Facility's processes and products by SIC Code has been identified in Section 2 of this application.

4.2 ALTERNATIVE OPERATING SCENARIOS

There are no alternative operating scenarios being requested by EPNG at this time. Therefore, this is not applicable to the Application, and no further information has been included.

4.3 PROCESS FLOW DIAGRAM, MATERIAL BALANCE, AND SITE DIAGRAM

A process flow diagram and site diagram are included in Section 2 of the Application. A material balance is not required to understand emissions calculations; therefore, it has not been provided.

4.4 EMISSIONS RELATED INFORMATION

The applicable emissions related information from items seven and ten of Section 2.4 of the "Application Packet for a Class I Permit" have been identified below:

- *The source shall submit the potential emissions of regulated air pollutants as defined in A.A.C. R18-2-101 for all emission sources. Emissions shall be expressed in pounds per hour, tons per year, and such other terms as may be requested. Emissions shall be submitted using the standard "Emission Sources" portion of the "Standard Permit Application Form." Emissions information shall include fugitive emissions in the same manner as stack emissions, regardless of whether the source category in question is included in the list of sources contained in the definition of major source in A.A.C. R18-2-101.*

- *The source shall identify and describe all points of emissions, and shall submit additional information related to the emissions of regulated air pollutants sufficient to verify which requirements are applicable to the source and sufficient to determine any fees under this Chapter.*

Appendix A includes the "Emissions Sources' portion of the application form. Appendix B provides emissions calculations to support the information included on the form.

- *Maximum annual process rate for each piece of equipment which generates air emissions.*
- *Maximum annual process rate for the whole plant.*
- *Maximum rated hourly process rate for each piece of equipment which generates air emissions.*
- *Maximum rated hourly process rate for the whole plant.*

No processing is done at this Facility. The maximum annual and hourly process rate are not applicable to this Application.

- *For all fuel burning equipment including generators, a description of fuel use, including the type used, the quantity used per year, the maximum and average quantity used per hour, the percent used for process heat, and higher heating value of the fuel. For solid fuels and fuel oils, state the potential sulfur and ash content.*

The fuel used in all of the units at the Facility is natural gas. The usage rates have been included in the emissions calculations provided in Appendix B.

- *A description of all raw materials used and the maximum annual and hourly, monthly, or quarterly quantities of each material used.*

There are no raw materials used as inputs at this Facility.

- *Anticipated Operating Schedules*

The equipment at the Facility can operate continuously (24 hours per day, 7 days per week, 8,760 hours per year). The anticipated operating schedule is as follows:

WINTER	SPRING	SUMMER	FALL
25%	25%	25%	25%

- *Limitations on source operations and any work practice standards affecting emissions.*

There are no limitations on source operations or work practice standards proposed with this Application that would impact emissions rates. Therefore, this is not applicable and no additional information has been provided.

4.5 APPLICABLE REQUIREMENTS

There are no changes to applicable requirements as contained in the current ADEQ Class I Air Quality Permit, and all applicable requirements have been addressed in Section 5.

4.6 EXEMPTIONS FROM OTHERWISE APPLICABLE REQUIREMENTS

There are no changes to exemptions from otherwise applicable requirements as contained in the current ADEQ permit, and all exemptions from otherwise applicable requirements have been addressed in Section 5.8.

4.7 VOLUNTARILY ACCEPTED LIMITS

There are no voluntary limitations being proposed to avoid classification as a major source or major modification. Therefore, no information on such limitations has been included with the Application.

4.8 SOURCE INFORMATION AND STACK CHARACTERISTICS

ADEQ's "Emissions Sources" form with emissions rates and stack characteristics as well as the "Equipment List" form have been included in Appendix A of the Application.

4.9 AIR POLLUTION CONTROL INFORMATION

The Facility does not contain air pollution control devices; therefore, the air pollution control information is not applicable and is not included in the Application. The Facility will continue to remain in compliance with the necessary air pollution control requirements.

4.10 COMPLIANCE PLAN AND SCHEDULE

The Flagstaff Compressor Station is currently in compliance with all applicable requirements. Additionally, the Facility has no new sources or modifications, thus a compliance plan has not been included with this Application.

4.11 COMPLIANCE CERTIFICATION

The Standard Class I Permit Application Form in Appendix A includes a certification of compliance with all applicable requirements and has been signed by a responsible official as required by A.A.C. R18-2-304(B)(9). The Facility will continue to submit semi-annual compliance certifications as required by the permit.

4.12 NEW MAJOR SOURCES OR MAJOR MODIFICATIONS

The Facility has no new sources or modifications; thus, the requirements of A.A.C. R18-2-401 are not applicable to the Application.

4.13 MINOR NSR APPLICABILITY DETERMINATION

Per A.A.C. R18-2-334, any new stationary source subject to the Class I permitting requirements or modification of a Class I source is required to complete Minor NSR. The Minor NSR provisions mandate that applicants either prepare an ambient air quality assessment or implement Reasonably Available Control Technology (RACT). This Application is for renewal of an existing Class I permit with no proposed modifications. Therefore, the Minor NSR provisions are not applicable, and the Application does not include a RACT analysis or air dispersion modeling.

4.14 INSIGNIFICANT ACTIVITIES

In addition to the emissions units detailed in other parts of this Application, EPNG may conduct any of the following non-exclusive insignificant activities at the Flagstaff Compressor Station:

- Liquid Storage and Piping
    - Petroleum product storage tanks containing the following substances: lubricating oil, transformer oil, and used oil.
    - Piping of natural gas.
    - Piping of used oil, and transformer oil.
    - Storage and handling of drums or other transportable containers where the containers are sealed during storage, and covered during loading and unloading, including containers of waste and used oil regulated under the Federal Resource Conservation and Recovery Act, 42 U.S.C. 6901-6992k.
    - Storage tanks of any size containing exclusively soaps, detergents, waxes, greases, aqueous salt solutions, aqueous solutions of acids that are not regulated air pollutants, or aqueous caustic solutions.
- Internal combustion electrical generator sets used for less than 500 hours per calendar year for emergency replacement or standby service.

- Low Emitting Processes
    - Equipment using water, water and soap or detergent, or a suspension of abrasives in water for purposes of cleaning or finishing.
- Site Maintenance
    - Housekeeping activities and associated products used for cleaning purposes, including collecting spilled and accumulated materials at the source, including operation of fixed vacuum cleaning systems specifically for such purposes.
    - Architectural painting and associated surface preparation for maintenance purposes at industrial or commercial facilities.
- Ancillary Non-Industrial Activities
    - General office activities, such as paper shredding, copying, photographic activities, and blueprinting, but not to include incineration.
    - Use of consumer products, including hazardous substances as that term is defined in the Federal Hazardous Substances Act (15 U.S.C. 1261 et seq.) where the product is used at a source in the same manner as normal consumer use.
- Miscellaneous Activities
    - Transformer vents.
    - Operation of cooling water, plant water, wastewater, and other water systems/
    - Natural gas blowdowns.
    - Operation of battery systems.
    - Operation of natural gas fired appliances rated less than 1 MMBtu/hr for human comfort.
    - Operation of vents, valves, and flanges.

Furthermore, with this Application, EPNG is providing information and emissions calculations for ESDs and blowdowns associated with startup and shutdown events. EPNG is providing this additional information, with associated emissions calculations, to assist ADEQ in its review of the Application. This information is not intended to be included in the permit or used as the basis for a limit on a number of events. It is included only to demonstrate that ESD and blowdown emissions at the Facility are insignificant. Detailed emissions calculations associated with ESDs and blowdowns are provided in Appendix B.

4.15 CONFIDENTIAL INFORMATION

This Application does not contain any confidential information. Therefore, the requirement to follow notice obligations in Arizona Revised Statutes (A.R.S). §49-432 and A.A.C. R18-2-305 is not applicable to the Application.

5. REGULATORY APPLICABILITY ANALYSIS

The Facility is subject to certain Federal and State air regulations. This section summarizes the key air quality regulations that apply to the Facility under both Federal and State programs. Based on the information included, there should be no change to applicable requirements as contained in the current ADEQ permit.

5.1 FEDERAL APPLICABILITY ANALYSIS

This section summarizes the key Federal air quality regulations that are applicable or potentially applicable to the Facility. There are no physical changes or changes in the method of operation to the emissions sources at the Flagstaff Compressor Station being proposed with this permit renewal Application. In addition, there have been no changes in the past 5 years to the Federal requirements applicable to the operations at the Flagstaff Compressor Station, which are already contained in the current permit. Potentially applicable Federal emissions standards include those from 40 CFR Parts 60, 61, and 63, which have been addressed in the following sections.

5.1.1 Standards of Performance for New Stationary Sources

This section discusses New Source Performance Standards (NSPS), located in 40 CFR Part 60, that are applicable or potentially applicable to sources at the Facility.

5.1.1.1 40 CFR Part 60, Subpart A – General Provisions

The Facility is subject to at least one NSPS standard. Therefore, the general provisions in Subpart A are applicable. EPNG will comply with all applicable requirements in Subpart A.

