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**NMED AIR QUALITY  
TITLE V RENEWAL APPLICATION**  
**El Paso Natural Gas Company, L.L.C.**  
**Bluewater Compressor Station**

Prepared By:  
Jane Romero Kotovsky – Senior Consultant  
MacKenzie Price – Consultant

TRINITY CONSULTANTS  
9400 Holly Ave NE  
Bldg 3 Suite 300  
Albuquerque, NM 87122  
(505) 266-6611

December 2019

Project 193201.0177

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9400 Holly Avenue NE | Bldg 3, Suite 300 | Albuquerque, NM 87122 | P (505) 266-6611

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December 13, 2019

Mr. Ted Schooley  
NMED Air Quality Bureau  
525 Camino de los Marquez, Suite 1  
Santa Fe, NM 87505

*RE: Application for Title V Renewal  
El Paso Natural Gas Company, L.L.C. – Bluewater Compressor Station*

Dear Mr. Schooley:

On behalf of El Paso Natural Gas Company, L.L.C., (EPNG), we are submitting this application for a Title V Renewal for Bluewater Compressor Station. The facility is located approximately one-half mile south of Thoreau, NM. The facility is currently authorized to operate under NSR Permit 3004-M1; the Title V Operating Permit being updated is P139-R3.

The format and content of this application are consistent with the Bureau's current policy regarding Title V applications. Title V Permit P139-R3 expires on December 16, 2020. EPNG is submitting this application in accordance with 20.2.70.300.B.2 NMAC, requiring a timely application for a Title V renewal be submitted at least 12 months prior to the date of permit expiration.

Enclosed are two hard copies of the application, including an original certification and two discs containing the electronic files. Please feel free to contact either myself at (505) 266-6611 or Richard Duarte, Principal Environmental Engineer with El Paso Natural Gas Company, L.L.C. at (505) 831-7763 if you have any questions regarding this application.

Sincerely,

Jane Romero-Kotovskyy  
Senior Consultant

Cc: Richard Duarte  
Trinity Project File 193201.0177

<p><b>Mail Application To:</b></p> <p>New Mexico Environment Department                  Air Quality Bureau                  Permits Section                  525 Camino de los Marquez, Suite 1                  Santa Fe, New Mexico, 87505</p> <p>Phone: (505) 476-4300                  Fax: (505) 476-4375                  www.env.nm.gov/aqb</p>		<p><b>For Department use only:</b></p>          <p>AIRS No.:</p>
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## Universal Air Quality Permit Application

### Use this application for NOI, NSR, or Title V sources.

Use this application for: the initial application, modifications, technical revisions, and renewals. For technical revisions, complete Sections, 1-A, 1-B, 2-E, 3, 9 and any other sections that are relevant to the requested action; coordination with the Air Quality Bureau permit staff prior to submittal is encouraged to clarify submittal requirements and to determine if more or less than these sections of the application are needed. Use this application for streamline permits as well. [See Section 1-1 for submittal instructions for other permits.](#)

**This application is submitted as** (check all that apply):  Request for a No Permit Required Determination (no fee)  
 **Updating** an application currently under NMED review. Include this page and all pages that are being updated (no fee required).  
 Construction Status:  Not Constructed  Existing Permitted (or NOI) Facility  Existing Non-permitted (or NOI) Facility  
 Minor Source:  a NOI 20.2.73 NMAC  20.2.72 NMAC application or revision  20.2.72.300 NMAC Streamline application  
 Title V Source:  Title V (new)  Title V renewal  TV minor mod.  TV significant mod. TV Acid Rain:  New  Renewal  
 PSD Major Source:  PSD major source (new)  minor modification to a PSD source  a PSD major modification

**Acknowledgements:**  
 I acknowledge that a pre-application meeting is available to me upon request.  Title V Operating, Title IV Acid Rain, and NPR applications have no fees.  
 \$500 NSR application Filing Fee enclosed **OR**  The full permit fee associated with 10 fee points (required w/ streamline applications).  
 Check No.: N/A in the amount of N/A  
 I acknowledge the required submittal format for the hard copy application is printed double sided 'head-to-toe', 2-hole punched (except the Sect. 2 landscape tables is printed 'head-to-head'), numbered tab separators. Incl. a copy of the check on a separate page.  
 This facility qualifies to receive assistance from the Small Business Environmental Assistance program (SBEAP) and qualifies for 50% of the normal application and permit fees. Enclosed is a check for 50% of the normal application fee which will be verified with the Small Business Certification Form for your company.  
 This facility qualifies to receive assistance from the Small Business Environmental Assistance Program (SBEAP) but does not qualify for 50% of the normal application and permit fees. To see if you qualify for SBEAP assistance and for the small business certification form go to [https://www.env.nm.gov/aqb/sbap/small\\_business\\_criteria.html](https://www.env.nm.gov/aqb/sbap/small_business_criteria.html) ).

**Citation:** Please provide the **low level citation** under which this application is being submitted: **20.2.70.300.B.2 NMAC** (e.g. application for a new minor source would be 20.2.72.200.A NMAC, one example for a Technical Permit Revision is 20.2.72.219.B.1.b NMAC, a Title V acid rain application would be: 20.2.70.200.C NMAC)

## Section 1 – Facility Information

### Section 1-A: Company Information

		AI # if known (see 1 <sup>st</sup> 3 to 5 #s of permit IDEA ID No.): 882	Updating Permit/NOI #: P139-R3
1	Facility Name: Bluewater Compressor Station	Plant primary SIC Code (4 digits): 4922	
		Plant NAIC code (6 digits): 486210	
a	Facility Street Address (If no facility street address, provide directions from a prominent landmark): Located in Township 14 North, Range 13 West, Section 33, approximately one mile South of Thoreau, New Mexico in McKinley County.		
2	Plant Operator Company Name: El Paso Natural Gas Company, L.L.C.	Phone/Fax: (520) 663-4200/(520) 663-4259	
a	Plant Operator Address: 5151 E. Broadway Blvd., Suite 1680, Tucson, AZ 85711		
b	Plant Operator's New Mexico Corporate ID or Tax ID: 46-0809216		

3	Plant Owner(s) name(s): El Paso Natural Gas Company, L.L.C.	Phone/Fax: (520) 663-4200/(520) 663-4259
a	Plant Owner(s) Mailing Address(s): 5151 E. Broadway Blvd., Suite 1680, Tucson, AZ 85711	
4	Bill To (Company): El Paso Natural Gas Company, L.L.C.	Phone/Fax: (520) 663-4200/(520) 663-4259
a	Mailing Address: 5151 E. Broadway Blvd., Suite 1680, Tucson, AZ 85711	E-mail: Ricardo_Duarte@kindermorgan.com
5	<input checked="" type="checkbox"/> Preparer: <input checked="" type="checkbox"/> Consultant: Trinity Consultants, Inc.	Phone/Fax: (505) 266-6611/ N/A
a	Mailing Address: 9400 Holly Avenue NE, Bldg. 3, Suite 300, Albuquerque, NM 87122	E-mail: JRomero@trinityconsultants.com
6	Plant Operator Contact: Ed Humada	Phone/Fax: (505) 870-0512 Cell/ N/A
a	Address: 7445 Pan American Freeway West, Suite 202, NE, Albuquerque, NM 87109	E-mail: edward_humada@kindermorgan.com
7	Air Permit Contact: Richard Duarte	Title: Sr. EHS Engineer
a	E-mail: Ricardo_Duarte@kindermorgan.com	Phone/Fax: (505) 831-7763/ N/A
b	Mailing Address: 7445 Pan American Freeway West, Suite 202, NE, Albuquerque, NM 87109	
c	The designated Air permit Contact will receive all official correspondence (i.e. letters, permits) from the Air Quality Bureau.	

### Section 1-B: Current Facility Status

1.a	Has this facility already been constructed? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	1.b If yes to question 1.a, is it currently operating in New Mexico? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
2	If yes to question 1.a, was the existing facility subject to a Notice of Intent (NOI) (20.2.73 NMAC) before submittal of this application? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If yes to question 1.a, was the existing facility subject to a construction permit (20.2.72 NMAC) before submittal of this application? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
3	Is the facility currently shut down? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If yes, give month and year of shut down (MM/YY): N/A
4	Was this facility constructed before 8/31/1972 and continuously operated since 1972? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
5	If Yes to question 3, has this facility been modified (see 20.2.72.7.P NMAC) or the capacity increased since 8/31/1972? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
6	Does this facility have a Title V operating permit (20.2.70 NMAC)? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If yes, the permit No. is: P139-R3
7	Has this facility been issued a No Permit Required (NPR)? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If yes, the NPR No. is: N/A
8	Has this facility been issued a Notice of Intent (NOI)? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If yes, the NOI No. is: N/A
9	Does this facility have a construction permit (20.2.72/20.2.74 NMAC)? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If yes, the permit No. is: 3004-M1
10	Is this facility registered under a General permit (GCP-1, GCP-2, etc.)? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If yes, the register No. is: N/A

### Section 1-C: Facility Input Capacity & Production Rate

1	What is the facility's maximum input capacity, specify units (reference here and list capacities in Section 20, if more room is required)			
a	Current	Hourly: 33.3 MMscf	Daily: 800 MMscf	Annually: 292,000 MMscf
b	Proposed	Hourly: 33.3 MMscf	Daily: 800 MMscf	Annually: 292,000 MMscf
2	What is the facility's maximum production rate, specify units (reference here and list capacities in Section 20, if more room is required)			
a	Current	Hourly: 33.3 MMscf	Daily: 800 MMscf	Annually: 292,000 MMscf

b	Proposed	Hourly: 33.3 MMscf	Daily: 800 MMscf	Annually: 292,000 MMscf
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### Section 1-D: Facility Location Information

1	Section: 33	Range: 13W	Township: 14N	County: McKinley	Elevation (ft): 7,160
2	UTM Zone: <input checked="" type="checkbox"/> 12 or <input type="checkbox"/> 13			Datum: <input type="checkbox"/> NAD 27 <input type="checkbox"/> NAD 83 <input checked="" type="checkbox"/> WGS 84	
a	UTM E (in meters, to nearest 10 meters): 751,770			UTM N (in meters, to nearest 10 meters): 3,920,250	
b	AND Latitude (deg., min., sec.): 35° 23' 37.7" N			Longitude (deg., min., sec.): 108° 13' 40.6"W	
3	Name and zip code of nearest New Mexico town: Thoreau, 87323				
4	Detailed Driving Instructions from nearest NM town (attach a road map if necessary): From the intersection of NM-371 and 1st St in Thoreau, NM, head south on NM-371 for 0.2 miles. The facility will be on the right.				
5	The facility is 0.5 miles south of Thoreau, NM.				
6	Status of land at facility (check one): <input checked="" type="checkbox"/> Private <input type="checkbox"/> Indian/Pueblo <input type="checkbox"/> Federal BLM <input type="checkbox"/> Federal Forest Service <input type="checkbox"/> Other (specify)				
7	List all municipalities, Indian tribes, and counties within a ten (10) mile radius (20.2.72.203.B.2 NMAC) of the property on which the facility is proposed to be constructed or operated: N/A – This application is being submitted under 20.2.70 NMAC.				
8	<b>20.2.72 NMAC applications only:</b> Will the property on which the facility is proposed to be constructed or operated be closer than 50 km (31 miles) to other states, Bernalillo County, or a Class I area (see <a href="http://www.env.nm.gov/aqb/modeling/class1areas.html">www.env.nm.gov/aqb/modeling/class1areas.html</a> )? <input type="checkbox"/> Yes <input type="checkbox"/> No (20.2.72.206.A.7 NMAC) If yes, list all with corresponding distances in kilometers: N/A This application is being submitted in accordance with 20.2.70 NMAC.				
9	Name nearest Class I area: Petrified Forest National Park				
10	Shortest distance (in km) from facility boundary to the boundary of the nearest Class I area (to the nearest 10 meters): 128 km				
11	Distance (meters) from the perimeter of the Area of Operations (AO is defined as the plant site inclusive of all disturbed lands, including mining overburden removal areas) to nearest residence, school or occupied structure: 310 m				
12	Method(s) used to delineate the Restricted Area: Continuous Fencing  "Restricted Area" is an area to which public entry is effectively precluded. Effective barriers include continuous fencing, continuous walls, or other continuous barriers approved by the Department, such as rugged physical terrain with steep grade that would require special equipment to traverse. If a large property is completely enclosed by fencing, a restricted area within the property may be identified with signage only. Public roads cannot be part of a Restricted Area.				
13	Does the owner/operator intend to operate this source as a portable stationary source as defined in 20.2.72.7.X NMAC? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No A portable stationary source is not a mobile source, such as an automobile, but a source that can be installed permanently at one location or that can be re-installed at various locations, such as a hot mix asphalt plant that is moved to different job sites.				
14	Will this facility operate in conjunction with other air regulated parties on the same property? <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes If yes, what is the name and permit number (if known) of the other facility?				

### Section 1-E: Proposed Operating Schedule (The 1-E.1 & 1-E.2 operating schedules may become conditions in the permit.)

1	Facility <b>maximum</b> operating ( $\frac{\text{hours}}{\text{day}}$ ): 24	( $\frac{\text{days}}{\text{week}}$ ): 7	( $\frac{\text{weeks}}{\text{year}}$ ): 52	( $\frac{\text{hours}}{\text{year}}$ ): 8,760
2	Facility's maximum daily operating schedule (if less than 24 $\frac{\text{hours}}{\text{day}}$ )? Start: N/A		<input type="checkbox"/> AM <input type="checkbox"/> PM	End: N/A <input type="checkbox"/> AM <input type="checkbox"/> PM
3	Month and year of anticipated start of construction: N/A- This is a Title V renewal application.			
4	Month and year of anticipated construction completion: N/A			
5	Month and year of anticipated startup of new or modified facility: N/A			
6	Will this facility operate at this site for more than one year? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No			

**Section 1-F: Other Facility Information**

1	Are there any current Notice of Violations (NOV), compliance orders, or any other compliance or enforcement issues related to this facility? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If yes, specify: N/A		
a	If yes, NOV date or description of issue: N/A	NOV Tracking No: N/A	
b	Is this application in response to any issue listed in 1-F, 1 or 1a above? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If Yes, provide the 1c & 1d info below:		
c	Document Title: N/A	Date: N/A	Requirement # (or page # and paragraph #): N/A
d	Provide the required text to be inserted in this permit: N/A		
2	Is air quality dispersion modeling or modeling waiver being submitted with this application? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
3	Does this facility require an "Air Toxics" permit under 20.2.72.400 NMAC & 20.2.72.502, Tables A and/or B? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
4	Will this facility be a source of federal Hazardous Air Pollutants (HAP)? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		
a	If Yes, what type of source? <input type="checkbox"/> Major ( <input type="checkbox"/> ≥10 tpy of any single HAP OR <input type="checkbox"/> ≥25 tpy of any combination of HAPS) OR <input checked="" type="checkbox"/> Minor ( <input checked="" type="checkbox"/> <10 tpy of any single HAP AND <input checked="" type="checkbox"/> <25 tpy of any combination of HAPS)		
5	Is any unit exempt under 20.2.72.202.B.3 NMAC? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		
a	If yes, include the name of company providing commercial electric power to the facility: Commercial power is purchased from a commercial utility company, which specifically does not include power generated on site for the sole purpose of the user.		

**Section 1-G: Streamline Application**

(This section applies to 20.2.72.300 NMAC Streamline applications only)

1	<input type="checkbox"/> I have filled out Section 18, "Addendum for Streamline Applications." <input checked="" type="checkbox"/> N/A (This is not a Streamline application.)
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**Section 1-H: Current Title V Information - Required for all applications from TV Sources**

(Title V-source required information for all applications submitted pursuant to 20.2.72 NMAC (Minor Construction Permits), or 20.2.74/20.2.79 NMAC (Major PSD/NNSR applications), and/or 20.2.70 NMAC (Title V))

1	Responsible Official (R.O.) (20.2.70.300.D.2 NMAC): Philip L. Baca	Phone: (520) 663-4224
a	R.O. Title: Operations Director	R.O. e-mail: Philip_Baca_kindermorgan.com
b	R. O. Address: 5151 E. Broadway Blvd., Suite 1680, Tucson, AZ 85711	
2	Alternate Responsible Official (20.2.70.300.D.2 NMAC): Joseph (Joe) E. McLaughlin	Phone: (713) 369-9847
a	A. R.O. Title: Operations Vice President	A. R.O. e-mail: Joe_McLaughlin@kindermorgan.com
b	A. R. O. Address: 1001 Louisiana Street, Suite 1000, Houston, TX 77002	
3	Company's Corporate or Partnership Relationship to any other Air Quality Permittee (List the names of any companies that have operating (20.2.70 NMAC) permits and with whom the applicant for this permit has a corporate or partnership relationship): N/A	
4	Name of Parent Company ("Parent Company" means the primary name of the organization that owns the company to be permitted wholly or in part.): Kinder Morgan, Inc.	
a	Address of Parent Company: 1001 Louisiana Street, Suite 1000, Houston, TX 77002	
5	Names of Subsidiary Companies ("Subsidiary Companies" means organizations, branches, divisions or subsidiaries, which are owned, wholly or in part, by the company to be permitted.): N/A, El Paso Natural Gas Company L.L.C. has no subsidiaries	
6	Telephone numbers & names of the owners' agents and site contacts familiar with plant operations: Richard Duarte (505) 831-7763 and Gary Verquer (575) 544-5234	

7	<p>Affected Programs to include Other States, local air pollution control programs (i.e. Bernalillo) and Indian tribes:</p> <p>Will the property on which the facility is proposed to be constructed or operated be closer than 80 km (50 miles) from other states, local pollution control programs, and Indian tribes and pueblos (20.2.70.402.A.2 and 20.2.70.7.B)? If yes, state which ones and provide the distances in kilometers: <b>States:</b> Arizona (74.78 km); <b>Indian Reservations::</b> Navajo Nation (28.61 km), Zuni (29.08 km), Ramah Navajo (29.31 km), Acoma (56.22 km), Laguna (63.81 km)</p>
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## Section 1-I – Submittal Requirements

Each 20.2.73 NMAC (NOI), a 20.2.70 NMAC (Title V), a 20.2.72 NMAC (NSR minor source), or 20.2.74 NMAC (PSD) application package shall consist of the following:

### Hard Copy Submittal Requirements:

- 1) One hard copy **original signed and notarized application package printed double sided 'head-to-toe' 2-hole punched** as we bind the document on top, not on the side; except Section 2 (landscape tables), which should be **head-to-head**. Please use **numbered tab separators** in the hard copy submittal(s) as this facilitates the review process. For NOI submittals only, hard copies of UA1, Tables 2A, 2D & 2F, Section 3 and the signed Certification Page are required. **Please include a copy of the check on a separate page.**
- 2) If the application is for a minor NSR, PSD, NNSR, or Title V application, include one working hard **copy** for Department use. This **copy** should be printed in book form, 3-hole punched, and **must be double sided**. Note that this is in addition to the head-to-toe 2-hole punched copy required in 1) above. Minor NSR Technical Permit revisions (20.2.72.219.B NMAC) only need to fill out Sections 1-A, 1-B, 3, and should fill out those portions of other Section(s) relevant to the technical permit revision. TV Minor Modifications need only fill out Sections 1-A, 1-B, 1-H, 3, and those portions of other Section(s) relevant to the minor modification. NMED may require additional portions of the application to be submitted, as needed.
- 3) The entire NOI or Permit application package, including the full modeling study, should be submitted electronically. Electronic files for applications for NOIs, any type of General Construction Permit (GCP), or technical revisions to NSRs must be submitted with compact disk (CD) or digital versatile disc (DVD). For these permit application submittals, **two CD** copies are required (in sleeves, not crystal cases, please), with additional CD copies as specified below. NOI applications require only a **single CD** submittal. Electronic files for other New Source Review (construction) permits/permit modifications or Title V permits/permit modifications can be submitted on CD/DVD or sent through AQB's secure file transfer service.