5.1.1.2 40 CFR Part 60, Subpart JJJJ – Standards of Performance for Stationary Spark Ignition Internal Combustion Engines

The two Clark TCV-16 engines and Cummins G12 emergency generator are natural gas-fired stationary internal combustion engines. They were constructed prior to June 12, 2006, and have not been modified or reconstructed since that time. Therefore, they are not subject to the standards in 40 CFR Part 60, Subpart JJJJ (Standards of Performance for Stationary Spark Ignition Internal Combustion Engines).

5.1.2 National Emission Standards for Hazardous Air Pollutants

The Facility does not include sources or activities subject to any National Emission Standards for Hazardous Air Pollutants (NESHAPs); therefore, it is not subject to the regulations of 40 CFR Part 61.

5.1.3 Maximum Achievable Control Technology (MACT) Standards

This section discusses NESHAP for source categories, otherwise referred to as MACT standards, located in 40 CFR Part 63 that are applicable or potentially applicable to the Facility.

5.1.3.1 40 CFR Part 63, Subpart A – General Provisions

The Facility is subject to at least one MACT standard. Therefore, the general provisions in Subpart A are applicable. EPNG will comply with all applicable requirements in Subpart A.

5.1.3.2 40 CFR Part 63, Subpart ZZZZ – National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines

The Facility is a major source of HAP emissions. Additionally, the two Clark TCV-16 engines are 2SLB stationary RICE with greater than 500 hp and were constructed before December 19, 2002. Therefore, as described in 40 CFR §63.6590(a)(1)(i), they are "existing stationary RICE". Per 40 CFR §63.6590(b)(3)(i), existing 2SLB type stationary RICE greater than 500 hp and located at a major source of HAP emissions are not subject to the requirements in 40 CFR Part 63, Subpart ZZZZ (National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines).

The Cummins G12 emergency generator is an emergency engine with less than 500 hp and was constructed prior to June 12, 2006. Therefore, it is considered an existing emergency stationary RICE at a major source of HAP emissions and is subject to the requirements of Subpart ZZZZ. EPNG will continue to comply with all applicable requirements of Subpart ZZZZ.

5.2 FEDERAL NEW SOURCE REVIEW APPLICABILITY

The Federal NSR permitting programs generally require that a stationary source obtain a permit and undertake other obligations prior to construction of a Facility if the proposed project results in emissions increase or PTE of regulated NSR pollutants in excess of certain significance levels. The requirements for

these programs have been included as Article 4 of Chapter 2 of Title 18 of the A.A.C. (R18-2-401 through R18-2-412).

Two distinct Federal NSR permitting programs apply depending on whether the Facility is located in an attainment or nonattainment area for a particular pollutant. These are PSD and Nonattainment NSR (NNSR). The PSD permitting program requirements are prescribed in A.A.C. R18-2-406 and apply to projects with emissions increases of conventional pollutants [those with a primary or secondary National Ambient Air Quality Standard (NAAQS)] for which the area is classified as attainment or unclassifiable. PSD can also apply to projects with emissions increases of unconventional pollutants (those regulated NSR pollutants without a primary or secondary NAAQS) if their corresponding major source threshold or significant emissions rate are exceeded. NNSR permitting program requirements are prescribed in A.A.C. R18-2-403 and apply to new construction or modifications that result in emission increases of a particular pollutant or precursor pollutant for which the area is classified as nonattainment.

The Facility is located in Coconino County. The county has been classified as attainment with the NAAQS or unclassifiable for all regulated NSR pollutants. Therefore, with respect to the Federal NSR permitting program, only PSD requirements are potentially applicable to the Facility. Although the Facility is a major stationary source as defined in the PSD regulations, PSD Requirements are not applicable to the Application because there are no proposed physical modifications or changes in the method of operation.

5.3 TITLE V APPLICABILITY

The requirements of the Federal Title V operating permit program are contained in 40 CFR Part 70 and incorporated into the Class I Air Quality Permit program at A.A.C. R18-2-304. The major source thresholds for the Title V program are 100 tpy for each air pollutant subject to regulation, 10 tpy of any single HAP, and 25 tpy of any combination of HAPs. As noted in 40 CFR 70.2 and A.A.C. R18-2-101(75), non-HAP fugitive emissions are not considered unless the source belongs to one of the source categories listed under the definition of "major source". The Facility is not one of the listed source categories and is not required to consider fugitive emissions when determining the sitewide PTE of non-HAP air pollutants. However, fugitive emissions are always required when estimating the PTE of HAPs, regardless of the source category. Additionally, Item 7.a of Section 2.4 of ADEQ's "Application Packet for Class I Permit" requires fugitive emissions be included regardless of source category. Therefore, as summarized in Table

3-1, emissions from all point sources and fugitive sources have been included. The result is that the sitewide PTE is greater than the thresholds for NO_X, CO, and HAPs and the Facility is subject to the Title V program.

5.4 COMPLIANCE ASSURANCE MONITORING

Pursuant to the requirement of 40 CFR Part 64, the Compliance Assurance Monitoring (CAM) regulations, facilities are required to prepare and submit monitoring plans for certain emission units with a Title V application. The CAM Plans provide an assurance of compliance with applicable emission limits. CAM is not applicable to the Application because the Facility does not use a control device to meet a standard. Therefore, none of the sources have pre-control emissions that exceed the major source threshold.

5.5 CHEMICAL ACCIDENT PREVENTION

Subpart B of 40 CFR Part 68 outlines requirements for risk management prevention (RMP) plans pursuant to Clean Air Act (CAA) Section 112(r). Applicability of 40 CFR Part 68 Subparts B and G is determined based on the type and quantity of the chemicals stored at the Facility. The Facility will not store RMP chemicals in quantities greater than the RMP trigger thresholds. Therefore, the requirements of 40 CFR Part 68 are not applicable. However, the Facility will be subject to the provisions of the CAA General Duty Clause, Section 112, as it pertains to accidental releases of hazardous materials.

5.6 STRATOSPHERIC OZONE PROTECTION REGULATIONS

The requirements originating from Title VI of the CAA, Protection of Stratospheric Ozone, are contained in 40 CFR Part 82. Subparts A, B, C, D, E, G, H and I of 40 CFR Part 82 will not be applicable to the Facility because the Facility operations do not fall under the activities highlighted. 40 CFR Part 82 Subpart F, Recycling and Emissions Reduction, potentially apply if the Facility maintains, repairs, services, or disposes of appliances that utilize Class I or Class II ozone depleting substances. Subpart F generally requires persons completing the repairs, service, or disposal to be properly certified. An appropriately certified technician will complete all repairs, service, and disposal of ozone depleting substances from the comfort cooling components at the Facility.

5.7 STATE APPLICABILITY ANALYSIS

This section summarizes the key State air quality regulations that are applicable or potentially applicable to the Facility.

5.7.1 Applicability; Registration; Classes of Permits, A.A.C. R18-2-302

As discussed in previous sections, sitewide emissions from the Facility remain above major source thresholds for NO_X, CO, and HAPs. Furthermore, emissions of NO_X, CO, VOC, PM_{10}, and $PM_{2.5}$ exceed both their permitting exemption thresholds and significant levels. For this reason, per A.A.C. R18-2-302(B)(1)(a), the Facility is currently and will continue to be authorized by a Class I Permit.

5.7.2 Permit Application Processing Procedures, A.A.C. R18-2-304

This section addresses specific subparagraphs of A.A.C. R18-2-304 regarding information that should be included in a Class I Air Quality Permit application.

5.7.2.1 Required Forms and Information, A.A.C. R18-2-304(B)

A.A.C. R18-2-304(B) includes provisions related to required forms and information from a Class I Air Quality Permit application. The requirements of a Class I Application are included in the instructions on the form for Class I Applications. Each of these requirements has been addressed in Section 4. EPNG satisfies all required forms and information necessary according to R18-2-304(B) in the permit application and supplemental documents.

5.7.2.2 Request to Waive Requirement, A.A.C. R18-2-304(C)

The information required to support a request, as outlined in A.A.C. R18-2-304(C), does not apply to this Application since it falls under the Class I category; therefore, it has not been included with this Application.

5.7.2.3 Request for Alternative Emission Limit, A.A.C. R18-2-304(E)

A.A.C. R18-2-304(E) describes the procedures that must be followed to request an alternative emissions limit from an applicable standard in a State or Federal implementation plan, when allowed by the relevant plan. It states the following:

If an applicable implementation plan allows the determination of an alternative emission limit, a source may, in its application, propose an emission limit that is equivalent to the emission limit otherwise applicable to the source under the applicable implementation plan. The source shall also demonstrate that the equivalent limit is quantifiable, accountable, enforceable, and subject to replicable compliance determination procedures.

There are no alternative emission limits being requested at this time. Therefore, the requirement in A.A.C. R18-2-304(E) is not applicable to this Application and no demonstrations for equivalent limits have been included with this Application.

5.7.2.4 Information for a Complete Application, A.A.C. R18-2-304(F)

A.A.C. R18-2-304(F) specifies the information that is required for an application to be considered complete. Each element of this subsection is described in further detail, with information describing how this Application complies with each requirement.