### Electronic files sent by (check one):

CD/DVD attached to paper application

secure electronic transfer. Air Permit Contact Name \_\_\_\_\_

Email \_\_\_\_\_

Phone number \_\_\_\_\_

a. If the file transfer service is chosen by the applicant, after receipt of the application, the Bureau will email the applicant with instructions for submitting the electronic files through a secure file transfer service. Submission of the electronic files through the file transfer service needs to be completed within 3 business days after the invitation is received, so the applicant should ensure that the files are ready when sending the hard copy of the application. The applicant will not need a password to complete the transfer. **Do not use the file transfer service for NOIs, any type of GCP, or technical revisions to NSR permits.**

- 4) Optionally, the applicant may submit the files with the application on compact disk (CD) or digital versatile disc (DVD) following the instructions above and the instructions in 5 for applications subject to PSD review.
- 5) If **air dispersion modeling** is required by the application type, include the **NMED Modeling Waiver** and/or electronic air dispersion modeling report, input, and output files. The dispersion modeling **summary report only** should be submitted as hard copy(ies) unless otherwise indicated by the Bureau.
- 6) If the applicant submits the electronic files on CD and the application is subject to PSD review under 20.2.74 NMAC (PSD) or NNSR under 20.2.79 NMC include,
  - a. one additional CD copy for US EPA,
  - b. one additional CD copy for each federal land manager affected (NPS, USFS, FWS, USDI) and,
  - c. one additional CD copy for each affected regulatory agency other than the Air Quality Bureau.

If the application is submitted electronically through the secure file transfer service, these extra CDs do not need to be submitted.

### Electronic Submittal Requirements [in addition to the required hard copy(ies)]:

- 1) All required electronic documents shall be submitted as 2 separate CDs or submitted through the AQB secure file transfer service. Submit a single PDF document of the entire application as submitted and the individual documents comprising the application.
- 2) The documents should also be submitted in Microsoft Office compatible file format (Word, Excel, etc.) allowing us to access the text and formulas in the documents (copy & paste). Any documents that cannot be submitted in a Microsoft Office compatible



format shall be saved as a PDF file from within the electronic document that created the file. If you are unable to provide Microsoft office compatible electronic files or internally generated PDF files of files (items that were not created electronically: i.e. brochures, maps, graphics, etc.), submit these items in hard copy format. We must be able to review the formulas and inputs that calculated the emissions.

- 3) It is preferred that this application form be submitted as 4 electronic files (**3 MSWord docs**: Universal Application section 1 [UA1], Universal Application section 3-19 [UA3], and Universal Application 4, the modeling report [UA4]) and **1 Excel file** of the tables (Universal Application section 2 [UA2]). Please include as many of the 3-19 Sections as practical in a single MS Word electronic document. Create separate electronic file(s) if a single file becomes too large or if portions must be saved in a file format other than MS Word.
- 4) The **electronic file names** shall be a maximum of 25 characters long (including spaces, if any). The format of the electronic Universal Application shall be in the format: "A-3423-FacilityName". The "A" distinguishes the file as an application submittal, as opposed to other documents the Department itself puts into the database. Thus, all electronic application submittals should begin with "A-". Modifications to existing facilities should use the **core permit number** (i.e. '3423') the Department assigned to the facility as the next 4 digits. Use 'XXXX' for new facility applications. The format of any separate electronic submittals (additional submittals such as non-Word attachments, re-submittals, application updates) and Section document shall be in the format: "A-3423-9-description", where "9" stands for the **section #** (in this case Section 9-Public Notice). Please refrain, as much as possible, from submitting any scanned documents as this file format is extremely large, which uses up too much storage capacity in our database. Please take the time to fill out the **header information** throughout all submittals as this will identify any loose pages, including the Application Date (date submitted) & Revision number (0 for original, 1, 2, etc.; which will help keep track of subsequent partial update(s) to the original submittal. Do not use special symbols (#, @, etc.) in file names. The footer information should not be modified by the applicant.

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**Table 2-B: Insignificant Activities<sup>1</sup> (20.2.70 NMAC) OR Exempted Equipment (20.2.72 NMAC)**

All 20.2.70 NMAC (Title V) applications must list all Insignificant Activities in this table. All 20.2.72 NMAC applications must list Exempted Equipment in this table. If equipment listed on this table is exempt under 20.2.72.202.B.5, include emissions calculations and emissions totals for 202.B.5 "similar functions" units, operations, and activities in Section 6, Calculations. Equipment and activities exempted under 20.2.72.202 NMAC may not necessarily be Insignificant under 20.2.70 NMAC (and vice versa). Unit & stack numbering must be consistent throughout the application package. Per Exemptions Policy 02-012.00 (see [http://www.env.nm.gov/aqb/permit/aqb\\_pol.html](http://www.env.nm.gov/aqb/permit/aqb_pol.html)), 20.2.72.202.B NMAC Exemptions do not apply, but 20.2.72.202.A NMAC exemptions do apply to NOI facilities under 20.2.73 NMAC. List 20.2.72.301.D.4 NMAC Auxiliary Equipment for Streamline applications in Table 2-A. The List of Insignificant Activities (for TV) can be found online at <http://www.env.nm.gov/aqb/forms/InsignificantListTitleV.pdf>. TV sources may elect to enter both TV Insignificant Activities and Part 72 Exemptions on this form.

Unit Number	Source Description	Manufacturer	Model No.	Max Capacity	List Specific 20.2.72.202 NMAC Exemption (e.g. 20.2.72.202.B.5)	Date of Manufacture /Reconstruction <sup>2</sup>	For Each Piece of Equipment, Check One
			Serial No.	Capacity Units	Insignificant Activity citation (e.g. IA List Item #1.a)	Date of Installation /Construction <sup>2</sup>	
TK-001	Lube oil day tank	N/A	N/A	150	20.2.72.202.B(2)	N/A	<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> To be Removed <input type="checkbox"/> New/Additional <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Modified <input type="checkbox"/> To be Replaced
			N/A	gal	IA List Item #5	N/A	
TK-002	Lube oil tank (drum)	N/A	N/A	55	20.2.72.202.B(2)	N/A	<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> To be Removed <input type="checkbox"/> New/Additional <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Modified <input type="checkbox"/> To be Replaced
			N/A	gal	IA List Item #5	N/A	
TK-003	Aux lube oil tank	N/A	N/A	15	20.2.72.202.B(2)	N/A	<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> To be Removed <input type="checkbox"/> New/Additional <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Modified <input type="checkbox"/> To be Replaced
			N/A	gal	IA List Item #5	N/A	
TK-004	Used lube oil tank	N/A	N/A	1300	20.2.72.202.B(2)	N/A	<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> To be Removed <input type="checkbox"/> New/Additional <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Modified <input type="checkbox"/> To be Replaced
			N/A	gal	IA List Item #5	N/A	
							<input type="checkbox"/> Existing (unchanged) <input type="checkbox"/> To be Removed <input type="checkbox"/> New/Additional <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Modified <input type="checkbox"/> To be Replaced
							<input type="checkbox"/> Existing (unchanged) <input type="checkbox"/> To be Removed <input type="checkbox"/> New/Additional <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Modified <input type="checkbox"/> To be Replaced
							<input type="checkbox"/> Existing (unchanged) <input type="checkbox"/> To be Removed <input type="checkbox"/> New/Additional <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Modified <input type="checkbox"/> To be Replaced
							<input type="checkbox"/> Existing (unchanged) <input type="checkbox"/> To be Removed <input type="checkbox"/> New/Additional <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Modified <input type="checkbox"/> To be Replaced
							<input type="checkbox"/> Existing (unchanged) <input type="checkbox"/> To be Removed <input type="checkbox"/> New/Additional <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Modified <input type="checkbox"/> To be Replaced
							<input type="checkbox"/> Existing (unchanged) <input type="checkbox"/> To be Removed <input type="checkbox"/> New/Additional <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Modified <input type="checkbox"/> To be Replaced
							<input type="checkbox"/> Existing (unchanged) <input type="checkbox"/> To be Removed <input type="checkbox"/> New/Additional <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Modified <input type="checkbox"/> To be Replaced
							<input type="checkbox"/> Existing (unchanged) <input type="checkbox"/> To be Removed <input type="checkbox"/> New/Additional <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Modified <input type="checkbox"/> To be Replaced

<sup>1</sup>Insignificant activities exempted due to size or production rate are defined in 20.2.70.300.D.6, 20.2.70.7.Q NMAC, and the NMED/AQB List of Insignificant Activities, dated September 15, 2008. Emissions from these insignificant activities do not need to be reported, unless specifically requested.

<sup>2</sup>Specify date(s) required to determine regulatory applicability.

**Table 2-A: Regulated Emission Sources**

Unit and stack numbering must correspond throughout the application package. If applying for a NOI under 20.2.73 NMAC, equipment exemptions under 2.72.202 NMAC do not apply.

Unit Number <sup>1</sup>	Source Description	Make	Model #	Serial #	Manufacturer's Rated Capacity <sup>3</sup> (Specify Units)	Requested Permitted Capacity <sup>3</sup> (Specify Units)	Date of Manufacture <sup>2</sup>	Controlled by Unit #	Source Classification Code (SCC)	For Each Piece of Equipment, Check One	RICE Ignition Type (CI, SI, 4SLB, 4SRB, 2SLB) <sup>4</sup>	Replacing Unit No.
							Date of Construction/Reconstruction <sup>2</sup>	Emissions vented to Stack #				
B-01	Natural Gas Fired Turbine	Solar	Taurus 60-7302	CC92910	6931 hp	5793 hp	10/01/2004	N/A	20200201	<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> To be Removed <input type="checkbox"/> New/Additional <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Modified <input type="checkbox"/> To be Replaced	N/A	N/A
							01/17/2005	T-001				
B-02	Natural Gas Fired Turbine	Solar	Taurus 60-7302	CC92911	6931 hp	5793 hp	01/01/1997	N/A	20200201	<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> To be Removed <input type="checkbox"/> New/Additional <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Modified <input type="checkbox"/> To be Replaced	N/A	N/A
							01/17/2005	T-002				
B-03	Natural Gas Fired Turbine	Solar	Taurus 60-7302	CC92912	6931 hp	5793 hp	10/01/2004	N/A	20200201	<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> To be Removed <input type="checkbox"/> New/Additional <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Modified <input type="checkbox"/> To be Replaced	N/A	N/A
							01/17/2005	T-003				
FUG	Facility-wide fugitive emissions	N/A	N/A	N/A	N/A	N/A	N/A	N/A	31088811	<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> To be Removed <input type="checkbox"/> New/Additional <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Modified <input type="checkbox"/> To be Replaced	N/A	N/A
							N/A	N/A				
SSM	Startup, Shutdown, Maintenance Emissions	N/A	N/A	N/A	N/A	N/A	N/A	N/A	31088811	<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> To be Removed <input type="checkbox"/> New/Additional <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Modified <input type="checkbox"/> To be Replaced	N/A	N/A
							N/A	N/A				
AUX-B-01	Auxiliary Reciprocating IC Engine	Waukesha	H-24 GL HCR	C-62002/1	586 hp	586 hp	10/01/2004	N/A	20100202	<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> To be Removed <input type="checkbox"/> New/Additional <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Modified <input type="checkbox"/> To be Replaced	4SLB	N/A
							01/17/2005	AUX-B-01				
										<input type="checkbox"/> Existing (unchanged) <input type="checkbox"/> To be Removed <input type="checkbox"/> New/Additional <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Modified <input type="checkbox"/> To be Replaced		
										<input type="checkbox"/> Existing (unchanged) <input type="checkbox"/> To be Removed <input type="checkbox"/> New/Additional <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Modified <input type="checkbox"/> To be Replaced		
										<input type="checkbox"/> Existing (unchanged) <input type="checkbox"/> To be Removed <input type="checkbox"/> New/Additional <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Modified <input type="checkbox"/> To be Replaced		
										<input type="checkbox"/> Existing (unchanged) <input type="checkbox"/> To be Removed <input type="checkbox"/> New/Additional <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Modified <input type="checkbox"/> To be Replaced		
										<input type="checkbox"/> Existing (unchanged) <input type="checkbox"/> To be Removed <input type="checkbox"/> New/Additional <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Modified <input type="checkbox"/> To be Replaced		
										<input type="checkbox"/> Existing (unchanged) <input type="checkbox"/> To be Removed <input type="checkbox"/> New/Additional <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Modified <input type="checkbox"/> To be Replaced		
										<input type="checkbox"/> Existing (unchanged) <input type="checkbox"/> To be Removed <input type="checkbox"/> New/Additional <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Modified <input type="checkbox"/> To be Replaced		
										<input type="checkbox"/> Existing (unchanged) <input type="checkbox"/> To be Removed <input type="checkbox"/> New/Additional <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Modified <input type="checkbox"/> To be Replaced		

<sup>1</sup> Unit numbers must correspond to unit numbers in the previous permit unless a complete cross reference table of all units in both permits is provided.

<sup>2</sup> Specify dates required to determine regulatory applicability.

<sup>3</sup> To properly account for power conversion efficiencies, generator set rated capacity shall be reported as the rated capacity of the engine in horsepower, not the kilowatt capacity of the generator set.

<sup>4</sup> "4SLB" means four stroke lean burn engine, "4SRB" means four stroke rich burn engine, "2SLB" means two stroke lean burn engine, "CI" means compression ignition, and "SI" means spark ignition

**Table 2-C: Emissions Control Equipment**

Unit and stack numbering must correspond throughout the application package. Only list control equipment for TAPs if the TAP's maximum uncontrolled emissions rate is over its respective threshold as listed in 20.2.72 NMAC, Subpart V, Tables A and B. In accordance with 20.2.72.203.A(3) and (8) NMAC, 20.2.70.300.D(5)(b) and (e) NMAC, and 20.2.73.200.B(7) NMAC, the permittee shall report all control devices and list each pollutant controlled by the control device regardless if the applicant takes credit for the reduction in emissions.

Control Equipment Unit No.	Control Equipment Description	Date Installed	Controlled Pollutant(s)	Controlling Emissions for Unit Number(s) <sup>1</sup>	Efficiency (% Control by Weight)	Method used to Estimate Efficiency
This table is not applicable as there is no Emissions Control Equipment at this facility.						

<sup>1</sup> List each control device on a separate line. For each control device, list all emission units controlled by the control device.

**Table 2-D: Maximum Emissions** (under normal operating conditions)

This Table was intentionally left blank because it would be identical to Table 2-E.

Maximum Emissions are the emissions at maximum capacity and prior to (in the absence of) pollution control, emission-reducing process equipment, or any other emission reduction. Calculate the hourly emissions using the worst case hourly emissions for each pollutant. For each pollutant, calculate the annual emissions as if the facility were operating at maximum plant capacity without pollution controls for 8760 hours per year, unless otherwise approved by the Department. List Hazardous Air Pollutants (HAP) & Toxic Air Pollutants (TAPs) in Table 2-I. Unit & stack numbering must be consistent throughout the application package. Fill all cells in this table with the emission numbers or a "-" symbol. A "-" symbol indicates that emissions of this pollutant are not expected. Numbers shall be expressed to at least 2 decimal points (e.g. 0.41, 1.41, or 1.41E-4).

Unit No.	NOx		CO		VOC		SOx		PM <sup>1</sup>		PM10 <sup>1</sup>		PM2.5 <sup>1</sup>		H <sub>2</sub> S		Lead	
	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr
<b>Totals</b>																		

<sup>1</sup>Condensable Particulate Matter: Include condensable particulate matter emissions for PM10 and PM2.5 if the source is a combustion source. Do not include condensable particulate matter for PM unless PM is set equal to PM10 and PM2.5. Particulate matter (PM) is not subject to an ambient air quality standard, but PM is a regulated air pollutant under PSD (20.2.74 NMAC) and Title V (20.2.70 NMAC).

**Table 2-E: Requested Allowable Emissions**

Unit & stack numbering must be consistent throughout the application package. Fill all cells in this table with the emission numbers or a "-" symbol. A "--" symbol indicates that emissions of this pollutant are not expected. Numbers shall be expressed to at least 2 decimal points (e.g. 0.41, 1.41, or 1.41E<sup>-4</sup>).

Unit No.	NOx		CO		VOC		SOx		PM <sup>1</sup>		PM10 <sup>1</sup>		PM2.5 <sup>1</sup>		H <sub>2</sub> S		Lead	
	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr
B-01	27.1	118.6	5.8	25.2	0.25	1.1	0.38	1.7	0.31	1.4	0.31	1.4	0.31	1.4	-	-	-	-
B-02	27.1	118.6	5.8	25.2	0.25	1.1	0.38	1.7	0.31	1.4	0.31	1.4	0.31	1.4	-	-	-	-
B-03	27.1	118.6	5.8	25.2	0.25	1.1	0.38	1.7	0.31	1.4	0.31	1.4	0.31	1.4	-	-	-	-
FUG	-	-	-	-	*	1.2	-	-	-	-	-	-	-	-	-	-	-	-
AUX-B-01	2.6	0.65	2.2	0.55	0.58	0.15	3.6E-02	9.1E-03	0.046	0.011	0.046	0.011	0.046	0.011	-	-	-	-
<b>Totals</b>	83.8	356.3	19.4	76.1	1.3	4.6	1.2	5.0	0.99	4.1	0.99	4.1	0.99	4.1	-	-	-	-

<sup>1</sup> **Condensable Particulate Matter:** Include condensable particulate matter emissions for PM10 and PM2.5 if the source is a combustion source. Do not include condensable particulate matter for PM unless PM is set equal to PM10 and PM2.5. Particulate matter (PM) is not subject to an ambient air quality standard, but it is a regulated air pollutant under PSD (20.2.74 NMAC) and Title V (20.2.70 NMAC).  
 \* Denotes an hourly value is not appropriate for this emission type.

**Table 2-F: Additional Emissions during Startup, Shutdown, and Routine Maintenance (SSM)**

This table is intentionally left blank since all emissions at this facility due to routine or predictable startup, shutdown, or scheduled maintenance are no higher than those listed in Table 2-E and a malfunction emission limit is not already permitted or requested. If you are required to report GHG emissions as described in Section 6a, include any GHG emissions during Startup, Shutdown, and/or Scheduled Maintenance (SSM) in Table 2-P. Provide an explanation of SSM emissions in Section 6 and 6a.

All applications for facilities that have emissions during routine or predictable startup, shutdown or scheduled maintenance (SSM)<sup>1</sup>, including NOI applications, must include in this table the Maximum Emissions during routine or predictable startup, shutdown and scheduled maintenance (20.2.7 NMAC, 20.2.72.203.A.3 NMAC, 20.2.73.200.D.2 NMAC). In Section 6 and 6a, provide emissions calculations for all SSM emissions reported in this table. Refer to "Guidance for Submittal of Startup, Shutdown, Maintenance Emissions in Permit Applications ([https://www.env.nm.gov/aqb/permit/aqb\\_pol.html](https://www.env.nm.gov/aqb/permit/aqb_pol.html)) for more detailed instructions. Numbers shall be expressed to at least 2 decimal points (e.g. 0.41, 1.41, or 1.41E-4).

Unit No.	NOx		CO		VOC		SOx		PM <sup>2</sup>		PM10 <sup>2</sup>		PM2.5 <sup>2</sup>		H <sub>2</sub> S		Lead	
	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr
SSM	-	-	-	-	*	10.0	-	-	-	-	-	-	-	-	0.20	0.0039	-	-
<b>Totals</b>	-	-	-	-	*	10.0	-	-	-	-	-	-	-	-	0.20	0.0039	-	-

<sup>1</sup> For instance, if the short term steady-state Table 2-E emissions are 5 lb/hr and the SSM rate is 12 lb/hr, enter 7 lb/hr in this table. If the annual steady-state Table 2-E emissions are 21.9 TPY, and the number of scheduled SSM events result in annual emissions of 31.9 TPY, enter 10.0 TPY in the table below.

<sup>2</sup> **Condensable Particulate Matter:** Include condensable particulate matter emissions for PM10 and PM2.5 if the source is a combustion source. Do not include condensable particulate matter for PM unless PM is set equal to PM10 and PM2.5. Particulate matter (PM) is not subject to an ambient air quality standard, but it is a regulated air pollutant under PSD (20.2.74 NMAC) and Title V (20.2.70 NMAC).

<sup>3</sup> H2S emissions were calculated for episodic SSM events. The H2S emission rate is conservatively based on 0.25 grains of H2S per 100 scf of gas due to customer obligations per gas tariffs. In reality the H2S emissions are significantly less than what is being requested based on sampling data. The proposed maximum facility-wide hourly H2S emission rate is 0.199 lb/hr. Blowdown ventings do not happen simultaneously.

**NOTE: Emission estimates presented here are based on historical data and are not intended as a limit.**

### Table 2-G: Stack Exit and Fugitive Emission Rates for Special Stacks

I have elected to leave this table blank because this facility does not have any stacks/vents that split emissions from a single source or combine emissions from more than one source listed in table 2-A. Additionally, the emission rates of all stacks match the Requested allowable emission rates stated in Table 2-E.

Use this table to list stack emissions (requested allowable) from split and combined stacks. List Toxic Air Pollutants (TAPs) and Hazardous Air Pollutants (HAPs) in Table 2-I. List all fugitives that are associated with the normal, routine, and non-emergency operation of the facility. Unit and stack numbering must correspond throughout the application package. Refer to Table 2-E for instructions on use of the “-“ symbol and on significant figures.

Stack No.	Serving Unit Number(s) from Table 2-A	NOx		CO		VOC		SOx		PM		PM10		PM2.5		<input type="checkbox"/> H <sub>2</sub> S or <input type="checkbox"/> Lead	
		lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr
<b>Totals:</b>																	



Table 2-H: Stack Exit Conditions

Unit and stack numbering must correspond throughout the application package. Include the stack exit conditions for each unit that emits from a stack, including blowdown venting parameters and tank emissions. If the facility has multiple operating scenarios, complete a separate Table 2-H for each scenario and, for each, type scenario name here:

Stack Number	Serving Unit Number(s) from Table 2-A	Orientation (H=Horizontal V=Vertical)	Rain Caps (Yes or No)	Height Above Ground (ft)	Temp. (F)	Flow Rate		Moisture by Volume (%)	Velocity (ft/sec)	Inside Diameter (ft)
						(acfs)	(dscfs)			
T-001	B-01	V	No	38	864	1775	N/A	N/A	184.5	3.50
T-002	B-02	V	No	38	864	1775	N/A	N/A	184.5	3.50
T-003	B-03	V	No	38	864	1775	N/A	N/A	184.5	3.50
AUX-B-01	AUX-B-01	V	No	~25	~850	47	N/A	N/A	133.6	0.67

**Table 2-I: Stack Exit and Fugitive Emission Rates for HAPs and TAPs**

In the table below, report the Potential to Emit for each HAP from each regulated emission unit listed in Table 2-A, only if the entire facility emits the HAP at a rate greater than or equal to one (1) ton per year For each such emission unit, HAPs shall be reported to the nearest 0.1 tpy. Each facility-wide Individual HAP total and the facility-wide Total HAPs shall be the sum of all HAP sources calculated to the nearest 0.1 ton per year. Per 20.2.72.403.A.1 NMAC, facilities not exempt [see 20.2.72.402.C NMAC] from TAP permitting shall report each TAP that has an uncontrolled emission rate in excess of its pounds per hour screening level specified in 20.2.72.502 NMAC. TAPs shall be reported using one more significant figure than the number of significant figures shown in the pound per hour threshold corresponding to the substance. Use the HAP nomenclature as it appears in Section 112 (b) of the 1990 CAAA and the TAP nomenclature as it listed in 20.2.72.502 NMAC. Include tank-flashing emissions estimates of HAPs in this table. For each HAP or TAP listed, fill all cells in this table with the emission numbers or a "-" symbol. A "-" symbol indicates that emissions of this pollutant are not expected or the pollutant is emitted in a quantity less than the threshold amounts described above.

Stack No.	Unit No.(s)	Total HAPs		Acetaldehyde <input checked="" type="checkbox"/> HAP or <input type="checkbox"/> TAP		Formaldehyde <input checked="" type="checkbox"/> HAP or <input type="checkbox"/> TAP		Provide Pollutant Name Here <input type="checkbox"/> HAP or <input type="checkbox"/> TAP		Provide Pollutant Name Here <input type="checkbox"/> HAP or <input type="checkbox"/> TAP		Provide Pollutant Name Here <input type="checkbox"/> HAP or <input type="checkbox"/> TAP		Provide Pollutant Name Here <input type="checkbox"/> HAP or <input type="checkbox"/> TAP		Provide Pollutant Name Here <input type="checkbox"/> HAP or <input type="checkbox"/> TAP		Provide Pollutant Name Here <input type="checkbox"/> HAP or <input type="checkbox"/> TAP		
		lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr
T-001	B-01	0.64	2.8	0.26	1.2	0.26	1.1													
T-002	B-02	0.64	2.8	0.26	1.2	0.26	1.1													
T-003	B-03	0.64	2.8	0.26	1.2	0.26	1.1													
FUG	FUG	*	0.012	-	-	-	-													
SSM	SSM	*	0.069	-	-	-	-													
AUX-B-01	AUX-B-01	0.32	0.079	0.038	0.0096	0.25	0.061													
<b>Totals:</b>		2.2	8.5	0.83	3.5	1.0	3.5													

\* Denotes an hourly value is not appropriate for this emission type.

### Table 2-J: Fuel

Specify fuel characteristics and usage. Unit and stack numbering must correspond throughout the application package.

Unit No.	Fuel Type (low sulfur Diesel, ultra low sulfur diesel, Natural Gas, Coal, ...)	Fuel Source: purchased commercial, pipeline quality natural gas, residue gas, raw/field natural gas, process gas (e.g. SRU tail gas) or other	Specify Units				
			Lower Heating Value	Hourly Usage	Annual Usage	% Sulfur	% Ash
B-01	Pipeline Quality Natural Gas	Pipeline Quality Natural Gas	904 BTU/scf	52.6 Mscf	461 MMscf	2.5 grains S/100 scf	N/A
B-02	Pipeline Quality Natural Gas	Pipeline Quality Natural Gas	904 BTU/scf	52.6 Mscf	461 MMscf	2.5 grains S/100 scf	N/A
B-03	Pipeline Quality Natural Gas	Pipeline Quality Natural Gas	904 BTU/scf	52.6 Mscf	461 MMscf	2.5 grains S/100 scf	N/A
AUX-B-01	Pipeline Quality Natural Gas	Pipeline Quality Natural Gas	904 BTU/scf	4342 scf	38 Mscf	2.5 grains S/100 scf	N/A

**Table 2-K: Liquid Data for Tanks Listed in Table 2-L**

For each tank, list the liquid(s) to be stored in each tank. If it is expected that a tank may store a variety of hydrocarbon liquids, enter "mixed hydrocarbons" in the Composition column for that tank and enter the corresponding data of the most volatile liquid to be stored in the tank. If tank is to be used for storage of different materials, list all the materials in the "All Calculations" attachment, run the newest version of TANKS on each, and use the material with the highest emission rate to determine maximum uncontrolled and requested allowable emissions rate. The permit will specify the most volatile category of liquids that may be stored in each tank. Include appropriate tank-flashing modeling input data. Use additional sheets if necessary. Unit and stack numbering must correspond throughout the application package.

Tank No.	SCC Code	Material Name	Composition	Liquid Density (lb/gal)	Vapor Molecular Weight (lb/lb*mol)	Average Storage Conditions		Max Storage Conditions	
						Temperature (°F)	True Vapor Pressure (psia)	Temperature (°F)	True Vapor Pressure (psia)
N/A - All tanks at the facility are insignificant.									

### Table 2-L: Tank Data

Include appropriate tank-flashing modeling input data. Use an addendum to this table for unlisted data categories. Unit and stack numbering must correspond throughout the application package. Use additional sheets if necessary. See reference Table 2-L2. Note: 1.00 bbl = 10.159 M3 = 42.0 gal

Tank No.	Date Installed	Materials Stored	Seal Type (refer to Table 2-LR below)	Roof Type (refer to Table 2-LR below)	Capacity		Diameter (M)	Vapor Space (M)	Color (from Table VI-C)		Paint Condition (from Table VI-C)	Annual Throughput (gal/yr)	Turn-overs (per year)
					(bbl)	(M <sup>3</sup> )			Roof	Shell			
N/A - All tanks at the facility are insignificant.													

**Table 2-L2: Liquid Storage Tank Data Codes Reference Table**

Roof Type	Seal Type, Welded Tank Seal Type		Seal Type, Riveted Tank Seal Type		Roof, Shell Color	Paint Condition
FX: Fixed Roof	Mechanical Shoe Seal	Liquid-mounted resilient seal	Vapor-mounted resilient seal	Seal Type	WH: White	Good
IF: Internal Floating Roof	A: Primary only	A: Primary only	A: Primary only	A: Mechanical shoe, primary only	AS: Aluminum (specular)	Poor
EF: External Floating Roof	B: Shoe-mounted secondary	B: Weather shield	B: Weather shield	B: Shoe-mounted secondary	AD: Aluminum (diffuse)	
P: Pressure	C: Rim-mounted secondary	C: Rim-mounted secondary	C: Rim-mounted secondary	C: Rim-mounted secondary	LG: Light Gray	
					MG: Medium Gray	
					BL: Black	
					OT: Other (specify)	

Note: 1.00 bbl = 0.159 M<sup>3</sup> = 42.0 gal

**Table 2-M: Materials Processed and Produced** (Use additional sheets as necessary.)

Material Processed				Material Produced			
Description	Chemical Composition	Phase (Gas, Liquid, or Solid)	Quantity (specify units)	Description	Chemical Composition	Phase	Quantity (specify units)
N/A - Materials are not processed or produced at this facility.							

**Table 2-N: CEM Equipment**

Enter Continuous Emissions Measurement (CEM) Data in this table. If CEM data will be used as part of a federally enforceable permit condition, or used to satisfy the requirements of a state or federal regulation, include a copy of the CEM's manufacturer specification sheet in the Information Used to Determine Emissions attachment. Unit and stack numbering must correspond throughout the application package. Use additional sheets if necessary.

Stack No.	Pollutant(s)	Manufacturer	Model No.	Serial No.	Sample Frequency	Averaging Time	Range	Sensitivity	Accuracy
This table is not applicable as there are no Continuous Emissions Monitoring devices at this facility.									

**Table 2-O: Parametric Emissions Measurement Equipment**

Unit and stack numbering must correspond throughout the application package. Use additional sheets if necessary.

Unit No.	Parameter/Pollutant Measured	Location of Measurement	Unit of Measure	Acceptable Range	Frequency of Maintenance	Nature of Maintenance	Method of Recording	Averaging Time
This table is not applicable as there are no parametric emissions measurement devices at this facility.								



### Table 2-P: Greenhouse Gas Emissions

Applications submitted under 20.2.70, 20.2.72, & 20.2.74 NMAC are required to complete this Table. Power plants, Title V major sources, and PSD major sources must report and calculate all GHG emissions for each unit. Applicants must report potential emission rates in short tons per year (see Section 6.a for assistance). Include GHG emissions during Startup, Shutdown, and Scheduled Maintenance in this table. For minor source facilities that are not power plants, are not Title V, or are not PSD, there are three options for reporting GHGs 1) report GHGs for each individual piece of equipment; 2) report all GHGs from a group of unit types, for example report all combustion source GHGs as a single unit and all venting GHG as a second separate unit; OR 3) check the following box  By checking this box, the applicant acknowledges the total CO<sub>2</sub>e emissions are less than 75,000 tons per year.

		CO <sub>2</sub> ton/yr	N <sub>2</sub> O ton/yr	CH <sub>4</sub> ton/yr	SF <sub>6</sub> ton/yr	PFC/HFC ton/yr <sup>2</sup>										Total GHG Mass Basis ton/yr <sup>4</sup>	Total CO <sub>2</sub> e ton/yr <sup>5</sup>
<b>Unit No.</b>	<b>GWPs<sup>1</sup></b>	<b>1</b>	<b>298</b>	<b>25</b>	<b>22,800</b>	<b>footnote 3</b>											
<b>B-01</b>	mass GHG	24394.8	0.046	0.46												24395.3	
	CO <sub>2</sub> e	24394.8	13.7	11.5													24420.0
<b>B-02</b>	mass GHG	24394.8	0.046	0.46												24395.3	
	CO <sub>2</sub> e	24394.8	13.7	11.5													24420.0
<b>B-03</b>	mass GHG	24394.8	0.046	0.46												24395.3	
	CO <sub>2</sub> e	24394.8	13.7	11.5													24420.0
<b>FUG</b>	mass GHG	1.2	-	1.2												2.3	
	CO <sub>2</sub> e	1.2	-	29.2													30.4
<b>SSM</b>	mass GHG	10.0	-	450.0												460.0	
	CO <sub>2</sub> e	10.0	-	11250.0													11260.0
<b>AUX-B-01</b>	mass GHG	134.5	2.5E-04	2.5E-03												134.5	
	CO <sub>2</sub> e	134.5	0.076	0.063													134.7
	mass GHG																
	CO <sub>2</sub> e																
	mass GHG																
	CO <sub>2</sub> e																
	mass GHG																
	CO <sub>2</sub> e																
	mass GHG																
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	mass GHG																
	CO <sub>2</sub> e																
	mass GHG																
	CO <sub>2</sub> e																
<b>Total</b>	mass GHG	73330.1	0.14	452.6												73782.8	
	CO <sub>2</sub> e	73330.1	41.2	11313.8													84685.1

<sup>1</sup> GWP (Global Warming Potential): Applicants must use the most current GWPs codified in Table A-1 of 40 CFR part 98. GWPs are subject to change, therefore, applicants need to check 40 CFR 98 to confirm GWP values.

<sup>2</sup> For HFCs or PFCs describe the specific HFC or PFC compound and use a separate column for each individual compound.

<sup>3</sup> For each new compound, enter the appropriate GWP for each HFC or PFC compound from Table A-1 in 40 CFR 98.

<sup>4</sup> Green house gas emissions on a mass basis is the ton per year green house gas emission before adjustment with its GWP.

<sup>5</sup> CO<sub>2</sub>e means Carbon Dioxide Equivalent and is calculated by multiplying the TPY mass emissions of the green house gas by its GWP.