A.A.C. R18-2-304(F)(1). To be complete, an application shall provide all information required by subsection (B) (standard application form section). An application for permit revision only need supply information related to the proposed change, unless the source's proposed permit revision will change the permit from a Class II permit to a Class I permit. A responsible official shall certify the submitted information consistent with subsection (I) (Certification of Truth, Accuracy, and Completeness).

This Application includes a completed "Application Packet for Class I Permit" form. It has been provided in Appendix A. The remaining sections of this submittal include all information required by the form. The Application is limited in scope to renewal of Class I Air Quality Permit No. 76612. There are no changes proposed to the permit or Facility with the Application.

A.A.C. R18-2-304(F)(2). An application for a new permit or permit revision shall contain an assessment of the applicability of the requirements of Article 4 of this Chapter. If the applicant determines that the proposed new source is a major source as defined in R18-2-401, or the proposed permit revision constitutes a major modification as defined in R18-2-101, then the application shall comply with all applicable requirements of Article 4.

Article 4 of Chapter 2 applies to new major sources and major modifications to existing major sources. There are no physical modifications or changes in the method of operation proposed with the Application. The Application is limited in scope to renewal of Class I Air Quality Permit No. 76612. Therefore, the requirements in Article 4 are not applicable to the Application.

A.A.C. R18-2-304(F)(3). An application for a new permit or permit revision shall contain an assessment of the applicability of Minor New Source Review requirements in R18-2-334. If the applicant determines that the proposed new source is subject to R18-2-334, or the proposed permit revision constitutes a Minor NSR Modification, then the application shall comply with all applicable requirements of R18-2-334.

As described in Section 4.13, the Minor NSR requirements are not applicable to the Application as it is limited in scope to renewal of Class I Air Quality Permit No. 76612. For this reason, the Application does not include a RACT analysis or air dispersion modeling results.

A.A.C. R18-2-304(F)(4). Except for proposed new major sources or major modifications subject to the requirements of Article 4 of this Chapter, an application for a new permit, a permit revision, or a permit renewal shall be deemed to be complete unless, within 60 days of receipt of the application, the Director notifies the applicant by certified mail that the application is not complete.

This requirement is informational only and does not prescribe any additional information that must be provided to support the application. EPNG will comply with all requirements and will respond to ADEQ as necessary following submittal of the application.

A.A.C. R18-2-304(F)(5). If a source wishes to voluntarily enter into an emissions limitation, control, or other requirement pursuant to R18-2-306.01, the source shall describe that emissions limitation, control, or other requirement in its application, along with proposed associated monitoring, recordkeeping, and reporting requirements necessary to demonstrate that the emissions limitation, control, or other requirement is permanent, quantifiable, and otherwise enforceable as a practical matter.

There are no voluntarily accepted emissions limitations or standards proposed with the Application. Therefore, the requirements in A.A.C. R18-2-304(F)(5) are not applicable.

A.A.C. R18-2-304(F)(6). If, while processing an application that has been determined or deemed to be complete, the Director determines that additional information is necessary to evaluate or take final action on that application, the Director may request such information in writing and set a reasonable deadline for a response. Except for minor permit revisions as set forth in R18-2-319, a source's ability to continue operating without a permit, as set forth in subsection (K), shall be in effect from the date the application is determined to be complete until the final permit is issued, provided that the applicant submits any requested additional information by the deadline specified by the Director.

This requirement is informational only and does not prescribe any additional information that must be provided to support the application. EPNG will comply with all requirements and will respond to ADEQ as necessary following submittal of the Application.

A.A.C. R18-2-304(F)(7). The completeness determination shall not apply to revisions processed through the minor permit revision process.

This requirement is informational only and does not prescribe any additional information that must be provided to support the application. EPNG will comply with all requirements and will respond to ADEQ as necessary following submittal of the Application.

A.A.C. R18-2-304(F)(8). Activities which are insignificant pursuant to the definition of insignificant activities in R18-2-101 shall be listed in the application. Except as necessary to complete the assessment required by subsections (F)(2) or (3), the application need not provide emissions data regarding insignificant activities. If the Director determines that an activity listed as insignificant does not meet the requirements of the definition of insignificant activities in R18-2-101 or that emissions data for the activity is required to complete the assessment required by subsections (F)(2) or (3), the Director shall notify the applicant in writing and specify additional information required.

The activities at the Facility that meet the definition of insignificant activity prescribed in R18-2-101(68) have been included in Section 4.14 of the Application. EPNG can provide additional information regarding these activities upon request by ADEQ.

A.A.C. R18-2-304(F)(9). If a permit applicant requests terms and conditions allowing for the trading of emission increases and decreases in the permitted Facility solely for the purpose of complying with a federally enforceable emission cap that is established in the permit independent of otherwise applicable requirements, the permit applicant shall include in its application proposed replicable procedures and permit terms that ensure the emissions trades are quantifiable and enforceable.

EPNG is not requesting terms and conditions allowing for the trading of emissions increases and decreases for the purposes of complying with a federally enforceable emissions cap. Therefore, the requirements of A.A.C. R18-2-302(F)(9) are not applicable to the Application.

A.A.C. R18-2-304(F)(10). The Director is not in disagreement with a notice of confidentiality submitted with the application pursuant to A.R.S. § 49-432.

None of the information submitted with the Application has been labeled confidential.

5.7.3 Fees Related to Individual Permits, A.A.C. R18-2-326

In accordance with A.A.C. R18-2-326 and the Permit Fee Schedule, effective November 1, 2022, no fee is being submitted with this permit renewal Application. However, upon receipt of the ADEQ invoice following permit processing, EPNG agrees to pay the fee of $186.10 per hour (based on the total actual time spent by ADEQ staff on processing this Application) as well as any fees associated with public notice.

5.7.4 Minor New Source Review Applicability, A.A.C. R18-2-334

Per A.A.C. R18-2-334(A), ADEQ minor NSR requirements apply to the construction of a new Class I or Class II source or to any minor NSR modification to a Class I or Class II source. EPNG is not proposing any modifications or changes in the method of operation with this submittal. The Application is limited in scope to renewal of Class I Permit No. 76612. Therefore, minor NSR requirements are not required to support the approval of the permit renewal Application.

5.7.5 Emissions from Existing and New Nonpoint Sources, Article 6

Article 6 regulates emissions from sources which due to lack of an identifiable emission point or plume cannot be considered a point source. The following sections of Article 6 have historically been identified as applicable to the Facility:

- A.A.C. R18-2-604 - Open Areas, Dry Washes, or Riverbeds
- A.A.C. R18-2-605 - Roadways and Streets
- A.A.C. R18-2-606 - Material Handling
- A.A.C. R18-2-607 - Storage Piles
- A.A.C. R18-2-614 - Evaluation of Nonpoint Source Emissions

These sections have not been updated in the last five years (since issuance of the current permit). For this reason, it is not necessary to make any revisions to the permit regarding Article 6 requirements. EPNG will continue to comply with all applicable standards.

5.7.6 Existing Stationary Source Performance Standards, Article 7

Article 7 regulates emissions from existing point sources. The following sections of Article 7 have historically been identified as applicable to the Facility:

- A.A.C. R18-2-702 - General Provisions
- A.A.C. R18-2-719 - Standards of Performance for Existing Stationary Rotating Machinery
- A.A.C. R18-2-726 - Standards of Performance for Sandblasting Operations
- A.A.C. R18-2-727 - Standards of Performance for Spray Painting Operations

These sections have not been updated in the last five years (since issuance of the current permit). For this reason, it is not necessary to make any revisions to the permit regarding Article 7 requirements. EPNG will continue to comply with all applicable standards.

5.8 REGULATORY EXEMPTION DOCUMENTATION

As part of this Application in response to Paragraph F of Section 2.4 of the "Application Packet for Class I Permit", EPNG is presenting the following exemptions which have been historically claimed in other permit actions:

- There is lubricating oil in tanks at the Facility that meets ADEQ's definition for petroleum liquid (A.A.C. R18-2-701(29)). However, the tanks are less than 40,000 gallons in capacity and vapor pressure is less than that for fuel oils exempted in A.A.C R18-2-701(29). ADEQ previously exempted these tanks as A.A.C. R18-2-710(B) and (E) and A.A.C. R18-2-905(1) are not on the list of applicable requirements in the current Class I permit. Accordingly, EPNG requests that ADEQ reaffirm the exemption of the oil storage tanks from the provisions of A.A.C. R18-2-710(B) and (E) and A.A.C. R18-2-905(1).

- Because the units at the Facility subject to A.A.C. R18-2-719 burn only pipeline quality natural gas that contains less than 0.8% sulfur by weight, EPNG requests exemption from the provisions of A.A.C. R18- 2-719(I) and (J) to record the sulfur content and lower heating value of the fuel on a daily basis, and to report instances where the sulfur exceeds 0.8%. The requirement to use only natural gas that meets this fuel sulfur limit is already incorporated in the current permit for this Facility.