# Section 3

## Application Summary

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The **Application Summary** shall include a brief description of the facility and its process, the type of permit application, the applicable regulation (i.e. 20.2.72.200.A.X, or 20.2.73 NMAC) under which the application is being submitted, and any air quality permit numbers associated with this site. If this facility is to be collocated with another facility, provide details of the other facility including permit number(s). In case of a revision or modification to a facility, provide the lowest level regulatory citation (i.e. 20.2.72.219.B.1.d NMAC) under which the revision or modification is being requested. Also describe the proposed changes from the original permit, how the proposed modification will affect the facility's operations and emissions, de-bottlenecking impacts, and changes to the facility's major/minor status (both PSD & Title V).

The **Process Summary** shall include a brief description of the facility and its processes.

**Startup, Shutdown, and Maintenance (SSM) routine or predictable emissions:** Provide an overview of how SSM emissions are accounted for in this application. Refer to "Guidance for Submittal of Startup, Shutdown, Maintenance Emissions in Permit Applications ([http://www.env.nm.gov/aqb/permit/app\\_form.html](http://www.env.nm.gov/aqb/permit/app_form.html)) for more detailed instructions on SSM emissions.

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This application is being submitted for the renewal of Operating Permit P139-R3 for the Bluewater Compressor Station. The facility is owned and operated by El Paso Natural Gas Company, L.L.C. (EPNG), a Kinder Morgan company. This submittal is pursuant to 20.2.70.300.B.2 NMAC, which requires a Title V renewal application be submitted at least twelve months prior to expiration of the current permit. Title V Permit P139-R3 expires on December 16, 2020.

Bluewater Compressor Station is currently permitted under Operating Permit P139-R3 and NSR Permit 3004-M1.

The facility compresses natural gas for transportation purposes. Equipment at this facility includes three Solar natural gas combustion turbines. These turbines were identified in the NSR permit as T-001, T-002, and T-003 and are currently identified in the operating permit as B-01, B-02, and B-03. In addition, the facility has an auxiliary reciprocating engine for the emergency power generation (AUX-B-01).

Additional emissions at this facility result from facility-wide fugitives (unit FUG) and startup, shutdown, and routine maintenance (unit SSM). Insignificant activities include three lube oil storage tanks (TK-001 to TK-003) and one used lube oil tank (TK-004).

EPNG would also like to request changes to specific Title V permit conditions in an attempt toward improving or streamlining the overall efficiency of these processes. The requested changes are listed below:

1. **Remove the 30-day notification requirement for periodic testing events for state-only required testing.** EPNG requests removal of the 30-day notification requirement for state-only required periodic emission tests. If there are any federal testing requirements which specifically require a notice for an initial performance or periodic test, those federal requirements remain intact and unaffected by this proposed change.

EPNG understands and supports the AQB's ability to observe these events; however, it has been EPNG's experience that, in the last 10-years or so, the NMED AQB inspectors have only observed a few periodic testing events. Should the AQB have an interest in observing a test, it can request the permittee's testing schedule per Condition B108G

*G. When requested by the Department, the permittee shall provide schedules of testing and monitoring activities. Compliance tests from previous NSR and Title V permits may be re-imposed if it is deemed necessary by the Department to determine whether the source is in compliance with applicable regulations or permit conditions (underlined emphasis added).*

The additional notification requirement does not appear to provide any additional information for the AQB to determine compliance. As such, EPNG is proposing the following language to clarify that this requirement at Condition B111 is only for federal performance or periodic testing rather than state only periodic testing requirements:

*D. Test Procedures:*

(1) *The permittee shall notify the Department's Program Manager, Compliance and Enforcement Section at least thirty (30) days before the test to afford a representative of the Department an opportunity to be present at the test. ~~as required by 40CFR 60.8(d)~~ for performance tests or any other periodic test requiring a notice under a federal requirement.*

**2. Allow EPA Alternative Method 082 (opacity camera method) as an alternative to EPA Method 9.** EPA

Alternative Method 082 (ALT-082) is a proven method that is accurate, easy to use, and more efficient than Method 9 for measuring opacity. ALT-082 was approved by EPA as an alternative to Method 9 in the February 15, 2012 Federal Register for sources subject to opacity limitations under 40 CFR Parts 60, 61, and 63.

ALT-082 has also been accepted in other states such as Arizona in lieu of EPA Method 9. The method has multiple advantages over Method 9 including:

- More accurate and repeatable results
- Auditable and verifiable results
- Lower training time and costs for both the agency and the company

Allowing the use of ALT-082 also decreases overall emissions by eliminating the need to have a Method 9 certified reader travel to a site to perform the readings.

Attachment "Section 3 -2" includes:

- Suggested language for Condition A111 A that adds ALT-082 as an alternative to Method 9
- An example of a recent opacity observation report from Virtual Technology L. L. C. performed at an EPNG facility in Arizona.

**3. Provide three business days to provide records whether they are requested for an onsite or offsite inspection.**

Lastly, we request the addition of following language to clarify that records requests conducted via email also come under the requirements of Condition B112.

***B112 Compliance***

A. *The Department shall be given the right to enter the facility at all reasonable times to verify the terms and conditions of this permit. Required records shall be organized by date and subject matter and shall at all times be readily available for inspection. The permittee, upon verbal or written request from an authorized representative of the Department who appears at the facility, shall immediately produce for inspection or copying any records required to be maintained at the facility. Upon written or email request at other times, the permittee shall deliver to the Department paper or electronic copies of any and all required records maintained on site or at an off-site location. Requested records shall be copied and delivered at the permittee's expense within three business days from receipt of request unless the Department allows additional time. Required records may include records required by permit and other information necessary to demonstrate compliance with terms and conditions of this permit. (NMSA 1978, Section 74-2-13)*

1. Recent records requests for Full Compliance Evaluations (FCE) have specified a two-business-day turnaround on documents, some of which were in addition to records required by the permit (e.g., photo logs, questionnaires). EPNG wishes to clarify that the timeline of 3 business days applies to such a request. Allowing responses in three business days still gets the information to NMED in a timely manner while allowing the necessary time to gather documents that may be offsite..

**Facility: 20.2.61 NMAC Opacity**

## A. 20.2.61 NMAC Opacity Requirements (Units A-1, A-2, and A-3)

**Requirement:** Visible emissions from all stationary combustion emission stacks shall not equal or exceed an opacity of 20 percent in accordance with the requirements at 20.2.61.109 NMAC.

**Monitoring:**

- (1) Use of natural gas fuel constitutes compliance with 20.2.61 NMAC unless opacity equals or exceeds 20% averaged over a 10-minute period. When any visible emissions are observed during operation other than during startup mode, opacity shall be measured over a 10-minute period, in accordance with the procedures at 40 CFR 60, Appendix A, Reference Method 9 (EPA Method 9) as required by 20.2.61.114 NMAC, or the operator will be allowed to shut down the equipment to perform maintenance/repair to eliminate the visible emissions. Following completion of equipment maintenance/repair, the operator shall conduct visible emission observations following startup in accordance with the following procedures:
- (a) Visible emissions observations shall be conducted over a 10-minute period during operation after completion of startup mode in accordance with the procedures at 40 CFR 60, Appendix A, Reference Method 22 (EPA Method 22). If no visible emissions are observed, no further action is required.
  - (b) If any visible emissions are observed during completion of the EPA Method 22 observation, subsequent opacity observations shall be conducted over a 10-minute period, in accordance with the procedures at EPA Method 9 or EPA Alternative Method 082 as required by 20.2.61.114 NMAC.

For the purposes of this condition, *Startup mode* is defined as the startup period that is described in the facility's startup plan.

**Recordkeeping:**

- (1) If any visible emissions observations were conducted, the permittee shall keep records in accordance with the requirements of Section B109 and as follows:
- (a) For any visible emissions observations conducted in accordance with EPA Method 22, record the information on the form referenced in EPA Method 22, Section 11.2.
  - (b) For any opacity observations conducted in accordance with the requirements of EPA Method 9 or EPA Alternative Method 082, record the information on the form referenced in EPA Method 9 or EPA Alternative Method 082, Sections 2.2 and 2.4.

**Reporting:** The permittee shall report in accordance with Section B110.

**VISIBLE EMISSION OBSERVATION FORM**

Form Number					Page	of
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Method Used Total Average
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Continued on VEO Form Number					
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Equipment Owner Start Weiwen Daly
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Observation Date 8/28/2019	Time Zone MST	Start Time 09:46:18	End Time 09:46:18
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Facility Name Williams Compressor Station GE Turbine
---

EO Street Address 5151 E Broadway Blvd., Ste. 1680
---

EO City Tucson	EO State AZ	EO Zip 85711
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	Opacity	Comments
1		
2		
3		Avg Opacity = 0
4		
5		
6		
7		
8		
9		
10		
11		
12		
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29		
30		
31		
32		

Process N/A	Unit N/A	Operating Mode N/A
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Control Equipment N/A	Operating Mode N/A
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Describe Emission Point Stacks Exit
--

Height of Emiss. Pt Start 71.65 End Same	Height of Emiss. Pt. Rel. to Observer Start 67.65 End Same
---	---

Distance to Emiss. Pt Start 198.84 End Same	Direction to Emiss. Pt (Degrees) Start 280.11 End Same
--	---

Vertical Angle to Obs. Pt. Start 16.5 End Same	Direction to Obs. Pt. Start 279.33 End Same
---	--

Distance and Direction to Observation Point from Emission Point Start 2.75 / 180 End Same
--

Describe Emissions Start Fanning End Same
--

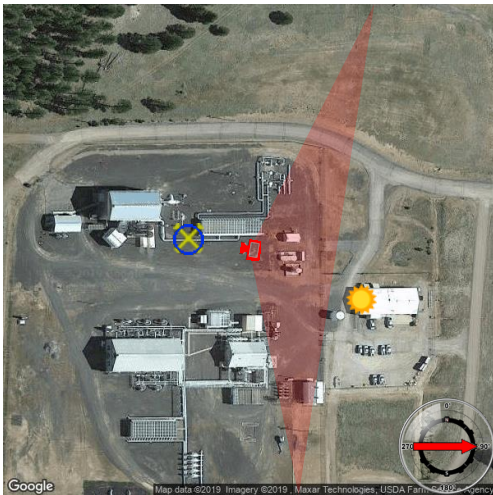
Emission Color Start White End Same	Water Droplet Plume Attached: ( X ) Detached: ( ) N/A: ( )
--	---

Describe Plume Background Start sky End Same
---

Background Color Start Blue End Same	Sky Conditions Start Clear End Same
---	--

Wind Speed Start 11 End Same	Wind Direction Start 260 End Same
---------------------------------	--------------------------------------

Ambient Temp. Start 75 End Same	Wet Bulb Temp. Start 48 End Same	RH Percent Start 38 End Same
------------------------------------	-------------------------------------	---------------------------------



Longitude 112.03.36.279.W	Latitude 035.18.20.246.E	Declination
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Notes Unit IS RUNNING
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Observers Name (Print) David Gill
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Observers Signature David Gill	Date 8/28/2019
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Organization Kinder Morgan
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Certified By Weiwen Daly	Date 8/28/2019
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**Source**

Name: Williams Compressor Station GE Turbine C-1  
Address: 3601 N. Buggy Wheel Road  
City: Williams  
State: AZ  
Zip: 86046  
Phone: 928-522-2023  
Local ID:

**Regulatory**

Permit ID: 60997  
Condition: Attachment B I.A.3.1  
Regulatory Reference: AAC R18-2-306.A.3.c

**Process**

Process: N/A  
Unit: N/A  
Operating Mode: N/A

**Complaint**

Name:  
Address:  
City:  
State:  
Zip:

**Equipment**

Name: N/A

**Type of Inspection**

Type of Inspection: Surveillance

**Sun**

Altitude: 45.1  
Azimuth: 114.1  
Data Source: Calculated


**Map Information**

Map Type: Google  
Map Width: 1004

**Analysis**

Averaging Type: Automatic  
Method: Total Average  
Number of Images: 1  
Rolling High Count: All  
Seconds Between Images: N/A  
Who Created: DOCS II  
Creation Date: 8/28/2019

Analysis Name: Shawn Dolan  
Affiliation: Virtual Technology LLC 05  
Comments:

Image	Opacity	Coordinates	Date Taken	Camera Information																
 IMG_0028.JPG		<p><b>Foreground Coordinates</b></p> <table border="1" data-bbox="488 165 762 241"> <tr> <td>T</td> <td>L</td> <td>B</td> <td>R</td> </tr> <tr> <td>1244</td> <td>1878</td> <td>1313</td> <td>1939</td> </tr> </table> <p><b>Background Coordinates</b></p> <table border="1" data-bbox="488 277 762 353"> <tr> <td>T</td> <td>L</td> <td>B</td> <td>R</td> </tr> <tr> <td>1319</td> <td>2036</td> <td>1388</td> <td>2097</td> </tr> </table>	T	L	B	R	1244	1878	1313	1939	T	L	B	R	1319	2036	1388	2097	<p><b>Date Taken:</b> 2019-08-28 09:46:18.000</p> <p><b>Camera Mfg/Model:</b> Canon/Canon PowerShot G11</p> <p><b>Temperature:</b> 75      <b>Wind Speed/Dir:</b> 11 W</p> <p><b>Rel Humidity:</b> 38      <b>Wet Bulb Temp:</b> 48</p>	
T	L	B	R																	
1244	1878	1313	1939																	
T	L	B	R																	
1319	2036	1388	2097																	

# Section 4

## Process Flow Sheet

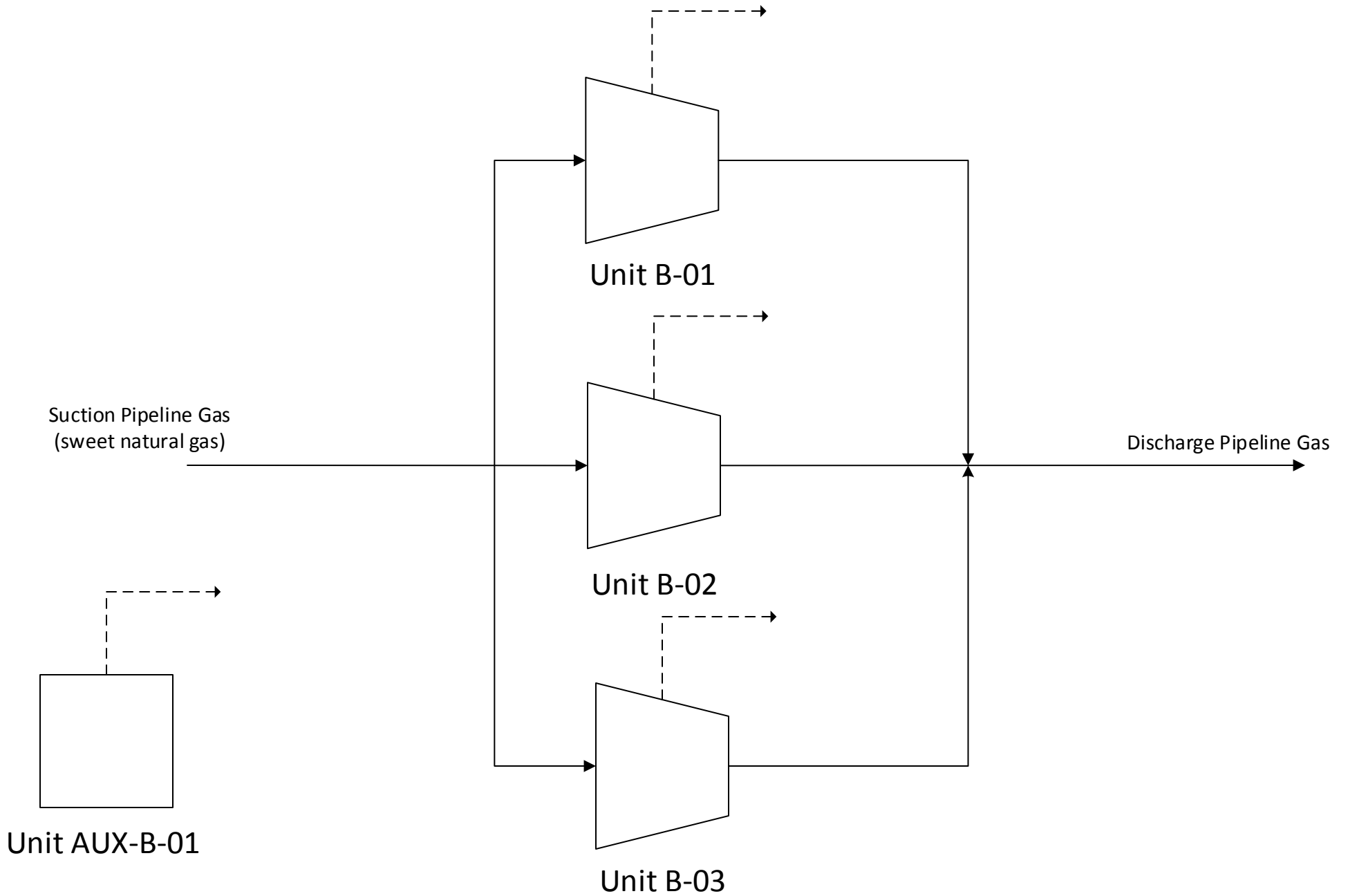
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A **process flow sheet** and/or block diagram indicating the individual equipment, all emission points and types of control applied to those points. The unit numbering system should be consistent throughout this application.

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A process flow sheet is attached.





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**EPNG Bluewater Compressor Station  
Process Flow Diagram**

# Section 5

## Plot Plan Drawn To Scale

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A **plot plan drawn to scale** showing emissions points, roads, structures, tanks, and fences of property owned, leased, or under direct control of the applicant. This plot plan must clearly designate the restricted area as defined in UA1, Section 1-D.12. The unit numbering system should be consistent throughout this application.