APPENDIX A -
ADEQ FORMS

SECTION 2.1

ARIZONA DEPARTMENT OF ENVIRONMENTAL QUALITY

Air Quality Division

1110 West Washington • Phoenix, AZ 85007 • Phone: (602) 771-2338

STANDARD CLASS I PERMIT APPLICATION FORM

(As required by A.R.S. § 49-426, and Chapter 2, Article 3, Arizona Administrative Code)

1. Permit to be issued to (Business license name of organization that is to receive permit):
   El Paso Natural Gas Company, L.L.C. (EPNG) – Flagstaff Compressor Station

2. Mailing Address: ***5151 E. Broadway, Suite 1680***

   City: ***Tucson*** State: ***AZ*** ZIP: ***85711***

3. Name (or names) of Owners/ Principals: ***Philip Baca***

   Phone: ***(520) 663-4224*** Fax: ***(520) 663-4259*** Email: ***Philip_Baca@Kindermorgan.com***

4. Name of Owner's Agent: _____

   Phone: _____ Fax: _____ Email: _____

5. Plant/Site Manager/ Contact Person and Title: ***Joshua Taylor, Operations Supervisor***

   Phone: ***(928) 527-6524*** Fax: _____ Email: ***Joshua_taylor_az@kindermorgan.com***

6. Plant Site Name: ***Flagstaff Compressor Station***

7. Plant Site Location Address: ***1/2 mile north of Old Highway 66 on El Paso Flagstaff Road***

   City: ***Flagstaff*** County: ***Coconino*** Zip Code: ***86004***

   Indian Reservation (if applicable, which one): ***N/A***

   Latitude/ Longitude, Elevation: ***Lat. 35.2289 / Long. -111.5562 Approx. elevation: 6,775 ft***

   Section/ Township/ Range: ***N/A***

8. General Nature of Business: ***Pipeline transmission of natural gas***

9. Type of Organization:
   ☑ Corporation ☐ Individual Owner ☐ Partnership ☐ Government Entity (Government Facility Code ----------)

   ☐ Other _____

8. Permit Application Basis: ☐ New Source ☐ Revision ☑ Renewal of Existing Permit
   (Check all that apply.)

   For renewal or modification, include existing permit number (and exp. date): ***Permit #76612***

   Date of Commencement of Construction or Modification: ***N/A***

   Primary Standard Industrial Classification Code: ***4922 (NAICS 48621)***

9. I certify that I have knowledge of the facts herein set forth, that the same are true, accurate and complete to the best of my knowledge and belief, and that all information not identified by me as confidential in nature shall be treated by ADEQ as public record. I also attest that I am in compliance with the applicable requirements of the Permit and will continue to comply with such requirements and any future requirements that become effective during the life of the Permit. I will present a certification of compliance to ADEQ no less than annually and more frequently if specified by ADEQ. I further state that I will assume responsibility for the construction, modification, or operation of the source in accordance with Arizona Administrative Code, Title 18, Chapter 2 and any permit issued thereof.

   Signature of Responsible Official: _____

*Definitions for all terms that are **bolded and italicized** can be found starting on page 26*

Official Title of Signer: ***Director***

Typed or Printed Name of Signer: ***Philip Baca***

Date: 1-25-24 Telephone Number: ***(520) 663-4224***

SECTION 2.2 - EMISSION SOURCES

DATE _____

Estimated "Potential to Emit" per A.A.C. R18-2-101.
Review of applications and issuance of permits will be expedited by supplying all necessary information on this Table.

REGULATED AIR POLLUTANT DATA					EMISSION POINT DISCHARGE PARAMETERS										
EMISSION POINT [1]		CHEMICAL COMPOSITION OF TOTAL STREAM	AIR POLLUTANT EMISSION RATE		UTM COORDINATES OF EMISSION POINT [5] *NAD83*			STACK SOURCES [6]					NONPOINT	
NUMBER	NAME	REGULATED AIR POLLUTANT NAME [2]	#/ HR. [3]	TONS/ YEAR [4]	ZONE	EAST (Mtrs)	NORTH (Mtrs)	HEIGHT ABOVE GROUND (feet)	HEIGHT ABOVE STRUC. (feet)	EXIT DATA			SOURCES [7]		
										DIA (ft.)	VEL. (fps)	TEMP. (°F)	LENGTH (ft.)	WIDTH (ft.)	
A-1	Reciprocating IC Engine	NO_X	133.38	584.20	12	449448	3898511	37		2.33	222.8	750			
		CO	27.11	118.74											
		VOC	4.66	20.39											
		SO_2	0.02	0.10											
		$PM/PM_{10}/PM_{2.5}$	1.87	8.21											
		HAPs	3.09	13.54											
		CO_2e	4,543	19,900											
A-2	Reciprocating IC Engine	NO_X	133.38	584.20	12	449439	3898502	37		2.33	222.8	750			
		CO	27.11	118.74											
		VOC	4.66	20.39											
		SO_2	0.02	0.10											
		$PM/PM_{10}/PM_{2.5}$	1.87	8.21											
		HAPs	3.09	13.54											
		CO_2e	4,543	19,900											
Aux-1	Emergency Generator	NO_X	3.42	0.86	12	449404	3898501	8		4					
		CO	5.76	1.44											
		VOC	0.05	0.01											
		SO_2	9.10×10^{-4}	2.28×10^{-4}											
		$PM/PM_{10}/PM_{2.5}$	0.03	7.51×10^{-3}											

REGULATED AIR POLLUTANT DATA					EMISSION POINT DISCHARGE PARAMETERS										
EMISSION POINT [1]		CHEMICAL COMPOSITION OF TOTAL STREAM	AIR POLLUTANT EMISSION RATE		UTM COORDINATES OF EMISSION POINT [5]			STACK SOURCES [6]					NONPOINT	
NUMBER	NAME	REGULATED AIR POLLUTANT NAME [2]	#/ HR. [3]	TONS/ YEAR [4]	ZONE	EAST (Mtrs)	NORTH (Mtrs)	HEIGHT ABOVE GROUND (feet)	HEIGHT ABOVE STRUC. (feet)	EXIT DATA			SOURCES [7]		
										DIA (ft.)	VEL. (fps)	TEMP. (°F)	LENGTH (ft.)	WIDTH (ft.)	
		HAPs	0.05	0.01											
		CO_2e	181.26	45.32											

GROUND ELEVATION OF FACILITY ABOVE MEAN SEA LEVEL ***6775*** feet
ADEQ STANDARD CONDITIONS ARE 293K AND 101.3 KILOPASCALS (A.A.C. R18-2-101)

****Submit emission calculations spreadsheet with your application****

General Instructions:

1. Identify each emission point with a unique number for this plant site, consistent with emission point identification used on plot plan, previous permits, and Emissions Inventory Questionnaire. Include fugitive emissions. Limit emission point number to eight (8) character spaces. For each emission point use as many lines as necessary to list regulated air pollutant data. Typical emission point names are: heater, vent, boiler, tank, reactor, separator, baghouse, fugitive, etc. Abbreviations are O.K.

2. Components to be listed include regulated air pollutants as defined in A.A.C. R18-2-101. Examples of typical component names are: Carbon Monoxide (CO), Nitrogen Oxides (NO_X), Sulfur Dioxide (SO_2), Volatile Organic Compounds (VOC), particulate matter (PM), particulate less than 10 microns (PM_{10}), etc. Abbreviations are O.K.

3. Pounds per hour (#/HR) is maximum potential emission rate expected by applicant.

4. Tons per year is annual maximum potential emission expected by applicant, which takes into account process operating schedule.

5. As a minimum applicant shall furnish a facility plot plan as described in the filing instructions. UTM coordinates are required only if the source is a major source or is required to perform refined modeling for the purposes of demonstrating compliance with ambient air quality guidelines.

6. Supply additional information as follows if appropriate:
   (a) Stack exit configuration other than a round vertical stack. Show length and width for a rectangular stack. Indicate if horizontal discharge with a note.
   (b) Stack's height above supporting or adjacent structures if structure is within 3 "stack height above the ground" of stack.

7. Dimensions of nonpoint sources as defined in A.A.C. R18-2-101.

SECTION 2.3 - EQUIPMENT LIST

The following table should include all equipment utilized at the facility, and should be completed with all the requested information. Be sure to notate the units (tons/hour, horsepower, etc.) when recording the Maximum Rated Capacity information, the Serial Number and/or the Equipment ID Number. The date of manufacture must be included in order to determine if portions of the facility are NSPS applicable. Make additional copies of this form if necessary.

Submit photographs of the faceplates for all engines listed below. If an engine is certified, please also include a copy of the engine certification with the application. For any newly added equipment, include a copy of the specification sheet. These documents will be used to verify equipment information and determine applicable regulations.