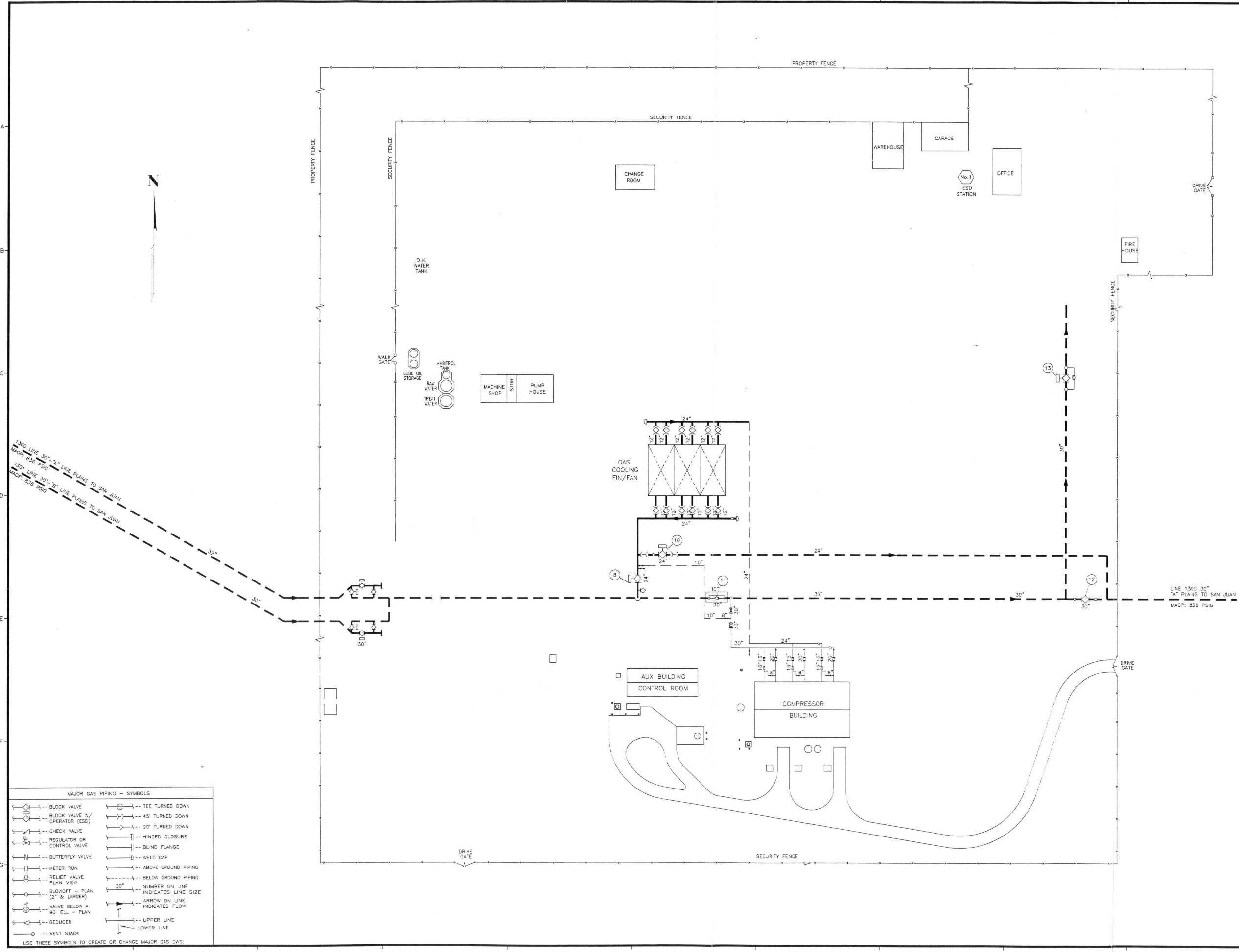
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A plot plan is provided.

REFERENCE DRAWINGS  
 CMP-BW-3 M.A.G.P. PIPING PLAN  
 CMP-BW-4 FIRE CONTROL EQUIPMENT PLAN

GENERAL NOTES

- ESD VALVE AND SWITCH LOCATION LEGEND
- 7 4" SUCTION VENT VALVE
  - 8 24" DISCHARGE BLOCK VALVE (WEST FLOW)
  - 9 4" DISCHARGE VENT VALVE
  - 10 24" DISCHARGE BLOCK VALVE (EAST FLOW)
  - 11 30" MAINLINE BLOCK VALVE (WEST FLOW)
  - 12 30" MAINLINE BLOCK VALVE (EAST FLOW)
  - 13 30" SUCTION BLOCK VALVE (EAST/WEST FLOW)
  - OPERATE AUTOMATICALLY ON ESD.



MAJOR GAS PIPING - SYMBOLS

Block Valve	Tee Turned Down
Block Valve w/ Operator (ESD)	45° Turned Down
Check Valve	90° Turned Down
Regulator or Control Valve	Hinged Closure
Butterfly Valve	Blind Flange
Meter Run	Weld Cap
Relief Valve	Above Ground Piping
Plan View	Below Ground Piping
Blowoff - Plan (2" & Larger)	20" Number on Line Indicates Line Size
Valve Below a 90° Ell - Plan	Arrow on Line Indicates Flow
Reducer	Upper Line
Vent Stack	Lower Line

NO.	DATE	BY	DESCRIPTION	PROJ. D.	APPR.
10	4/9/07	BLS	UPDATE FOR "B" PLANT	086952	MVL
9	12-24-06	DLS	AS-BUILT 2006 PIP	106257/106886	ROK
8	10-25-05	MEN	2006 PIP LINE 1300/1301	106957/106886	ROK
7	11-14-03	REE	COMPLIANCE UPDATE	O&M	-
6	11-21-02	EPG	MSC REVISIONS PER STEVE LOPEZ	-	-
5	24-16-99	FJ3	REMOVED VALVES 11 AND 12 FROM THE SYSTEM	-	-



COMPLIANCE LOCATION PLAN  
 ESD VALVE AND SWITCH  
 BLUEWATER COMPRESSOR STATION

Division:	ALBUQUERQUE	Op. Area:	GALLUP
State:	NEW MEXICO	Co./Par.:	MCKINLEY
Section:	33	Township:	14N Range: 13W
Drafter:	LG	Date:	03-06-90 Project: D: "106886" Type: ACAD
Chk'd:	-	Date:	- Scale: NO SCALE
Appr:	LRP	Date:	03-10-90 Filename: CMP-BW-2.DWG
CMP-BW2			Sheet: Rev. 1 of 1

# Section 6

## All Calculations

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**Show all calculations** used to determine both the hourly and annual controlled and uncontrolled emission rates. All calculations shall be performed keeping a minimum of three significant figures. Document the source of each emission factor used (if an emission rate is carried forward and not revised, then a statement to that effect is required). If identical units are being permitted and will be subject to the same operating conditions, submit calculations for only one unit and a note specifying what other units to which the calculations apply. All formulas and calculations used to calculate emissions must be submitted. The "Calculations" tab in the UA2 has been provided to allow calculations to be linked to the emissions tables. Add additional "Calc" tabs as needed. If the UA2 or other spread sheets are used, all calculation spread sheet(s) shall be submitted electronically in Microsoft Excel compatible format so that formulas and input values can be checked. Format all spread sheets and calculations such that the reviewer can follow the logic and verify the input values. Define all variables. If calculation spread sheets are not used, provide the original formulas with defined variables. Additionally, provide subsequent formulas showing the input values for each variable in the formula. All calculations, including those calculations are imbedded in the Calc tab of the UA2 portion of the application, the printed Calc tab(s), should be submitted under this section.

**Tank Flashing Calculations:** The information provided to the AQB shall include a discussion of the method used to estimate tank-flashing emissions, relative thresholds (i.e., NOI, permit, or major source (NSPS, PSD or Title V)), accuracy of the model, the input and output from simulation models and software, all calculations, documentation of any assumptions used, descriptions of sampling methods and conditions, copies of any lab sample analysis. If Hysis is used, all relevant input parameters shall be reported, including separator pressure, gas throughput, and all other relevant parameters necessary for flashing calculation.

**SSM Calculations:** It is the applicant's responsibility to provide an estimate of SSM emissions or to provide justification for not doing so. In this Section, provide emissions calculations for Startup, Shutdown, and Routine Maintenance (SSM) emissions listed in the Section 2 SSM and/or Section 22 GHG Tables and the rationale for why the others are reported as zero (or left blank in the SSM/GHG Tables). Refer to "Guidance for Submittal of Startup, Shutdown, Maintenance Emissions in Permit Applications ([http://www.env.nm.gov/aqb/permit/app\\_form.html](http://www.env.nm.gov/aqb/permit/app_form.html)) for more detailed instructions on calculating SSM emissions. If SSM emissions are greater than those reported in the Section 2, Requested Allowables Table, modeling may be required to ensure compliance with the standards whether the application is NSR or Title V. Refer to the Modeling Section of this application for more guidance on modeling requirements.

**Glycol Dehydrator Calculations:** The information provided to the AQB shall include the manufacturer's maximum design recirculation rate for the glycol pump. If GRI-Glycalc is used, the full input summary report shall be included as well as a copy of the gas analysis that was used.

**Road Calculations:** Calculate fugitive particulate emissions and enter haul road fugitives in Tables 2-A, 2-D and 2-E for:

1. If you transport raw material, process material and/or product into or out of or within the facility and have PER emissions greater than 0.5 tpy.
2. If you transport raw material, process material and/or product into or out of the facility more frequently than one round trip per day.

**Significant Figures:**

**A.** All emissions standards are deemed to have at least two significant figures, but not more than three significant figures.

**B.** At least 5 significant figures shall be retained in all intermediate calculations.

**C.** In calculating emissions to determine compliance with an emission standard, the following rounding off procedures shall be used:

- (1) If the first digit to be discarded is less than the number 5, the last digit retained shall not be changed;
- (2) If the first digit discarded is greater than the number 5, or if it is the number 5 followed by at least one digit other than the number zero, the last figure retained shall be increased by one unit; **and**
- (3) If the first digit discarded is exactly the number 5, followed only by zeros, the last digit retained shall be rounded upward if it is an odd number, but no adjustment shall be made if it is an even number.
- (4) The final result of the calculation shall be expressed in the units of the standard.

**Control Devices:** In accordance with 20.2.72.203.A(3) and (8) NMAC, 20.2.70.300.D(5)(b) and (e) NMAC, and 20.2.73.200.B(7) NMAC, the permittee shall report all control devices and list each pollutant controlled by the control device

regardless if the applicant takes credit for the reduction in emissions. The applicant can indicate in this section of the application if they chose to not take credit for the reduction in emission rates. For notices of intent submitted under 20.2.73 NMAC, only uncontrolled emission rates can be considered to determine applicability unless the state or federal Acts require the control. This information is necessary to determine if federally enforceable conditions are necessary for the control device, and/or if the control device produces its own regulated pollutants or increases emission rates of other pollutants.

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Authorized emissions units at the facility are as follows:

- Three Natural Gas Turbines, providing power for compressors (Units B-01, B-02, and B-03)
- One natural gas reciprocating engine, providing standby electric power (Unit AUX-B-01)
- Facility-wide fugitive emissions, (Unit FUG)
- Startup, shutdown and maintenance emissions (Unit SSM)
- Exempt tanks (Units T-001, T-003 and T-004)

The basis for calculating the emissions for these units is discussed here.

#### **Turbines (B-01, B-02 and B-03)**

The emission rates for NO<sub>x</sub>, CO and VOC were calculated using testing data. The SO<sub>2</sub> emission rate was calculated using a maximum sulfur content in the fuel of 2.5 grains/100scf. HAP emissions were calculated using GRI-HAPCalc 3.01. As a conservative measure, the ISO horsepower was used for these calculations instead of the site-rated horsepower. PM emissions were calculated using AP-42 Table 3.1-2a emission factors.

#### **Natural Gas Reciprocating Engine (AUX-B-01)**

The emission rates for NO<sub>x</sub>, CO, and VOC were calculated using manufacturer data. The SO<sub>2</sub> emission rate was calculated using a maximum sulfur content in the fuel of 2.5 grains/100scf. PM emissions were calculated using AP-42 Table 3.2-2 emission factors.

#### **Fugitives (FUG)**

The fugitive VOC and HAP emissions for the facility were calculated GRI-HAPCalc.

#### **Startup, Shutdown and Maintenance (SSM)**

VOC and H<sub>2</sub>S emissions from startup, shutdown, and maintenance were calculated using the predicted number of SSM events, the volume of gas blown down per event, and a nominal gas constituent weight percentages. HAP emissions were calculated using the same HAP/VOC ratio from the fugitive emission calculations.

# Section 6.a

## Green House Gas Emissions

(Submitting under 20.2.70, 20.2.72 20.2.74 NMAC)

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**Title V (20.2.70 NMAC), Minor NSR (20.2.72 NMAC), and PSD (20.2.74 NMAC)** applicants must estimate and report greenhouse gas (GHG) emissions to verify the emission rates reported in the public notice, determine applicability to 40 CFR 60 Subparts, and to evaluate Prevention of Significant Deterioration (PSD) applicability. GHG emissions that are subject to air permit regulations consist of the sum of an aggregate group of these six greenhouse gases: carbon dioxide (CO<sub>2</sub>), nitrous oxide (N<sub>2</sub>O), methane (CH<sub>4</sub>), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF<sub>6</sub>).

### Calculating GHG Emissions:

1. Calculate the ton per year (tpy) GHG mass emissions and GHG CO<sub>2</sub>e emissions from your facility.
2. GHG mass emissions are the sum of the total annual tons of greenhouse gases without adjusting with the global warming potentials (GWPs). GHG CO<sub>2</sub>e emissions are the sum of the mass emissions of each individual GHG multiplied by its GWP found in Table A-1 in 40 CFR 98 Mandatory Greenhouse Gas Reporting.
3. Emissions from routine or predictable start up, shut down, and maintenance must be included.
4. Report GHG mass and GHG CO<sub>2</sub>e emissions in Table 2-P of this application. Emissions are reported in **short** tons per year and represent each emission unit's Potential to Emit (PTE).
5. All Title V major sources, PSD major sources, and all power plants, whether major or not, must calculate and report GHG mass and CO<sub>2</sub>e emissions for each unit in Table 2-P.
6. For minor source facilities that are not power plants, are not Title V, and are not PSD there are three options for reporting GHGs in Table 2-P: 1) report GHGs for each individual piece of equipment; 2) report all GHGs from a group of unit types, for example report all combustion source GHGs as a single unit and all venting GHGs as a second separate unit; 3) or check the following  By checking this box, the applicant acknowledges the total CO<sub>2</sub>e emissions are less than 75,000 tons per year.

### Sources for Calculating GHG Emissions:

- Manufacturer's Data
- AP-42 Compilation of Air Pollutant Emission Factors at <http://www.epa.gov/ttn/chief/ap42/index.html>
- EPA's Internet emission factor database WebFIRE at <http://cfpub.epa.gov/webfire/>
- 40 CFR 98 Mandatory Green House Gas Reporting except that tons should be reported in short tons rather than in metric tons for the purpose of PSD applicability.
- API Compendium of Greenhouse Gas Emissions Methodologies for the Oil and Natural Gas Industry. August 2009 or most recent version.
- Sources listed on EPA's NSR Resources for Estimating GHG Emissions at <http://www.epa.gov/nsr/clean-air-act-permitting-greenhouse-gases>:

### Global Warming Potentials (GWP):

Applicants must use the Global Warming Potentials codified in Table A-1 of the most recent version of 40 CFR 98 Mandatory Greenhouse Gas Reporting. The GWP for a particular GHG is the ratio of heat trapped by one unit mass of the GHG to that of one unit mass of CO<sub>2</sub> over a specified time period.

"Greenhouse gas" for the purpose of air permit regulations is defined as the aggregate group of the following six gases: carbon dioxide, nitrous oxide, methane, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride. **(20.2.70.7 NMAC, 20.2.74.7 NMAC)**. You may also find GHGs defined in 40 CFR 86.1818-12(a).

### Metric to Short Ton Conversion:

Short tons for GHGs and other regulated pollutants are the standard unit of measure for PSD and title V permitting programs. 40 CFR 98 Mandatory Greenhouse Reporting requires metric tons.

1 metric ton = 1.10231 short tons (per Table A-2 to Subpart A of Part 98 – Units of Measure Conversions)

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Greenhouse Gas calculations are included in Table 2-P of the UA2.

## Emission Summary

### Emission Summary

Unit	NO <sub>x</sub>		CO		VOC		SO <sub>2</sub>		PM		H <sub>2</sub> S		Total HAP		Acetaldehyde		Formaldehyde	
	lb/hr	tpy	lb/hr	tpy	lb/hr	tpy	lb/hr	tpy	lb/hr	tpy	lb/hr	tpy	lb/hr	tpy	lb/hr	tpy	lb/hr	tpy
B-01	27.1	118.6	5.8	25.2	0.25	1.1	0.38	1.7	0.31	1.4	-	-	0.64	2.8	0.26	1.2	0.26	1.1
B-02	27.1	118.6	5.8	25.2	0.25	1.1	0.38	1.7	0.31	1.4	-	-	0.64	2.8	0.26	1.2	0.26	1.1
B-03	27.1	118.6	5.8	25.2	0.25	1.1	0.38	1.7	0.31	1.4	-	-	0.64	2.8	0.26	1.2	0.26	1.1
FUG	-	-	-	-	*	1.2	-	-	-	-	-	-	*	0.012	-	-	-	-
SSM	-	-	-	-	*	10.0	-	-	-	-	0.20	0.0039	*	0.069	-	-	-	-
AUX-B-01	2.6	0.65	2.2	0.55	0.58	0.15	0.036	0.0091	0.046	0.011	-	-	0.32	0.079	0.039	0.0096	0.25	0.061
<b>Totals</b>	<b>83.8</b>	<b>356.3</b>	<b>19.5</b>	<b>76.1</b>	<b>1.3</b>	<b>14.6</b>	<b>1.2</b>	<b>5.0</b>	<b>0.99</b>	<b>4.1</b>	<b>0.20</b>	<b>0.0039</b>	<b>2.2</b>	<b>8.5</b>	<b>0.83</b>	<b>3.5</b>	<b>1.0</b>	<b>3.5</b>

Notes

"\*" Denotes an hourly value is not appropriate for this emission type.

"-" Denotes emissions of this pollutant are not expected.

## Turbine Emissions

Unit: B-01, B-02 and B-03. Note: These same sources were identified in the NSR Permit 3004-R2 as: T-001, T-002 and T-003.  
 Description: Solar Natural Gas Combustion Turbines, Model 60-7302

ISO Rating:	6931	hp	For informational purposes only; emissions are calculated using the site rating
Site Rating:	5793	hp	Based on manufacturer's data
Fuel Heating Value:	904	Btu/scf	
Fuel Consumption:	461	MMscf/yr	
Heat Input:	47.61	MMBtu/hr	Heat input (Btu/hp-hr) * Site rating (hp) * 1MMBtu/10 <sup>6</sup> Btu
Heat Input:	8219.0	Btu/hp-hr	Manufacturer data

**Emission Calculations**

NO <sub>x</sub>	CO	VOC <sup>1</sup>	SO <sub>2</sub> <sup>2</sup>	PM <sup>3</sup>	Acetaldehyde <sup>4</sup>	Formaldehyde <sup>4</sup>	Total HAPs <sup>4</sup>	
27.07	5.75	0.25						lb/hr
			2.5					grains S/100 scf
<b>27.1</b>	<b>5.8</b>	<b>0.25</b>	<b>0.38</b>	<b>0.31</b>	<b>0.26</b>	<b>0.26</b>	<b>0.64</b>	<b>lb/hr</b>
<b>118.6</b>	<b>25.2</b>	<b>1.1</b>	<b>1.7</b>	<b>1.4</b>	<b>1.2</b>	<b>1.1</b>	<b>2.8</b>	<b>tons/yr</b>

<sup>1</sup> VOCs assumed 15% of UHC.

<sup>2</sup> SO<sub>2</sub> emission rate based on sulfur content of 2.5gr S/100scf

<sup>3</sup> PM=PM10=PM2.5; AP-42 Table 3.1-2a

<sup>4</sup> HAP tpy emission rate from GRI-HAPCalc 3.01.



# Fugitive Emissions

Unit: FUG  
 Description: Facility-Wide Fugitive Emissions

<b>VOCs</b>	<b>Benzene</b>	<b>Toluene</b>	<b>Ethylbenzene</b>	<b>Xylene</b>	<b>Total HAPs</b>	
0.5561	0.0037	0.0062	0.0003	0.0016	0.0118	tons/yr, GRI-HAPCalc 3.01
110%	0%	0%	0%	0%	0%	Safety Factor
<b>1.2</b>	<b>0.0037</b>	<b>0.0062</b>	<b>0.0003</b>	<b>0.0016</b>	<b>0.0118</b>	<b>tons/yr (w/SF)</b>

Unit: SSM/M1  
 Description: Facility-wide SSM emissions

**Gas Analysis (Typical)**

VOC weight %:	2.00%	Nominal
CO2 weight %:	2.00%	Nominal
CH4 weight %:	90.00%	Nominal
Gas molecular weight:	17.00 lb/lb-mol	Nominal
Gas molar volume:	378.61 scf/lb-mol	Constant
Gas density:	0.0449 lb/scf	Gas MW / Molar volume

**Turbine Blowdown Venting (BD-Unit)**

**SSM Emission Rates, Per Event**

Event Description:	Planned Maintenance and Normal Shutdown	
Volume per event:	26 Mscf/event	Estimated (varies)
VOC Emissions:	23.3 lb/event	lb/scf * scf/event * VOC wt %

**SSM Emission Rates, Annual**

Annual volume:	10312.64 Mscf/yr	Expected blowdown volume
VOC Emissions:	4.6 tons/yr	lb/scf * scf/event * VOC wt % * ton/2000 lb

**Turbine Starting Gas (BD-Unit)**

**SSM Emission Rates, Per Event**

Event Description:	Normal Startup	
Volume per event:	150 Mscf/event	Estimated (varies)
VOC Emissions:	135 lb/event	lb/scf * scf/event * VOC wt %

**SSM Emission Rates, Annual**

Annual volume:	10819.5 Mscf/yr	Expected blowdown volume
VOC Emissions:	4.9 tons/yr	lb/scf * scf/event * VOC wt %

**Facility Blowdown Venting (BD-ESD)**

**SSM Emission Rates, Per Event**

Event Description:	Station ESD	
Volume per event:	558 Mscf/event	Estimated (varies)
VOC Emissions:	501 lb/event	lb/scf * scf/event * VOC wt %

**SSM Emission Rates, Annual**

Annual volume:	558 Mscf/yr	Assumes 1 event per year
VOC Emissions:	0.251 tons/yr	lb/event * event/year * ton/2000lb

Facility VOC Total: 9.739 tpy

**Facility Blowdown Total**

VOC Emissions:	10.0 tons/yr	
HAP emissions:	0.069 tons/yr	Assumes same HAP/VOC ratio as fugitives
CO2 Emissions:	10.0 tons/yr	VOC Emissions / %VOC * %CO2
CH4 Emissions:	450.0 tons/yr	VOC Emissions / %VOC * %CH4
CO2e Emissions:	11260.0 tons/yr	

**Facility-Wide SSM/M1 Total**

<b>VOC</b>	<b>HAP</b>	<b>CO2</b>	<b>CH4</b>	<b>CO2e</b>	
10.0	0.069	10.0	450.0	11260.0	tons/yr

Unit: SSM/M1  
 Description: Facility-wide startup, shutdown, maintenance and malfunction emissions

**Gas Analysis (Typical)**

---

$H_2S$	0.25	gr $H_2S$	
	100	scf	Nominal (Max amount allowed in pipeline quality natural gas)

**Turbine Blowdown Venting (BD-Unit)**

**SSM Emission Rates, Per Event**

Event Description: **Planned Maintenance and Normal Shutdown**  
 Volume per event: 26 Mscf/event Estimated (varies)  
 $H_2S$  Emissions: 0.009 lb/event gr/scf \* scf/event \* 1lb/7000gr

**SSM Emission Rates, Annual**

Annual volume: 10312.64 Mscf/yr Expected blowdown volume  
 $H_2S$  Emissions: 0.0018 tons/yr gr/scf \* scf/event \* 1lb/7000gr \* ton/2000 lb

**Turbine Starting Gas (BD-Unit)**

**SSM Emission Rates, Per Event**

Event Description: **Normal Startup**  
 Volume per event: 150 Mscf/event Estimated (varies)  
 $H_2S$  Emissions: 0.054 lb/event gr/scf \* scf/event \* 1lb/7000gr

**SSM Emission Rates, Annual**

Annual volume: 10819.5 Mscf/yr Expected blowdown volume  
 $H_2S$  Emissions: 0.0019 tons/yr gr/scf \* scf/event \* 1lb/7000gr \* ton/2000 lb

**Facility Blowdown Venting (BD-ESD)**

**SSM Emission Rates, Per Event**

Event Description: **Station ESD**  
 Volume per event: 558 Mscf/event Estimated (varies)  
 $H_2S$  Emissions: 0.199 lb/event gr/scf \* scf/event \* 1lb/7000gr

**SSM Emission Rates, Annual**

Annual volume: 558 Mscf/yr Expected blowdown volume  
 $H_2S$  Emissions: 9.96E-05 tons/yr gr/scf \* scf/event \* 1lb/7000gr \* ton/2000 lb

**Facility  $H_2S$  Total:** 0.0039 tons/yr

**Facility Blowdown Total**

---

$H_2S$  Emissions: 0.0039 tons/yr

**Facility-Wide SSM/M Total**

---

**$H_2S$**   
 0.0039 tons/yr

**Waukesha H24GL - Unit AUX-B-01**

Emission Unit: AUX-B-01  
 Description: Natural Gas Compressor - 4SLB

<b>Manufacturer:</b>	Waukesha		
<b>Model:</b>	H-24 GL HCR		
<b>Serial No.:</b>	C-62002/1		
<b>Rated Speed:</b>	1800	RPM	Manufacturer
<b>Rated Horse Power:</b>	586	hp	Manufacturer
<b>Fuel Consumption:</b>	7850	Btu/hp-hr	Manufacturer
<b>Fuel Heating Value:</b>	904	Btu/scf	Nominal
<b>Heating Rate:</b>	4.6	MMBtu/hr	Calculated
<b>Fuel Usage</b>	0.0051	MMscf/hr	Calculated
	2.5	MMscf/yr	Calculated
<b>Operating Hours:</b>	500	hr/yr	

**Emission Rates**

NOx	CO	VOC <sup>1</sup>	SO <sub>2</sub> <sup>2</sup>	PM <sup>3</sup>	HCHO	Total HAPs <sup>4</sup>	
2.0	1.7	0.5		0.00999	0.19		g/hp-hr Manufacturer Data
			0.025				lb/MMBtu AP-42 Table 3.2-2, 40 CFR 98 Table C-2
2.6	2.2	0.58	0.036	0.046	0.25	0.32	gr S/scf
0.65	0.55	0.15	0.0091	0.011	0.061	0.079	lb/hr
							tpy

**Notes**

- <sup>1</sup> VOC emissions include VOC plus HCOH emissions.
- <sup>2</sup> SO<sub>2</sub> is calculated based on the default fuel sulfur content from AECT of 0.0025 grains total sulfur per scf.
- <sup>3</sup> It is assumed that TSP = PM<sub>10</sub> = PM<sub>2.5</sub>, PM emissions are derived from AP-42 emissions factors.
- <sup>4</sup> Total HAPs were calculated using AP-42 emissions factors for a 4-Stroke Lean Burn Engine and includes only those HAPs listed in the AECTool.

**GRI-HAPCalc® 3.01**  
**Fugitive Emissions Report**

<b>Facility ID:</b>	<b>EPNG BLUEWATER</b>	<b>Notes:</b>
<b>Operation Type:</b>	<b>COMPRESSOR STATION</b>	
<b>Facility Name:</b>	<b>BLUEWATER COMPRESSOR STATION</b>	
<b>User Name:</b>		
<b>Units of Measure:</b>	<b>U.S. STANDARD</b>	

*Note: Emissions less than 5.00E-09 tons (or tonnes) per year are considered insignificant and are treated as zero. These emissions are indicated on the report with a "0". Emissions between 5.00E-09 and 5.00E-05 tons (or tonnes) per year are represented on the report with "0.0000".*

**Fugitive Emissions**

**Calculation Method:** EPA Average Factors

**User Inputs**

<u>Component</u>	<u>Gas Service</u>	<u>Light Liquid Service</u>	<u>Heavy Liquid Service</u>
Connections:	737	0	0
Flanges	120	0	0
Open-Ended Lines:	14	0	0
Pumps:	0	0	0
Valves:	257	0	0
Others:	30	0	0

**Calculated Emissions** (ton/yr)

<u>Chemical Name</u>	<u>Emissions</u>
<b><u>HAPs</u></b>	
Benzene	0.0037
Toluene	0.0062
Ethylbenzene	0.0003
Xylenes(m,p,o)	0.0016
<b>Total</b>	0.0118

**Criteria Pollutants**

NMHC	1.2712
NMEHC	0.5561

**GRI-HAPCalc® 3.01**  
**Turbine Report**

<b>Facility ID:</b>	<b>EPNG BLUEWATER</b>	<b>Notes:</b>
<b>Operation Type:</b>	<b>COMPRESSOR STATION</b>	
<b>Facility Name:</b>	<b>BLUEWATER COMPRESSOR STATION</b>	
<b>User Name:</b>		
<b>Units of Measure:</b>	<b>U.S. STANDARD</b>	

*Note: Emissions less than 5.00E-09 tons (or tonnes) per year are considered insignificant and are treated as zero. These emissions are indicated on the report with a "0". Emissions between 5.00E-09 and 5.00E-05 tons (or tonnes) per year are represented on the report with "0.0000".*

**Turbine Unit**

Unit Name: B01 TO B03

Hours of Operation: 8,760 Yearly  
 Rate Power: 6931 hp  
 Fuel Type: NATURAL GAS  
 Emission Factor Set: FIELD > EPA > LITERATURE  
 Additional EF Set: -NONE-

**Calculated Emissions (ton/yr)**

<u>Chemical Name</u>	<u>Emissions</u>	<u>Emission Factor</u>	<u>Emission Factor Set</u>
<b>HAPs</b>			
PAHs	0.0006	0.00000970 g/bhp-hr	EPA
Formaldehyde	1.1325	0.01693680 g/bhp-hr	GRI Field
Acetaldehyde	1.1592	0.01733570 g/bhp-hr	GRI Field
1,3-Butadiene	0.0041	0.00006160 g/bhp-hr	GRI Field
Acrolein	0.0174	0.00026000 g/bhp-hr	GRI Field
Propional	0.0578	0.00086500 g/bhp-hr	GRI Field
Propylene Oxide	0.0085	0.00012730 g/bhp-hr	EPA
Benzene	0.0360	0.00053840 g/bhp-hr	GRI Field
Toluene	0.0275	0.00041100 g/bhp-hr	GRI Field
Ethylbenzene	0.0094	0.00014050 g/bhp-hr	EPA
Xylenes(m,p,o)	0.0832	0.00124410 g/bhp-hr	GRI Field
2,2,4-Trimethylpentane	0.1073	0.00160530 g/bhp-hr	GRI Field
n-Hexane	0.1007	0.00150580 g/bhp-hr	GRI Field
Phenol	0.0074	0.00011010 g/bhp-hr	GRI Field
Naphthalene	0.0005	0.00000760 g/bhp-hr	GRI Field
2-Methylnaphthalene	0.0001	0.00000130 g/bhp-hr	GRI Field
Biphenyl	0.0221	0.00033050 g/bhp-hr	GRI Field
Phenanthrene	0.0000	0.00000050 g/bhp-hr	GRI Field
Chrysene	0.0001	0.00000100 g/bhp-hr	GRI Field
Beryllium	0.0000	0.00000010 g/bhp-hr	GRI Field
Phosphorus	0.0044	0.00006520 g/bhp-hr	GRI Field
Chromium	0.0005	0.00000820 g/bhp-hr	GRI Field
Manganese	0.0012	0.00001750 g/bhp-hr	GRI Field
Nickel	0.0004	0.00000610 g/bhp-hr	GRI Field
Cobalt	0.0001	0.00000160 g/bhp-hr	GRI Field
Arsenic	0.0000	0.00000060 g/bhp-hr	GRI Field
Selenium	0.0000	0.00000030 g/bhp-hr	GRI Field

Cadmium	0.0000	0.00000020 g/bhp-hr	GRI Field
Mercury	0.0002	0.00000270 g/bhp-hr	GRI Field
Lead	0.0002	0.00000340 g/bhp-hr	GRI Field

**Total** 2.7814

**Criteria Pollutants**

PM	1.9373	0.02897200 g/bhp-hr	EPA
CO	140.9754	2.10828420 g/bhp-hr	GRI Field
NMHC	12.9641	0.19387800 g/bhp-hr	GRI Field
NMEHC	0.6164	0.00921840 g/bhp-hr	EPA
NOx	83.7288	1.25216290 g/bhp-hr	GRI Field
SO2	0.0687	0.00102720 g/bhp-hr	GRI Field

**Other Pollutants**

Methane	66.0109	0.98719230 g/bhp-hr	GRI Field
Acetylene	0.4791	0.00716540 g/bhp-hr	GRI Field
Ethylene	0.9331	0.01395450 g/bhp-hr	GRI Field
Ethane	10.0357	0.15008370 g/bhp-hr	GRI Field
Propane	1.0699	0.01600000 g/bhp-hr	GRI Field
Isobutane	0.3210	0.00480000 g/bhp-hr	GRI Field
Butane	0.3477	0.00520000 g/bhp-hr	GRI Field
Cyclopentane	0.1104	0.00165110 g/bhp-hr	GRI Field
Butyrald/Isobutyraldehyde	0.0896	0.00134000 g/bhp-hr	GRI Field
n-Pentane	5.4263	0.08115000 g/bhp-hr	GRI Field
Cyclohexane	0.4095	0.00612400 g/bhp-hr	GRI Field
Methylcyclohexane	0.5905	0.00883120 g/bhp-hr	GRI Field
n-Octane	0.2132	0.00318890 g/bhp-hr	GRI Field
1,3,5-Trimethylbenzene	0.2006	0.00300000 g/bhp-hr	GRI Field
n-Nonane	0.0356	0.00053260 g/bhp-hr	GRI Field
CO2	32,287.9783	482.86607780 g/bhp-hr	EPA
Vanadium	0.0000	0.00000070 g/bhp-hr	GRI Field
Copper	0.0014	0.00002050 g/bhp-hr	GRI Field
Molybdenum	0.0014	0.00002030 g/bhp-hr	GRI Field
Barium	0.0015	0.00002290 g/bhp-hr	GRI Field

# Section 7

## Information Used To Determine Emissions

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**Information Used to Determine Emissions shall include the following:**

- If manufacturer data are used, include specifications for emissions units and control equipment, including control efficiencies specifications and sufficient engineering data for verification of control equipment operation, including design drawings, test reports, and design parameters that affect normal operation.
  - If test data are used, include a copy of the complete test report. If the test data are for an emissions unit other than the one being permitted, the emission units must be identical. Test data may not be used if any difference in operating conditions of the unit being permitted and the unit represented in the test report significantly effect emission rates.
  - If the most current copy of AP-42 is used, reference the section and date located at the bottom of the page. Include a copy of the page containing the emissions factors, and clearly mark the factors used in the calculations.
  - If an older version of AP-42 is used, include a complete copy of the section.
  - If an EPA document or other material is referenced, include a complete copy.
  - Fuel specifications sheet.
  - If computer models are used to estimate emissions, include an input summary (if available) and a detailed report, and a disk containing the input file(s) used to run the model. For tank-flashing emissions, include a discussion of the method used to estimate tank-flashing emissions, relative thresholds (i.e., permit or major source (NSPS, PSD or Title V)), accuracy of the model, the input and output from simulation models and software, all calculations, documentation of any assumptions used, descriptions of sampling methods and conditions, copies of any lab sample analysis.
- 

The following items were used to calculate the emissions for this application:

- Turbines (B-01, B-02, B-03)
  - GRI-HAPCalc 3.01 Output
  - Manufacturer Data
  - AP-42 Table 3.1-2a
- Facility-wide fugitive emissions (FUG)
  - GRI-HAPCalc 3.01 Output
- Natural Gas Reciprocating Engine (AUX-B-01)
  - Manufacturer Data
  - AP-42 Table 3.2-2



# Solar Turbines

EPNG Bluewater

A Caterpillar Company

SOLAR TURBINES INCORPORATED  
ENGINE PERFORMANCE CODE REV. 3.25  
CUSTOMER: EPNG Bluewater  
JOB ID: OD3-434

DATE RUN: 9-Jan-04  
RUN BY: William L Richards

## NEW EQUIPMENT PREDICTED EMISSION PERFORMANCE DATA FOR POINT NUMBER 1

Fuel: CHOICE NATURAL GAS                      Customer: EPNG Bluewater  
Water Injection: NO                              Inquiry Number:  
Number of Engines Tested: 0  
Model: TAURUS 60-7300 CS/MD                  59F MATCH GAS  
Emissions Data: REV. 0.0

The following predicted emissions performance is based on the following specific single point: (see attached)

Hp= 5793, %Full Load= 100.0, Elev= 7150 ft, %RH= 60.0, Temperature= 0 F

NOX		CO		UHC		
NOM	MAX	NOM	MAX	NOM	MAX	
*	143.00	*	50.00	*	25.00	PPMvd at 15% O2
*	118.60	*	25.25	*	7.23	ton/yr
*	0.573	*	0.122	*	0.035	lbm/MMBtu (Fuel LHV)
*	6.27	*	1.33	*	0.38	lbm/(MW-hr)
						(gas turbine shaft pwr)
*	27.08	*	5.76	*	1.65	lbm/hr

\* NOMINAL EMISSIONS DATA UNAVAILABLE FOR THIS ENGINE  
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### IMPORTANT NOTES

1. For short-term emission limits such as lbs/hr., Solar recommends using "worst case" anticipated operating conditions specific to the application and the site conditions. Worst case for one pollutant is not necessarily the same for another. The emission values on this form are only predicted emissions at the specific operating conditions listed.
2. Solar's typical SoLoNOx warranty is for greater than 0 deg F, and between 50% and 100% load for gas fuel, and between 80% and 100% load for liquid fuel. An emission warranty for non-SoLoNOx equipment is for greater than 0 deg F and between 80% and 100% load.
3. Fuel must meet Solar standard fuel specification ES 9-98. Predicted emissions are based on the attached fuel composition, or, San Diego natural gas or equivalent.
4. If needed, Solar can provide generic documents to address turbine operation outside typical warranty ranges, as well as non-warranted emissions of SO2, PM10/2.5, VOC, and formaldehyde.
5. Solar can optionally provide factory testing in San Diego to ensure the actual unit(s) meet the above values within the tolerances quoted. Pricing and schedule impact will be provided upon request.