Type of Equipment	Maximum Rated Capacity [1]	Make	Model	Serial Number	Date of Manufacture	Equipment ID Number
Reciprocating IC Engine	5,500 hp @ 80 degF	Clark	TCV-16	101518	1964	A-1
Reciprocating IC Engine	5,500 hp @ 80 degF	Clark	TCV-16	101530	1966	A-2
Emergency Generator	184 hp	Cummins	G12	25177599	1991	Aux-1

[1] For generator sets, enter the maximum rated capacity of the engine rather than the maximum rated capacity of the generator

SECTION 4.0 - APPLICATION ADMINISTRATIVE COMPLETENESS CHECKLIST

	REQUIREMENT	MEETS REQUIREMENTS			COMMENT
		YES	NO	N/A	
1	Has the standard application form been completed?	X			
2	Has the responsible official signed the standard application form?	X			
3	Has a process description been provided?	X			
4	Are the facility's emissions documented with all appropriate supporting information?	X			
5	Is the facility subject to Minor NSR requirements? If the answer is "YES", answer 6a, 6b and 6c as applicable. If the answer is "NO", skip to 7.			X	No modifications or changes in method of operation
6.a	If the facility chooses to implement RACT, is the RACT determination included for the affected pollutants for all affected emission units?			X	Minor NSR not applicable
6.b	If the facility chooses to demonstrate compliance with NAAQS by screen modeling, is the modeling analysis included?			X	Minor NSR not applicable
6.c	If refined modeling has been conducted, is a comprehensive modeling report along with all modeling files included?			X	Minor NSR not applicable
7	Does the application include an equipment list with the type, name, make, model, serial number, maximum rated capacity, and date of manufacture?0	X			
8	Does the application include an identification and description of Pollution Controls? (if applicable)			X	
9	For any application component claimed as confidential, are the requirements of AR.S. 49-432 and A.A.C. R18-2-305 addressed?			X	No confidential information
10	For any current non-compliance issue, is a compliance schedule attached?			X	No non-compliance issues
11	For minor permit revision that will make a modification upon submittal of application, has a suggested draft permit been attached?			X	No modifications proposed
12	For major sources, have all applicable requirements been identified?	X			
13	For major sources, has a CAM applicability analysis been provided? For CAM applicable units, have CAM plans been provided?			X	
14	For major sources subject to requirements under Article 4 of the A.A.C., have all necessary New Source Review analyses identified in the application been presented?			X	

APPENDIX B -
EMISSIONS CALCULATIONS

Table B-1
Potential to Emit Emissions Rates
Natural Gas Reciprocating Internal Combustion Engine (Clark TCV-16), A-1
El Paso Natural Gas Company, L.L.C.
Flagstaff Compressor Station - Flagstaff, Arizona

Pollutant	Emissions Factor		Basis	Emissions Rate	
	Value	Units		(lb/hr)	(tpy)
Regulated NSR Pollutants					
NO_x	133.38	lb/hr	1995 Test w/ 20% safety factor	133.38	584.20
CO	27.11	lb/hr	1995 Test w/ 20% safety factor	27.11	118.74
VOC	0.12	lb/MMBtu	AP-42 Section 3.2, Table 3.2-1 (July 2000)	4.66	20.39
SO_2	5.88E-04	lb/MMBtu	AP-42 Section 3.2, Table 3.2-1 (July 2000)	0.02	0.10
PM	0.05	lb/MMBtu	AP-42 Section 3.2, Table 3.2-1 (July 2000), $PM_{filt} + PM_{cond}$	1.87	8.21
PM_{10}	0.05	lb/MMBtu	AP-42 Section 3.2, Table 3.2-1 (July 2000), $PM_{filt} + PM_{cond}$	1.87	8.21
$PM_{2.5}$	0.05	lb/MMBtu	AP-42 Section 3.2, Table 3.2-1 (July 2000), $PM_{filt} + PM_{cond}$	1.87	8.21
Hazardous Air Pollutants					
1,1,2,2-Tetrachloroethane	6.63E-05	lb/MMBtu	AP-42 Section 3.2, Table 3.2-1 (July 2000)	2.57E-03	0.01
1,1,2-Trichloroethane	5.27E-05	lb/MMBtu	AP-42 Section 3.2, Table 3.2-1 (July 2000)	2.04E-03	8.96E-03
1,1-Dichloroethane	3.91E-05	lb/MMBtu	AP-42 Section 3.2, Table 3.2-1 (July 2000)	1.52E-03	6.64E-03
1,2-Dichloroethane	4.22E-05	lb/MMBtu	AP-42 Section 3.2, Table 3.2-1 (July 2000)	1.64E-03	7.17E-03
1,2-Dichloropropane	4.46E-05	lb/MMBtu	AP-42 Section 3.2, Table 3.2-1 (July 2000)	1.73E-03	7.58E-03
1,3-Butadiene	8.20E-04	lb/MMBtu	AP-42 Section 3.2, Table 3.2-1 (July 2000)	0.03	0.14
1,3-Dichloropropene	4.38E-05	lb/MMBtu	AP-42 Section 3.2, Table 3.2-1 (July 2000)	1.70E-03	7.44E-03
2,2,4-Trimethylpentane	8.46E-04	lb/MMBtu	AP-42 Section 3.2, Table 3.2-1 (July 2000)	0.03	0.14
2-Methylnaphthalene	2.14E-05	lb/MMBtu	AP-42 Section 3.2, Table 3.2-1 (July 2000)	8.30E-04	3.64E-03
Acenaphthene	1.33E-06	lb/MMBtu	AP-42 Section 3.2, Table 3.2-1 (July 2000)	5.16E-05	2.26E-04
Acenaphthylene	3.17E-06	lb/MMBtu	AP-42 Section 3.2, Table 3.2-1 (July 2000)	1.23E-04	5.39E-04
Acetaldehyde	7.76E-03	lb/MMBtu	AP-42 Section 3.2, Table 3.2-1 (July 2000)	0.30	1.32
Acrolein	7.78E-03	lb/MMBtu	AP-42 Section 3.2, Table 3.2-1 (July 2000)	0.30	1.32
Anthracene	7.18E-07	lb/MMBtu	AP-42 Section 3.2, Table 3.2-1 (July 2000)	2.79E-05	1.22E-04
Benz(a)anthracene	3.36E-07	lb/MMBtu	AP-42 Section 3.2, Table 3.2-1 (July 2000)	1.30E-05	5.71E-05
Benzene	1.94E-03	lb/MMBtu	AP-42 Section 3.2, Table 3.2-1 (July 2000)	0.08	0.33
Benzo(a)pyrene	5.68E-09	lb/MMBtu	AP-42 Section 3.2, Table 3.2-1 (July 2000)	2.20E-07	9.65E-07
Benzo(b)fluoranthene	8.51E-09	lb/MMBtu	AP-42 Section 3.2, Table 3.2-1 (July 2000)	3.30E-07	1.45E-06
Benzo(e)pyrene	2.34E-08	lb/MMBtu	AP-42 Section 3.2, Table 3.2-1 (July 2000)	9.08E-07	3.98E-06
Benzo(g,h,i)perylene	2.48E-08	lb/MMBtu	AP-42 Section 3.2, Table 3.2-1 (July 2000)	9.62E-07	4.21E-06
Benzo(k)fluoranthene	4.26E-09	lb/MMBtu	AP-42 Section 3.2, Table 3.2-1 (July 2000)	1.65E-07	7.24E-07
Biphenyl	3.95E-06	lb/MMBtu	AP-42 Section 3.2, Table 3.2-1 (July 2000)	1.53E-04	6.71E-04
Carbon Tetrachloride	6.07E-05	lb/MMBtu	AP-42 Section 3.2, Table 3.2-1 (July 2000)	2.36E-03	0.01
Chlorobenzene	4.44E-05	lb/MMBtu	AP-42 Section 3.2, Table 3.2-1 (July 2000)	1.72E-03	7.55E-03
Chloroform	4.71E-05	lb/MMBtu	AP-42 Section 3.2, Table 3.2-1 (July 2000)	1.83E-03	8.00E-03
Chrysene	6.72E-07	lb/MMBtu	AP-42 Section 3.2, Table 3.2-1 (July 2000)	2.61E-05	1.14E-04
Ethylbenzene	1.08E-04	lb/MMBtu	AP-42 Section 3.2, Table 3.2-1 (July 2000)	4.19E-03	0.02
Ethylene Dibromide	7.34E-05	lb/MMBtu	AP-42 Section 3.2, Table 3.2-1 (July 2000)	2.85E-03	0.01
Fluoranthene	3.61E-07	lb/MMBtu	AP-42 Section 3.2, Table 3.2-1 (July 2000)	1.40E-05	6.13E-05
Fluorene	1.69E-06	lb/MMBtu	AP-42 Section 3.2, Table 3.2-1 (July 2000)	6.56E-05	2.87E-04
Formaldehyde	0.06	lb/MMBtu	AP-42 Section 3.2, Table 3.2-1 (July 2000)	2.14	9.38
Indeno(1,2,3-c,d)pyrene	9.93E-09	lb/MMBtu	AP-42 Section 3.2, Table 3.2-1 (July 2000)	3.85E-07	1.69E-06
Methanol	2.48E-03	lb/MMBtu	AP-42 Section 3.2, Table 3.2-1 (July 2000)	0.10	0.42
Methylene Chloride	1.47E-04	lb/MMBtu	AP-42 Section 3.2, Table 3.2-1 (July 2000)	5.70E-03	0.02
n-Hexane	4.45E-04	lb/MMBtu	AP-42 Section 3.2, Table 3.2-1 (July 2000)	0.02	0.08
Naphthalene	9.63E-05	lb/MMBtu	AP-42 Section 3.2, Table 3.2-1 (July 2000)	3.74E-03	0.02
PAH	1.34E-04	lb/MMBtu	AP-42 Section 3.2, Table 3.2-1 (July 2000)	5.20E-03	0.02
Perylene	4.97E-09	lb/MMBtu	AP-42 Section 3.2, Table 3.2-1 (July 2000)	1.93E-07	8.45E-07
Phenanthrene	3.53E-06	lb/MMBtu	AP-42 Section 3.2, Table 3.2-1 (July 2000)	1.37E-04	6.00E-04
Phenol	4.21E-05	lb/MMBtu	AP-42 Section 3.2, Table 3.2-1 (July 2000)	1.63E-03	7.15E-03
Pyrene	5.84E-07	lb/MMBtu	AP-42 Section 3.2, Table 3.2-1 (July 2000)	2.27E-05	9.92E-05
Styrene	5.48E-05	lb/MMBtu	AP-42 Section 3.2, Table 3.2-1 (July 2000)	2.13E-03	9.31E-03
Toluene	9.63E-04	lb/MMBtu	AP-42 Section 3.2, Table 3.2-1 (July 2000)	0.04	0.16
Vinyl Chloride	2.47E-05	lb/MMBtu	AP-42 Section 3.2, Table 3.2-1 (July 2000)	9.58E-04	4.20E-03
Xylene	2.68E-04	lb/MMBtu	AP-42 Section 3.2, Table 3.2-1 (July 2000)	0.01	0.05
			Total	**3.09**	**13.54**