Table 3.1-2a. EMISSION FACTORS FOR CRITERIA POLLUTANTS AND GREENHOUSE GASES FROM STATIONARY GAS TURBINES

Emission Factors <sup>a</sup> - Uncontrolled				
Pollutant	Natural Gas-Fired Turbines <sup>b</sup>		Distillate Oil-Fired Turbines <sup>d</sup>	
	(lb/MMBtu) <sup>c</sup> (Fuel Input)	Emission Factor Rating	(lb/MMBtu) <sup>c</sup> (Fuel Input)	Emission Factor Rating
CO <sub>2</sub> <sup>f</sup>	110	A	157	A
N <sub>2</sub> O	0.003 <sup>g</sup>	E	ND	NA
Lead	ND	NA	1.4 E-05	C
SO <sub>2</sub>	0.94S <sup>h</sup>	B	1.01S <sup>h</sup>	B
Methane	8.6 E-03	C	ND	NA
VOC	2.1 E-03	D	4.1 E-04 <sup>j</sup>	E
TOC <sup>k</sup>	1.1 E-02	B	4.0 E-03 <sup>l</sup>	C
PM (condensable)	4.7 E-03 <sup>l</sup>	C	7.2 E-03 <sup>l</sup>	C
PM (filterable)	1.9 E-03 <sup>l</sup>	C	4.3 E-03 <sup>l</sup>	C
PM (total)	6.6 E-03 <sup>l</sup>	C	1.2 E-02 <sup>l</sup>	C

<sup>a</sup> Factors are derived from units operating at high loads ( $\geq 80$  percent load) only. For information on units operating at other loads, consult the background report for this chapter (Reference 16), available at “www.epa.gov/ttn/chief”. ND = No Data, NA = Not Applicable.

<sup>b</sup> SCCs for natural gas-fired turbines include 2-01-002-01, 2-02-002-01 & 03, and 2-03-002-02 & 03.

<sup>c</sup> Emission factors based on an average natural gas heating value (HHV) of 1020 Btu/scf at 60°F. To convert from (lb/MMBtu) to (lb/10<sup>6</sup> scf), multiply by 1020. Similarly, these emission factors can be converted to other natural gas heating values.

<sup>d</sup> SCCs for distillate oil-fired turbines are 2-01-001-01, 2-02-001-01, 2-02-001-03, and 2-03-001-02.

<sup>e</sup> Emission factors based on an average distillate oil heating value of 139 MMBtu/10<sup>3</sup> gallons. To convert from (lb/MMBtu) to (lb/10<sup>3</sup> gallons), multiply by 139.

<sup>f</sup> Based on 99.5% conversion of fuel carbon to CO<sub>2</sub> for natural gas and 99% conversion of fuel carbon to CO<sub>2</sub> for distillate oil. CO<sub>2</sub> (Natural Gas) [lb/MMBtu] = (0.0036 scf/Btu)(%CON)(C)(D), where %CON = weight percent conversion of fuel carbon to CO<sub>2</sub>, C = carbon content of fuel by weight, and D = density of fuel. For natural gas, C is assumed at 75%, and D is assumed at 4.1 E+04 lb/10<sup>6</sup>scf. For distillate oil, CO<sub>2</sub> (Distillate Oil) [lb/MMBtu] = (26.4 gal/MMBtu) (%CON)(C)(D), where C is assumed at 87%, and the D is assumed at 6.9 lb/gallon.

<sup>g</sup> Emission factor is carried over from the previous revision to AP-42 (Supplement B, October 1996) and is based on limited source tests on a single turbine with water-steam injection (Reference 5).

<sup>h</sup> All sulfur in the fuel is assumed to be converted to SO<sub>2</sub>. S = percent sulfur in fuel. Example, if sulfur content in the fuel is 3.4 percent, then S = 3.4. If S is not available, use 3.4 E-03 lb/MMBtu for natural gas turbines, and 3.3 E-02 lb/MMBtu for distillate oil turbines (the equations are more accurate).

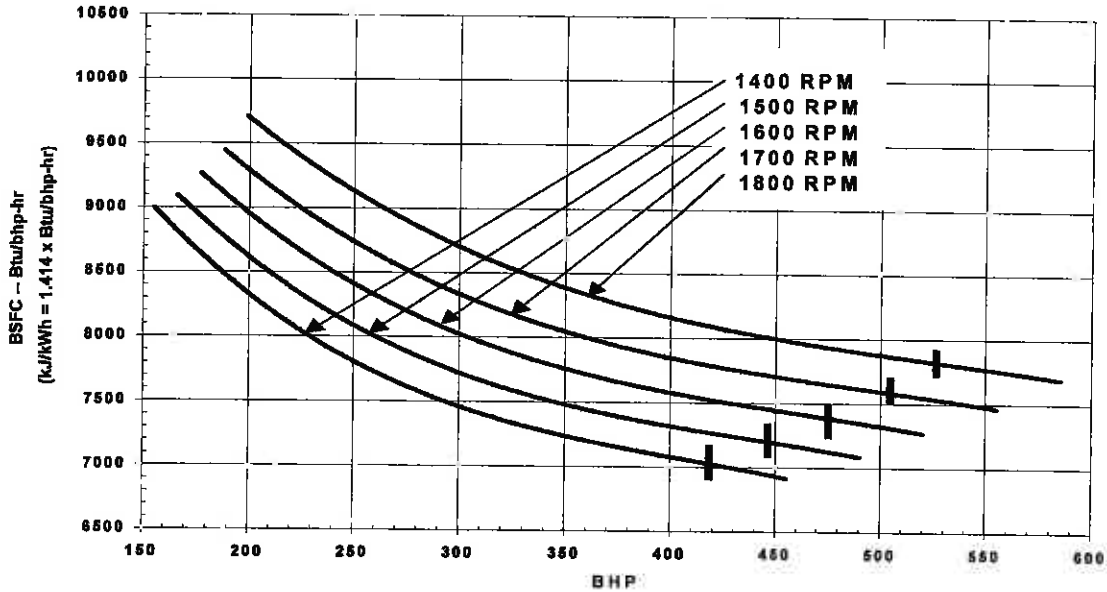
<sup>j</sup> VOC emissions are assumed equal to the sum of organic emissions.

<sup>k</sup> Pollutant referenced as THC in the gathered emission tests. It is assumed as TOC, because it is based on EPA Test Method 25A.

<sup>l</sup> Emission factors are based on combustion turbines using water-steam injection.

**Engine Ratings and Fuel Consumption  
ISO Standard (Continuous) Power Ratings for Model H24GL  
8.7:1 CR, 900 BTU/ft<sup>3</sup> SLHV  
130°F (54°C) Auxiliary Water Temperature  
180°F (82°C) Jacket Water Temperature**

**PART LOAD FUEL CONSUMPTION  
WASTEGATE SET FOR CONTINUOUS POWER RATING**



RPM	1400	1500	1600	1700	1800
ISO STANDARD BHP	415	445	475	505	530
OVERLOAD BHP	455	490	520	555	585
<b>OVERLOAD</b>	Allowed 2 Hours per 24 Hours				
<b>STANDARD CONDITIONS</b>	Barometer 29.54 in. Hg. (100 kPa)		Ambient Temperature 77°F (25°C)		
<b>ISO STANDARD POWER DEDUCTIONS</b>	5 Percent per 1000 ft. (305 m) above 3500 ft. (10677 m) Altitude 1 Percent per 10°F (5.5°C) above 100° F (38° C) Ambient Temperature				
<b>FUEL STANDARD</b>	Dry Natural Gas - 900 Btu/ft <sup>3</sup> (35.38 MJ/m <sup>3</sup> ) SLHV; 91 WKI* Refer to S-7884-6 for Full Fuel Specification				
<b>EQUIPMENT</b>	Engine Equipped with Lube Oil and Cooling Water Pumps but without Radiator Fan				
<b>ENGINE DATA</b>	Turbocharged & Intercooled with 130° F (54.5° C) Intercooler Water 8.7:1 Compression Ratio				

**NOTES:**

- ISO Standard (continuous) power ratings conform to ISO 3046/1, latest version, with a mechanical efficiency of 90% and Tcr<sub>a</sub> of 130°F (54.5°C) limited to ± 10°F (± 5.5°C).
- Reference Heat Rejection and Operating Data Standard Sheet S-7779-52.
- Engine set to an exhaust oxygen concentration of 7.8% at rated speed and ISO Standard Power at 25° BTDC timing to provide a NO<sub>x</sub> emission level of 2 g/bhp-hr or less.

\*Trademark of General Electric Company. All other trademarks are the property of their respective owners.



<b>Engine Ratings &amp; Fuel Consumption Model H24GL, 8.7:1 CR, 900 Btu/ft<sup>3</sup> SLHV 130°F (54°C) Aux. Water Temperature 180°F (82°C) Jacket Water Temperature</b>	EN: 123500 DATE: 12/98	Ref. <u>C</u> 1104-22
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**VGf emPact Catalyst Out Emissions:\***

MODEL	Catalyst	GRAMS/BHP-HR			
		NOx <sup>1</sup>	CO	THC	NMHC
F18SE	Option Code 1004B	0.5	1.0	1.1	0.15
	Option Code 1005B	0.15	0.3		
H24SE	Option Code 1004B	0.5	1.0	1.1	0.15
	Option Code 1005B	0.15	0.3		

\* Emission levels are based on 1400-1800 rpm operation at 75-100% load and require GE-supplied (NSCR) catalyst.

**VGf\* Engine Out Emission Levels**

MODEL	CARBURETOR SETTING	GRAMS/BHP-HR				% OBSERVED DRY		MASS AFR <sup>(2)</sup>	VOLUME AFR <sup>(2)</sup>	EXCESS AIR RATIO
		NOx <sup>(1)</sup>	CO	NMHC <sup>(4)</sup>	THC	CO	O <sub>2</sub>			
G	Lowest Manifold (Best Power)	12.0	28.0	0.30	2.0	1.1	0.30	15.5:1	9.3:1	0.97
	Equal NOx & CO	15.0	15.0	0.30	2.0	0.70	0.30	15.8:1	9.5:1	0.98
	Catalytic Conv. Input (3-way <sup>3</sup> )	16.0	10.0	0.30	2.0	0.38	0.30	15.95:1	9.6:1	0.99
	Standard (Best Economy)	28.0	0.8	0.25	1.3	0.20	2.4	18.0:1	10.8:1	1.12
GSID	Catalytic Conv. Input (3-way <sup>3</sup> )	16.0	8.0	0.25	1.5	0.35	0.18	15.95:1	9.6:1	0.99
SE	Catalytic Conv. Input (3-way <sup>3</sup> )	14.0	10.0	0.3	1.8	0.35	0.18	15.95:1	9.6:1	0.995
GL, GLD 11:1 CR	Standard (High Speed Turbo Only)	2.6	1.75	0.75	5.0	0.04	7.8	24.5:1	14.7:1	1.53
	T.A. Luft Emissions	1.25	1.65	0.45	3.5	0.03	8.2	25.4:1	15.2:1	1.59
GLD/2* (200 BMEP) 11:1 CR	Standard (High Speed Turbo Only)	1.25	2.1	0.65	4.2	0.04	9.0	26.2	15.7:1	1.65
GL 8.7:1 CR	Standard (High Speed Turbo Only)	2.0	1.7	0.45	3.0	0.04	7.8	24.5:1	14.7:1	1.53
GL 11:1 CR	Code 1105 (High Altitude Low NOx)	1.0**	1.45	0.35	3.90	.033	8.0	24.8	14.9:1	1.54

+ For VGf GLD/2 models, the above table indicates emission levels that are for engines running on Dutch natural gas of 790 BTU/ft<sup>3</sup> (31.45 MJ/m<sup>3</sup> [25, V(0; 101.325)]) SLHV, Waukesha Knock Index of 99 or higher, 81% methane content by volume, and at ISO Standard conditions.

\*\* NOx emissions level applies at continuous BHP (160 BMEP) at 25 grains/lb. absolute humidity.

**NOTE:** The above table indicates emission levels that are valid for new engines for the duration of the standard warranty period or are attainable by an engine in good operating condition running on commercial quality natural gas of 900 BTU/ft<sup>3</sup> (35.38 MJ/m<sup>3</sup> [25, V(0; 101.325)]) SLHV, Waukesha Knock Index of 91 or higher, 93% methane content by volume, and at ISO standard conditions. Emissions are based on standard engine timing at 91 WKI with an absolute humidity of 42 grains/lb. Refer to engine specific WKI Power & Timing curves for standard timing. Unless otherwise noted, these emission levels can be achieved across the continuous duty speed range and from 75% to 110% of the ISO Standard Power (continuous duty) rating. Contact the local GE Waukesha gas engine representative or GE Waukesha's Application Engineering Department for emission values which can be obtained on a case-by-case basis for specific ratings, fuels, and site conditions.

**NOTES FOR ALL TABLES:**

1. NOx is measured as (NO + NO<sub>2</sub>) and expressed as NO<sub>2</sub>.

NOTE: Any ammonia present in the fuel gas composition will result in an increase in the NOx output beyond that of the normal engine NOx generation

<b>Gas Engine Exhaust And Emission Levels</b>	EN: 161816 DATE: 9/18	Ref. <u>S</u> 8483-6
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2. Air/fuel ratio values are based on a natural gas fuel with a stoichiometric mass air/fuel ratio of 16.05:1 and a H/C ratio of 3.85. Refer to S7884-7, or latest revision, for the complete gaseous fuel specification for Waukesha gas engines.
3. Consult with individual catalyst manufacturers for their preferred air/fuel ratio set point and specific post-catalyst emission values.
4. Non-Methane Hydrocarbons (NMHC) includes all hydrocarbon gasses in the exhaust except for methane (CH<sub>4</sub>). This value can be used for Reactive Organic Gasses (ROG), Reactive Organic Compounds (ROC), and Volatile Organic Compounds (VOC).

**Formaldehyde Emission Levels**

The following table provides formaldehyde (CH<sub>2</sub>O) levels that are valid for new engines for the duration of the standard warranty period and are attainable by an engine in good operating condition running on commercial quality natural gas of 900 BTU/ft<sup>3</sup> (35.38 MJ/m<sup>3</sup> [25, V(0; 101.325)]) SLHV, Waukesha Knock Index of 91 or higher, 93% methane content by volume, and at ISO standard conditions. Values are based on standard engine timing at 91 WKI with an absolute humidity of 42 grains/lb. Refer to engine specific WKI Power & Timing curves for standard timing. Unless otherwise noted, these emission levels can be achieved across the continuous duty speed range at the load levels tabulated. Contact the local GE Waukesha gas engine representative or GE Waukesha's Application Engineering Department for emission values which can be obtained on a case-by-case basis for specific ratings, fuels, and site conditions.