Table B-1
Potential to Emit Emissions Rates
Natural Gas Reciprocating Internal Combustion Engine (Clark TCV-16), A-1
El Paso Natural Gas Company, L.L.C.
Flagstaff Compressor Station - Flagstaff, Arizona

Greenhouse Gases					
CO_2	53.06	kg/MMBtu	40 CFR Part 98, Subpart C, Table C-1	4,539	19,879
CH_4	1.00E-03	kg/MMBtu	40 CFR Part 98, Subpart C, Table C-2	0.09	0.37
N_2O	1.00E-04	kg/MMBtu	40 CFR Part 98, Subpart C, Table C-2	0.01	0.04
CO_2e [(a)]	--	--	40 CFR Part 98, Subpart A, Table A-1 GWPs	4,543	19,900

Unit	Type	Make and Model	Rating [(b)]	Brake specific fuel consumption (BSFC)	Heat Input	Annual Operating Hours
			(hp @ 80 deg F)	(Btu/hp-hr)	(MMBtu/hr)	(hours)
A-1	Natural Gas Reciprocating Internal Combustion Engine	Clark TCV-16	5,500	7,055	38.8	8,760

[(a)] CO_2e based on multiplying CO_2 and CH_4 and N_2O by the Global Warming Potentials contained in 40 CFR 98 Subpart A as follows:

CO_2	1
CH_4	25
N_2O	298

[(b)] RICE horsepower (hp) assumed to be conservative based on rating at the site conditions of 5,500 hp at 80 deg F.

Table B-2
Potential to Emit Emissions Rates
Natural Gas Reciprocating Internal Combustion Engine (Clark TCV-16), A-2
El Paso Natural Gas Company, L.L.C.
Flagstaff Compressor Station - Flagstaff, Arizona

Pollutant	Emissions Factor		Basis	Emissions Rate	
	Value	Units		(lb/hr)	(tpy)
Regulated NSR Pollutants					
NO_x	133.38	lb/hr	1995 Test w/ 20% safety factor	133.38	584.20
CO	27.11	lb/hr	1995 Test w/ 20% safety factor	27.11	118.74
VOC	0.12	lb/MMBtu	AP-42 Section 3.2, Table 3.2-1 (July 2000)	4.66	20.39
SO_2	5.88E-04	lb/MMBtu	AP-42 Section 3.2, Table 3.2-1 (July 2000)	0.02	0.10
PM	0.05	lb/MMBtu	AP-42 Section 3.2, Table 3.2-1 (July 2000), PM_{filt} + PM_{cond}	1.87	8.21
PM_{10}	0.05	lb/MMBtu	AP-42 Section 3.2, Table 3.2-1 (July 2000), PM_{filt} + PM_{cond}	1.87	8.21
$PM_{2.5}$	0.05	lb/MMBtu	AP-42 Section 3.2, Table 3.2-1 (July 2000), PM_{filt} + PM_{cond}	1.87	8.21
Hazardous Air Pollutants					
1,1,2,2-Tetrachloroethane	6.63E-05	lb/MMBtu	AP-42 Section 3.2, Table 3.2-1 (July 2000)	2.57E-03	0.01
1,1,2-Trichloroethane	5.27E-05	lb/MMBtu	AP-42 Section 3.2, Table 3.2-1 (July 2000)	2.04E-03	8.96E-03
1,1-Dichloroethane	3.91E-05	lb/MMBtu	AP-42 Section 3.2, Table 3.2-1 (July 2000)	1.52E-03	6.64E-03
1,2-Dichloroethane	4.22E-05	lb/MMBtu	AP-42 Section 3.2, Table 3.2-1 (July 2000)	1.64E-03	7.17E-03
1,2-Dichloropropane	4.46E-05	lb/MMBtu	AP-42 Section 3.2, Table 3.2-1 (July 2000)	1.73E-03	7.58E-03
1,3-Butadiene	8.20E-04	lb/MMBtu	AP-42 Section 3.2, Table 3.2-1 (July 2000)	0.03	0.14
1,3-Dichloropropene	4.38E-05	lb/MMBtu	AP-42 Section 3.2, Table 3.2-1 (July 2000)	1.70E-03	7.44E-03
2,2,4-Trimethylpentane	8.46E-04	lb/MMBtu	AP-42 Section 3.2, Table 3.2-1 (July 2000)	0.03	0.14
2-Methylnaphthalene	2.14E-05	lb/MMBtu	AP-42 Section 3.2, Table 3.2-1 (July 2000)	8.30E-04	3.64E-03
Acenaphthene	1.33E-06	lb/MMBtu	AP-42 Section 3.2, Table 3.2-1 (July 2000)	5.16E-05	2.26E-04
Acenaphthylene	3.17E-06	lb/MMBtu	AP-42 Section 3.2, Table 3.2-1 (July 2000)	1.23E-04	5.39E-04
Acetaldehyde	7.76E-03	lb/MMBtu	AP-42 Section 3.2, Table 3.2-1 (July 2000)	0.30	1.32
Acrolein	7.78E-03	lb/MMBtu	AP-42 Section 3.2, Table 3.2-1 (July 2000)	0.30	1.32
Anthracene	7.18E-07	lb/MMBtu	AP-42 Section 3.2, Table 3.2-1 (July 2000)	2.79E-05	1.22E-04
Benz(a)anthracene	3.36E-07	lb/MMBtu	AP-42 Section 3.2, Table 3.2-1 (July 2000)	1.30E-05	5.71E-05
Benzene	1.94E-03	lb/MMBtu	AP-42 Section 3.2, Table 3.2-1 (July 2000)	0.08	0.33
Benzo(a)pyrene	5.68E-09	lb/MMBtu	AP-42 Section 3.2, Table 3.2-1 (July 2000)	2.20E-07	9.65E-07
Benzo(b)fluoranthene	8.51E-09	lb/MMBtu	AP-42 Section 3.2, Table 3.2-1 (July 2000)	3.30E-07	1.45E-06
Benzo(e)pyrene	2.34E-08	lb/MMBtu	AP-42 Section 3.2, Table 3.2-1 (July 2000)	9.08E-07	3.98E-06
Benzo(g,h,i)perylene	2.48E-08	lb/MMBtu	AP-42 Section 3.2, Table 3.2-1 (July 2000)	9.62E-07	4.21E-06
Benzo(k)fluoranthene	4.26E-09	lb/MMBtu	AP-42 Section 3.2, Table 3.2-1 (July 2000)	1.65E-07	7.24E-07
Biphenyl	3.95E-06	lb/MMBtu	AP-42 Section 3.2, Table 3.2-1 (July 2000)	1.53E-04	6.71E-04
Carbon Tetrachloride	6.07E-05	lb/MMBtu	AP-42 Section 3.2, Table 3.2-1 (July 2000)	2.36E-03	0.01
Chlorobenzene	4.44E-05	lb/MMBtu	AP-42 Section 3.2, Table 3.2-1 (July 2000)	1.72E-03	7.55E-03
Chloroform	4.71E-05	lb/MMBtu	AP-42 Section 3.2, Table 3.2-1 (July 2000)	1.83E-03	8.00E-03
Chrysene	6.72E-07	lb/MMBtu	AP-42 Section 3.2, Table 3.2-1 (July 2000)	2.61E-05	1.14E-04
Ethylbenzene	1.08E-04	lb/MMBtu	AP-42 Section 3.2, Table 3.2-1 (July 2000)	4.19E-03	0.02
Ethylene Dibromide	7.34E-05	lb/MMBtu	AP-42 Section 3.2, Table 3.2-1 (July 2000)	2.85E-03	0.01
Fluoranthene	3.61E-07	lb/MMBtu	AP-42 Section 3.2, Table 3.2-1 (July 2000)	1.40E-05	6.13E-05
Fluorene	1.69E-06	lb/MMBtu	AP-42 Section 3.2, Table 3.2-1 (July 2000)	6.56E-05	2.87E-04
Formaldehyde	0.06	lb/MMBtu	AP-42 Section 3.2, Table 3.2-1 (July 2000)	2.14	9.38
Indeno(1,2,3-c,d)pyrene	9.93E-09	lb/MMBtu	AP-42 Section 3.2, Table 3.2-1 (July 2000)	3.85E-07	1.69E-06
Methanol	2.48E-03	lb/MMBtu	AP-42 Section 3.2, Table 3.2-1 (July 2000)	0.10	0.42
Methylene Chloride	1.47E-04	lb/MMBtu	AP-42 Section 3.2, Table 3.2-1 (July 2000)	5.70E-03	0.02
n-Hexane	4.45E-04	lb/MMBtu	AP-42 Section 3.2, Table 3.2-1 (July 2000)	0.02	0.08
Naphthalene	9.63E-05	lb/MMBtu	AP-42 Section 3.2, Table 3.2-1 (July 2000)	3.74E-03	0.02
PAH	1.34E-04	lb/MMBtu	AP-42 Section 3.2, Table 3.2-1 (July 2000)	5.20E-03	0.02
Perylene	4.97E-09	lb/MMBtu	AP-42 Section 3.2, Table 3.2-1 (July 2000)	1.93E-07	8.45E-07
Phenanthrene	3.53E-06	lb/MMBtu	AP-42 Section 3.2, Table 3.2-1 (July 2000)	1.37E-04	6.00E-04
Phenol	4.21E-05	lb/MMBtu	AP-42 Section 3.2, Table 3.2-1 (July 2000)	1.63E-03	7.15E-03
Pyrene	5.84E-07	lb/MMBtu	AP-42 Section 3.2, Table 3.2-1 (July 2000)	2.27E-05	9.92E-05
Styrene	5.48E-05	lb/MMBtu	AP-42 Section 3.2, Table 3.2-1 (July 2000)	2.13E-03	9.31E-03
Toluene	9.63E-04	lb/MMBtu	AP-42 Section 3.2, Table 3.2-1 (July 2000)	0.04	0.16
Vinyl Chloride	2.47E-05	lb/MMBtu	AP-42 Section 3.2, Table 3.2-1 (July 2000)	9.58E-04	4.20E-03
Xylene	2.68E-04	lb/MMBtu	AP-42 Section 3.2, Table 3.2-1 (July 2000)	0.01	0.05
			Total	**3.09**	**13.54**

Table B-2
Potential to Emit Emissions Rates
Natural Gas Reciprocating Internal Combustion Engine (Clark TCV-16), A-2
El Paso Natural Gas Company, L.L.C.
Flagstaff Compressor Station - Flagstaff, Arizona

Greenhouse Gases					
CO_2	53.06	kg/MMBtu	40 CFR Part 98, Subpart C, Table C-1	4,539	19,879
CH_4	1.00E-03	kg/MMBtu	40 CFR Part 98, Subpart C, Table C-2	0.09	0.37
N_2O	1.00E-04	kg/MMBtu	40 CFR Part 98, Subpart C, Table C-2	0.01	0.04
CO_2e [(a)]	--	--	40 CFR Part 98, Subpart A, Table A-1 GWPs	4,543	19,900

Unit	Type	Make and Model	Rating [(b)]	Brake specific fuel consumption (BSFC)	Heat Input	Annual Operating Hours
			(hp @ 80 deg F)	(Btu/hp-hr)	(MMBtu/hr)	(hours)
A-2	Natural Gas Reciprocating Internal Combustion Engine	Clark TCV-16	5,500	7,055	38.8	8,760

[(a)] CO_2e based on multiplying CO_2 and CH_4 and N_2O by the Global Warming Potentials contained in 40 CFR 98 Subpart A as follows:

CO_2	1
CH_4	25
N_2O	298

[(b)] RICE horsepower (hp) assumed to be conservative based on rating at the site conditions of 5,500 hp at 80 deg F.

Table B-3
Potential to Emit Emissions Rates
Emergency Generator (Cummins G12), Aux-1
El Paso Natural Gas Company, L.L.C.
Flagstaff Compressor Station - Flagstaff, Arizona

Pollutant	Emissions Factor		Basis	Emissions Rate	
	Value	Units		(lb/hr)	(tpy)
Regulated NSR Pollutants					
NO_x	2.21	lb/MMBtu	AP-42 Section 3.2, Table 3.2-3 (July 2000)	3.42	0.86
CO	3.72	lb/MMBtu	AP-42 Section 3.2, Table 3.2-3 (July 2000)	5.76	1.44
VOC	0.03	lb/MMBtu	AP-42 Section 3.2, Table 3.2-3 (July 2000)	0.05	0.01
SO_2	5.88E-04	lb/MMBtu	AP-42 Section 3.2, Table 3.2-3 (July 2000)	9.10E-04	2.28E-04
PM	0.02	lb/MMBtu	AP-42 Section 3.2, Table 3.2-3 (July 2000), $PM_{filt} + PM_{cond}$	0.03	7.51E-03
PM_{10}	0.02	lb/MMBtu	AP-42 Section 3.2, Table 3.2-3 (July 2000), $PM_{filt} + PM_{cond}$	0.03	7.51E-03
$PM_{2.5}$	0.02	lb/MMBtu	AP-42 Section 3.2, Table 3.2-3 (July 2000), $PM_{filt} + PM_{cond}$	0.03	7.51E-03
Hazardous Air Pollutants					
1,1,2,2-Tetrachloroethane	2.53E-05	lb/MMBtu	AP-42 Section 3.2, Table 3.2-3, (July 2000)	3.92E-05	9.79E-06
1,1,2-Trichloroethane	1.53E-05	lb/MMBtu	AP-42 Section 3.2, Table 3.2-3, (July 2000)	2.37E-05	5.92E-06
1,1-Dichloroethane	1.13E-05	lb/MMBtu	AP-42 Section 3.2, Table 3.2-3, (July 2000)	1.75E-05	4.37E-06
1,2-Dichloroethane	1.13E-05	lb/MMBtu	AP-42 Section 3.2, Table 3.2-3, (July 2000)	1.75E-05	4.37E-06
1,2-Dichloropropane	1.30E-05	lb/MMBtu	AP-42 Section 3.2, Table 3.2-3, (July 2000)	2.01E-05	5.03E-06
1,3-Butadiene	6.63E-04	lb/MMBtu	AP-42 Section 3.2, Table 3.2-3, (July 2000)	1.03E-03	2.57E-04
1,3-Dichloropropene	1.27E-05	lb/MMBtu	AP-42 Section 3.2, Table 3.2-3, (July 2000)	1.97E-05	4.91E-06
Acetaldehyde	2.79E-03	lb/MMBtu	AP-42 Section 3.2, Table 3.2-3, (July 2000)	4.32E-03	1.08E-03
Acrolein	2.63E-03	lb/MMBtu	AP-42 Section 3.2, Table 3.2-3, (July 2000)	4.07E-03	1.02E-03
Benzene	1.58E-03	lb/MMBtu	AP-42 Section 3.2, Table 3.2-3, (July 2000)	2.45E-03	6.11E-04
Carbon Tetrachloride	1.77E-05	lb/MMBtu	AP-42 Section 3.2, Table 3.2-3, (July 2000)	2.74E-05	6.85E-06
Chlorobenzene	1.29E-05	lb/MMBtu	AP-42 Section 3.2, Table 3.2-3, (July 2000)	2.00E-05	4.99E-06
Chloroform	1.37E-05	lb/MMBtu	AP-42 Section 3.2, Table 3.2-3, (July 2000)	2.12E-05	5.30E-06
Ethylbenzene	2.48E-05	lb/MMBtu	AP-42 Section 3.2, Table 3.2-3, (July 2000)	3.84E-05	9.60E-06
Ethylene Dibromide	2.13E-05	lb/MMBtu	AP-42 Section 3.2, Table 3.2-3, (July 2000)	3.30E-05	8.24E-06
Formaldehyde	0.02	lb/MMBtu	AP-42 Section 3.2, Table 3.2-3, (July 2000)	0.03	7.93E-03
Methanol	3.06E-03	lb/MMBtu	AP-42 Section 3.2, Table 3.2-3, (July 2000)	4.74E-03	1.18E-03
Methylene Chloride	4.12E-05	lb/MMBtu	AP-42 Section 3.2, Table 3.2-3, (July 2000)	6.38E-05	1.59E-05
Naphthalene	9.71E-05	lb/MMBtu	AP-42 Section 3.2, Table 3.2-3, (July 2000)	1.50E-04	3.76E-05
PAH	1.41E-04	lb/MMBtu	AP-42 Section 3.2, Table 3.2-3, (July 2000)	2.18E-04	5.46E-05
Styrene	1.19E-05	lb/MMBtu	AP-42 Section 3.2, Table 3.2-3, (July 2000)	1.84E-05	4.61E-06
Toluene	5.58E-04	lb/MMBtu	AP-42 Section 3.2, Table 3.2-3, (July 2000)	8.64E-04	2.16E-04
Vinyl Chloride	7.18E-06	lb/MMBtu	AP-42 Section 3.2, Table 3.2-3, (July 2000)	1.11E-05	2.78E-06
Xylene	1.95E-04	lb/MMBtu	AP-42 Section 3.2, Table 3.2-3, (July 2000)	3.02E-04	7.55E-05
			Total	**0.05**	**0.01**
Greenhouse Gases					
CO_2	53.06	kg/MMBtu	40 CFR Part 98, Subpart C, Table C-1	181.08	45.27
CH_4	1.00E-03	kg/MMBtu	40 CFR Part 98, Subpart C, Table C-2	3.41E-03	8.53E-04
N_2O	1.00E-04	kg/MMBtu	40 CFR Part 98, Subpart C, Table C-2	3.41E-04	8.53E-05
CO_2e [(a)]	--	--	40 CFR Part 98, Subpart A, Table A-1 GWPs	181.26	45.32

Table B-3
Potential to Emit Emissions Rates
Emergency Generator (Cummins G12), Aux-1
El Paso Natural Gas Company, L.L.C.

Unit	Type	Make and Model	Rating	BSFC	Heat Input	Annual Operating Hours
			(hp)	(Btu/hp-hr)	(MMBtu/hr)	(hours)
Aux-1	Natural Gas Backup Generator	Cummins G12	184	8,413	1.5	500

[a] CO_2e based on multiplying CO_2 and CH_4 and N_2O by the Global Warming Potentials contained in 40 CFR 98 Subpart A as follows:

CO_2	1
CH_4	25
N_2O	298

Table B-4
Potential to Emit Emissions Rates
Equipment Leak Fugitives
El Paso Natural Gas Company, L.L.C.
Flagstaff Compressor Station - Flagstaff, Arizona

Component	Component Count[a]	THC Emission Factor	Stream Content [c] (wt %)				Emissions								
							VOC		HAP		CH_4		CO_2		CO_2e[d]
		(lbs/hr-component)[b]	VOC	HAP	CH_4	CO_2	(lb/hr)	(tpy)	(lb/hr)	(tpy)	(lb/hr)	(tpy)	(lb/hr)	(tpy)	(tpy)
Valves	514	9.92E-03	4.00%	0.01%	89.39%	2.23%	0.20	0.89	3.86E-04	1.69E-03	4.56	19.96	0.11	0.50	499.60
Flanges	240	8.60E-04	4.00%	0.01%	89.39%	2.23%	8.25E-03	0.04	1.56E-05	6.84E-05	0.18	0.81	4.60E-03	0.02	20.22
Connectors	1,474	4.41E-04	4.00%	0.01%	89.39%	2.23%	0.03	0.11	4.92E-05	2.16E-04	0.58	2.54	0.01	0.06	63.68
Open-ended lines	28	4.41E-03	4.00%	0.01%	89.39%	2.23%	4.94E-03	0.02	9.35E-06	4.09E-05	0.11	0.48	2.75E-03	0.01	12.10
Others	60	0.02	4.00%	0.01%	89.39%	2.23%	0.05	0.20	8.81E-05	3.86E-04	1.04	4.56	0.03	0.11	114.05
Totals							**0.29**	**1.27**	**5.48E-04**	**2.40E-03**	**6.47**	**28.36**	**0.16**	**0.71**	**709.64**

[a] Component counts default values obtained from GRI-HAPCalc Version 3.01 for a "typical" compressor station, doubled as a conservative measure. The GRI-HAPCalc Version 3.01 for a "typical" compressor station assumes six turbines and six reciprocating engines and will conservatively overstate component counts as there are no turbines at the Facility and only three engines.

[b] THC emissions factors from Table 2-4 of EPA-453/R-95-017, Protocol for Equipment Leak Emission Estimates (November, 1995).
The THC emissions factors were multiplied by the VOC weight percent and HAP weight percent to calculate VOC lb/hr and HAP lb/hr.
The THC emissions factors were multiplied by the CO_2 weight percent and CH_4 weight percent to calculate CO_2 lb/hr and CH_4 lb/hr.

[c] Stream content calculated using the July 2023 gas analysis provided by Kinder Morgan, on October 12, 2023.
VOC wt% was conservatively assumed to be 4 wt% in calculation rather than as shown on Gas Analysis Spreadsheet (Table B-6).

[d] CO_2e based on multiplying CO_2 and CH_4 and N_2O by the Global Warming Potentials contained in 40 CFR 98 Subpart A as follows:

CO_2	1
CH_4	25
N_2O	298

Table B-5
Potential to Emit Emissions Rates
Insignificant Activities - Startup and Shutdown Emissions
El Paso Natural Gas Company, L.L.C.
Flagstaff Compressor Station - Flagstaff, Arizona

Pollutant	Emissions Factor [a]	Annual Volume Vented	Emissions
	(lb/scf)	(Mscf/yr)	(tpy)
VOC	1.69E-04	7,250	0.61
HAP	3.38E-06	7,250	0.01
CO_2	9.96E-04	7,250	3.61
CH_4	0.04	7,250	144.68
GHG, CO_2e [b]	-	7,250	3,621

Emission Unit ID	Event	Volume Vented per Event [a]	Annual Events [c]	Annual Volume Vented
		(Mscf/event)	(event/yr)	(Mscf/yr)
A-1	Unit Blowdown	50	36	1,800
A-2	Unit Blowdown	50	36	1,800
Station	Station ESD	300	12	3,600
Station	Pipeline Pigging	-	-	50
Total				**7,250**

[a] The CO_2 and CH_4 emission factors are from Table B-6 (weight of component per volume of gas).
The VOC emission factor is the sum of the NM/E VOC emission factors from Table B-6.

[b] GHG, CO_2e Tons = CO_2 Emissions + (CH_4 Emissions x GWP of 25).

[c] Facility estimates. Note that these emissions are considered insignificant activities, as confirmed by ADEQ. For this reason they have not been considered as part of the sitewide PTE summary presented in Table 3-1 and the representations above are not intended to establish limits.

Table B-6
Potential to Emit Emissions Rates
Gas Analysis
El Paso Natural Gas Company, L.L.C.
Flagstaff Compressor Station - Flagstaff, Arizona

Component	VOC	HAP	Molecular Weight	Density [a]	Mole Percent[b]	lb Constituent/ lb-mol of Gas	Weight Percent[c]	Weight of Component per Volume of Gas[d]
			(lb/lb-mol)	(lb/scf)	(%)	(lb/lb-mol)	(%)	(lb/scf)
Nitrogen	N	N	28.01	0.07	0.95%	0.27	1.57%	7.01E-04
Carbon Dioxide	N	N	44.01	0.12	0.86%	0.38	2.23%	9.96E-04
Methane	N	N	16.04	0.04	94.43%	15.15	89.39%	0.04
Ethane	N	N	30.07	0.08	3.63%	1.09	6.44%	2.87E-03
Propane	Y	N	44.10	0.12	0.11%	0.05	0.29%	1.30E-04
i-Butane	Y	N	58.12	0.15	0.01%	4.35E-03	0.03%	1.15E-05
n-Butane	Y	N	58.12	0.15	0.01%	5.27E-03	0.03%	1.39E-05
i-Pentane	Y	N	72.15	0.19	0.002%	1.60E-03	0.009%	4.21E-06
n-Pentane	Y	N	72.15	0.19	0.0015%	1.06E-03	0.006%	2.80E-06
Hexane	Y	Y	86.18	0.23	0.0015%	1.28E-03	0.008%	3.38E-06
Heptane	Y	N	100.21	0.26	0.0015%	1.49E-03	0.009%	3.93E-06
				Total	**100%**	**16.95**	**100%**	**0.04**

[a] Density estimated assuming standard conditions of 60 degrees F and 14.969 psia, 379.5 ft^3/lb-mol

[b] From October 2023 gas analysis provided by Kinder Morgan, on October 12, 2023.

[c] Calculated as the individual component's (Molecular Weight x Mole Percent), divided by the total (Molecular Weight x Mole Percent).

[d] Calculated as the density times the mole percent.

Pollutant	Gas Content (lb/scf) [e]	Gas Weight Percent (%) [e], [f]
VOC	1.69E-04	4.00%
HAP	3.38E-06	0.008%
CO_2	9.96E-04	2.23%
CH_4	0.04	89.39%

[e] The gas content (lb/scf) is utilized for estimating emissions from SSM. The gas weight percent is utilized for estimating emissions from equipment leak fugitives.

[f] For the purposes of estimating VOC emissions from equipment leak fugitive components, it was conservatively assumed that the VOC content of the gas is 4%. However, for purposes of demonstrating that SSM emissions are insignificant, the actual VOC content (1.69E-04 lb/scf) from a recent gas analysis was utilized as this is more representative of emissions as a result of SSM.