MODEL	LOCATION	CARB. SETTING	CH <sub>2</sub> O		% OBSERVED DRY		MASS AFR <sup>2</sup>	VOLUME AFR <sup>2</sup>	EXCESS AIR RATIO
			GRAMS/BHP-HR		CO	O <sub>2</sub>			
			PERCENT LOAD						
100%	75%								
AT25GL	Engine Out	Lean Burn	0.18	0.20	0.06	9.8	28.0:1	16.8:1	1.74
275GL/AT27GL	Engine Out	Lean Burn	0.18	0.20	0.06	9.8	28.0:1	16.8:1	1.74
		Ultra Lean	0.18	0.20	0.05	11.2	32.0:1	19.2:1	2.00
275GL+	Engine Out	Lean Burn	0.28	0.31	0.04	11.6	34.0:1	20.4:1	2.10
12V220GL/ APG 2000 18V220GL/ APG 3000	Engine Out	Ultra Lean	0.23	0.29	0.09- 0.15	12.3- 13.4	32.1- 35.3	19.3- 21.2	2.03 - 2.20
16V150LTD/ APG 1000	Engine Out	Lean Burn	0.14	0.15	0.07	9.5-9.6	26.9- 27.2	16.2- 16.4	1.68-1.7
VHP G, GSI	Engine Out	Rich Burn	0.05	0.05	0.02 – 1.15	0.30 – 1.35	15.5:1 – 17.0:1	9.3:1 – 10.2:1	0.97 – 1.06
VHP Series 4 GSI	Engine Out	Rich Burn	0.05	0.05	0.02 – 0.45	0.30 – 1.35	15.85:1 – 17.0:1	9.5:1 – 10.2:1	0.99 – 1.06
VHP Series 4 GSI**	Catalyst Out	Rich Burn	0.001	0.001	n/a	n/a	n/a	n/a	n/a
L7042GSI S5 L7044GSI S5	Engine Out	Lean Burn	0.05	0.07	0.02 – 0.45	0.30 – 1.35	15.85:1 – 17.0:1	9.5:1 – 10.2:1	0.99 – 1.06
L7042GSI S5** L7044GSI S5**	Catalyst Out	Lean Burn	0.001	0.001	n/a	n/a	n/a	n/a	n/a
L5774LT L5794LT	Engine Out	Lean Burn	0.22	0.25	0.04	7.8 – 8.0	24.5:1 – 24.7:1	14.7:1 – 14.8:1	1.52 – 1.54
VHP GL	Engine Out	Lean Burn	0.29	0.34	0.06	9.8	28.0:1	16.8:1	1.74
VGF G, GSID, SE	Engine Out	Rich Burn	0.05	0.05	0.20 – 1.1	0.18 – 2.4	15.5:1 – 18.0:1	9.3:1 – 10.8:1	0.97 – 1.12
VGF-SE**	Catalyst Out	Rich Burn	0.001	0.001	n/a	n/a	n/a	n/a	n/a

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MODEL	LOCATION	CARB. SETTING	CH <sub>2</sub> O		% OBSERVED DRY		MASS AFR <sup>2</sup>	VOLUME AFR <sup>2</sup>	EXCESS AIR RATIO
			GRAMS/BHP-HR		CO	O <sub>2</sub>			
			PERCENT LOAD	PERCENT LOAD					
VGF GL, GLD, GLD/2	Engine Out	Lean Burn	100%	75%	0.03 – 0.04	7.8 – 9.0	21.5:1 – 25.4:1	13.9:1 – 15.2:1	1.53 – 1.65

\*\* Models with GE-supplied catalyst included as part of the emPact Emission Control System.

**Particulate Emission Levels**

The following table provides particulate levels that are valid for new engines for the duration of the standard warranty period and are attainable by an engine in good operating condition running on commercial quality natural gas of 900 BTU/ft<sup>3</sup> (35.38 MJ/m<sup>3</sup> [25, V(0; 101.325)]) SLHV, Waukesha Knock Index of 91 or higher, 93% methane content by volume, and at ISO standard conditions. Values are based on standard engine timing at 91 WKI with an absolute humidity of 42 grains/lb. Refer to engine specific WKI Power & Timing curves for standard timing. Unless otherwise noted, these emission levels can be achieved across the continuous duty speed range at the load levels tabulated. Contact the local Waukesha gas engine representative or Waukesha's Sales Engineering Department for emission values which can be obtained on a case-by-case basis for specific ratings, fuels, and site conditions.

1. Particulates emissions in exhaust gas for 220GL engines

The specific amounts of particulates are less than:

Load	100 %	< 10 mg/m <sup>3</sup> <sub>N</sub> at 15 % O <sub>2</sub> , dry
Load	90 %	< 10 mg/m <sup>3</sup> <sub>N</sub> at 15 % O <sub>2</sub> , dry
Load	75 %	< 10 mg/m <sup>3</sup> <sub>N</sub> at 15 % O <sub>2</sub> , dry
Load	50 %	< 15 mg/m <sup>3</sup> <sub>N</sub> at 15 % O <sub>2</sub> , dry

Particulates measured as "dry dust" according to the ISO 9096 alternatively EPA Method 17 measurement standards under steady state conditions.

2. Particulates emissions below 10 µm, so called PM 10, in exhaust gas for 220GL engines.

The specific amounts of particulates below 10 µm, PM 10 are less than:

Load	100 %	< 10 mg/m <sup>3</sup> <sub>N</sub> at 15 % O <sub>2</sub> , dry
Load	90 %	< 10 mg/m <sup>3</sup> <sub>N</sub> at 15 % O <sub>2</sub> , dry
Load	75 %	< 10 mg/m <sup>3</sup> <sub>N</sub> at 15 % O <sub>2</sub> , dry
Load	50 %	< 15 mg/m <sup>3</sup> <sub>N</sub> at 15 % O <sub>2</sub> , dry

Particulates measured as "in stack PM 10" according to EPA Method 201 excluding condensible matter.

<b>Gas Engine Exhaust And Emission Levels</b>	EN: 161816 DATE: 9/18	Ref. <u>S</u> 8483-6
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Table 3.2-2. UNCONTROLLED EMISSION FACTORS FOR 4-STROKE LEAN-BURN ENGINES<sup>a</sup>  
(SCC 2-02-002-54)

Pollutant	Emission Factor (lb/MMBtu) <sup>b</sup> (fuel input)	Emission Factor Rating
Criteria Pollutants and Greenhouse Gases		
NO <sub>x</sub> <sup>c</sup> 90 - 105% Load	4.08 E+00	B
NO <sub>x</sub> <sup>c</sup> <90% Load	8.47 E-01	B
CO <sup>c</sup> 90 - 105% Load	3.17 E-01	C
CO <sup>c</sup> <90% Load	5.57 E-01	B
CO <sub>2</sub> <sup>d</sup>	1.10 E+02	A
SO <sub>2</sub> <sup>e</sup>	5.88 E-04	A
TOC <sup>f</sup>	1.47 E+00	A
Methane <sup>g</sup>	1.25 E+00	C
VOC <sup>h</sup>	1.18 E-01	C
PM10 (filterable) <sup>i</sup>	7.71 E-05	D
PM2.5 (filterable) <sup>i</sup>	7.71 E-05	D
PM Condensable <sup>j</sup>	9.91 E-03	D
Trace Organic Compounds		
1,1,2,2-Tetrachloroethane <sup>k</sup>	<4.00 E-05	E
1,1,2-Trichloroethane <sup>k</sup>	<3.18 E-05	E
1,1-Dichloroethane	<2.36 E-05	E
1,2,3-Trimethylbenzene	2.30 E-05	D
1,2,4-Trimethylbenzene	1.43 E-05	C
1,2-Dichloroethane	<2.36 E-05	E
1,2-Dichloropropane	<2.69 E-05	E
1,3,5-Trimethylbenzene	3.38 E-05	D
1,3-Butadiene <sup>k</sup>	2.67E-04	D
1,3-Dichloropropene <sup>k</sup>	<2.64 E-05	E
2-Methylnaphthalene <sup>k</sup>	3.32 E-05	C
2,2,4-Trimethylpentane <sup>k</sup>	2.50 E-04	C
Acenaphthene <sup>k</sup>	1.25 E-06	C

Table 3.2-2. UNCONTROLLED EMISSION FACTORS FOR 4-STROKE LEAN-BURN ENGINES  
(Continued)

Pollutant	Emission Factor (lb/MMBtu) <sup>b</sup> (fuel input)	Emission Factor Rating
Acenaphthylene <sup>k</sup>	5.53 E-06	C
Acetaldehyde <sup>k,l</sup>	8.36 E-03	A
Acrolein <sup>k,l</sup>	5.14 E-03	A
Benzene <sup>k</sup>	4.40 E-04	A
Benzo(b)fluoranthene <sup>k</sup>	1.66 E-07	D
Benzo(e)pyrene <sup>k</sup>	4.15 E-07	D
Benzo(g,h,i)perylene <sup>k</sup>	4.14 E-07	D
Biphenyl <sup>k</sup>	2.12 E-04	D
Butane	5.41 E-04	D
Butyr/Isobutyraldehyde	1.01 E-04	C
Carbon Tetrachloride <sup>k</sup>	<3.67 E-05	E
Chlorobenzene <sup>k</sup>	<3.04 E-05	E
Chloroethane	1.87 E-06	D
Chloroform <sup>k</sup>	<2.85 E-05	E
Chrysene <sup>k</sup>	6.93 E-07	C
Cyclopentane	2.27 E-04	C
Ethane	1.05 E-01	C
Ethylbenzene <sup>k</sup>	3.97 E-05	B
Ethylene Dibromide <sup>k</sup>	<4.43 E-05	E
Fluoranthene <sup>k</sup>	1.11 E-06	C
Fluorene <sup>k</sup>	5.67 E-06	C
Formaldehyde <sup>k,l</sup>	5.28 E-02	A
Methanol <sup>k</sup>	2.50 E-03	B
Methylcyclohexane	1.23 E-03	C
Methylene Chloride <sup>k</sup>	2.00 E-05	C
n-Hexane <sup>k</sup>	1.11 E-03	C
n-Nonane	1.10 E-04	C



Table 3.2-2. UNCONTROLLED EMISSION FACTORS FOR 4-STROKE LEAN-BURN ENGINES  
(Continued)

Pollutant	Emission Factor (lb/MMBtu) <sup>b</sup> (fuel input)	Emission Factor Rating
n-Octane	3.51 E-04	C
n-Pentane	2.60 E-03	C
Naphthalene <sup>k</sup>	7.44 E-05	C
PAH <sup>k</sup>	2.69 E-05	D
Phenanthrene <sup>k</sup>	1.04 E-05	D
Phenol <sup>k</sup>	2.40 E-05	D
Propane	4.19 E-02	C
Pyrene <sup>k</sup>	1.36 E-06	C
Styrene <sup>k</sup>	<2.36 E-05	E
Tetrachloroethane <sup>k</sup>	2.48 E-06	D
Toluene <sup>k</sup>	4.08 E-04	B
Vinyl Chloride <sup>k</sup>	1.49 E-05	C
Xylene <sup>k</sup>	1.84 E-04	B

<sup>a</sup> Reference 7. Factors represent uncontrolled levels. For NO<sub>x</sub>, CO, and PM<sub>10</sub>, “uncontrolled” means no combustion or add-on controls; however, the factor may include turbocharged units. For all other pollutants, “uncontrolled” means no oxidation control; the data set may include units with control techniques used for NO<sub>x</sub> control, such as PCC and SCR for lean burn engines, and PSC for rich burn engines. Factors are based on large population of engines. Factors are for engines at all loads, except as indicated. SCC = Source Classification Code. TOC = Total Organic Compounds. PM-10 = Particulate Matter ≤ 10 microns (μm) aerodynamic diameter. A “<” sign in front of a factor means that the corresponding emission factor is based on one-half of the method detection limit.

<sup>b</sup> Emission factors were calculated in units of (lb/MMBtu) based on procedures in EPA Method 19. To convert from (lb/MMBtu) to (lb/10<sup>6</sup> scf), multiply by the heat content of the fuel. If the heat content is not available, use 1020 Btu/scf. To convert from (lb/MMBtu) to (lb/hp-hr) use the following equation:

$$\text{lb/hp-hr} = (\text{lb/MMBtu}) (\text{heat input, MMBtu/hr}) (1/\text{operating HP, 1/hp})$$

<sup>c</sup> Emission tests with unreported load conditions were not included in the data set.

<sup>d</sup> Based on 99.5% conversion of the fuel carbon to CO<sub>2</sub>. CO<sub>2</sub> [lb/MMBtu] = (3.67)(%CON)(C)(D)(1/h), where %CON = percent conversion of fuel carbon to CO<sub>2</sub>, C = carbon content of fuel by weight (0.75), D = density of fuel, 4.1 E+04 lb/10<sup>6</sup> scf, and

- h = heating value of natural gas (assume 1020 Btu/scf at 60°F).
- <sup>e</sup> Based on 100% conversion of fuel sulfur to SO<sub>2</sub>. Assumes sulfur content in natural gas of 2,000 gr/10<sup>6</sup> scf.
- <sup>f</sup> Emission factor for TOC is based on measured emission levels from 22 source tests.
- <sup>g</sup> Emission factor for methane is determined by subtracting the VOC and ethane emission factors from the TOC emission factor. Measured emission factor for methane compares well with the calculated emission factor, 1.31 lb/MMBtu vs. 1.25 lb/MMBtu, respectively.
- <sup>h</sup> VOC emission factor is based on the sum of the emission factors for all speciated organic compounds less ethane and methane.
- <sup>i</sup> Considered  $\leq 1 \mu\text{m}$  in aerodynamic diameter. Therefore, for filterable PM emissions, PM10(filterable) = PM2.5(filterable).
- <sup>j</sup> PM Condensable = PM Condensable Inorganic + PM-Condensable Organic
- <sup>k</sup> Hazardous Air Pollutant as defined by Section 112(b) of the Clean Air Act.
- <sup>l</sup> For lean burn engines, aldehyde emissions quantification using CARB 430 may reflect interference with the sampling compounds due to the nitrogen concentration in the stack. The presented emission factor is based on FTIR measurements. Emissions data based on CARB 430 are available in the background report.

# Section 8

## Map(s)

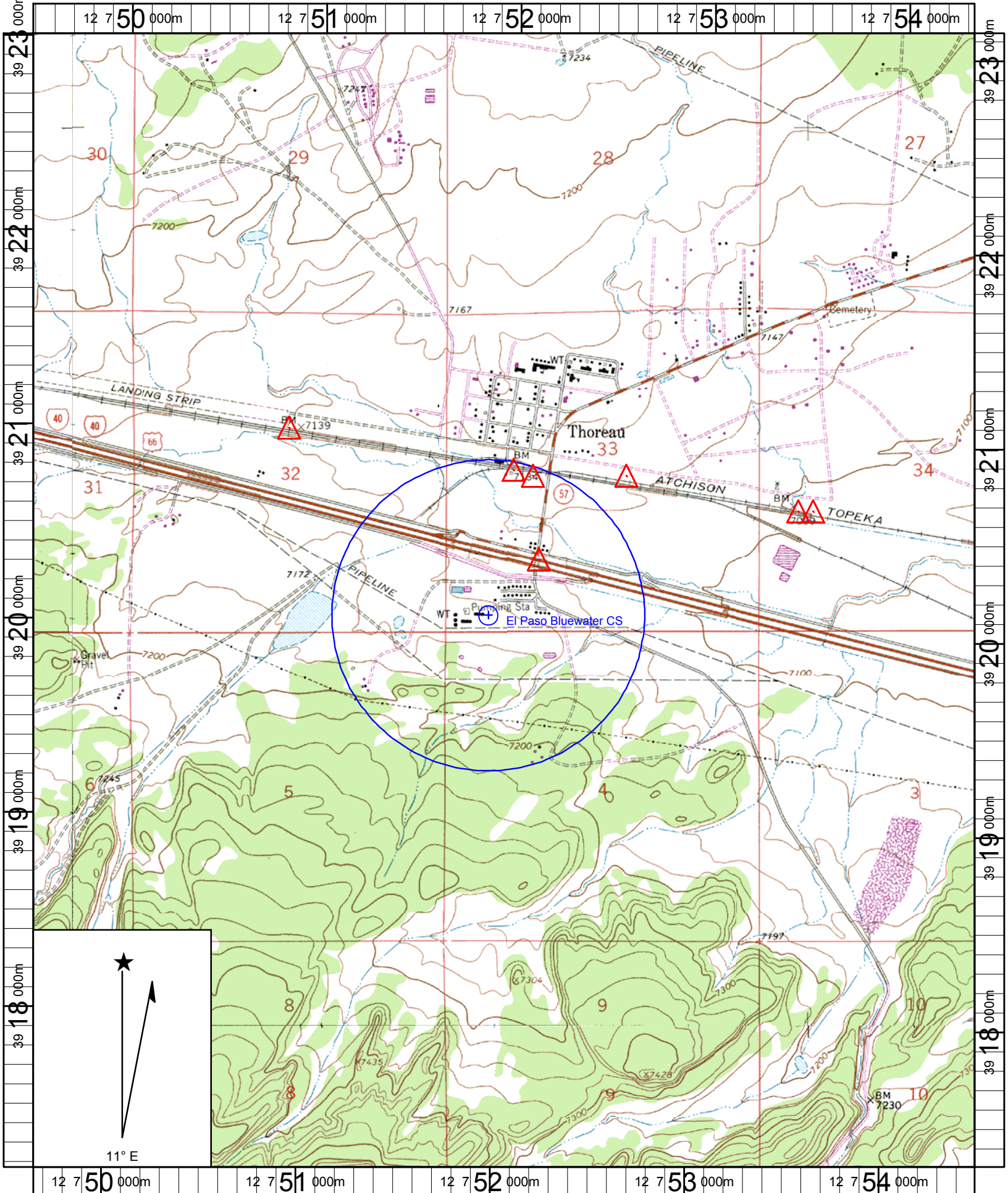
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**A map** such as a 7.5 minute topographic quadrangle showing the exact location of the source. The map shall also include the following:

The UTM or Longitudinal coordinate system on both axes	An indicator showing which direction is north
A minimum radius around the plant of 0.8km (0.5 miles)	Access and haul roads
Topographic features of the area	Facility property boundaries
The name of the map	The area which will be restricted to public access
A graphical scale	

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A map is attached.



Name: THOREAU  
 Date: 2/11/2009  
 Scale: 1 inch equals 2000 feet

Location: 12 0751990 E 3920158 N  
 Caption: El Paso Natural Gas  
 Bluewater Compressor Station

# Section 9

## Proof of Public Notice

(for NSR applications submitting under 20.2.72 or 20.2.74 NMAC)

(This proof is required by: 20.2.72.203.A.14 NMAC “Documentary Proof of applicant’s public notice”)

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**I have read the AQB “Guidelines for Public Notification for Air Quality Permit Applications”**

This document provides detailed instructions about public notice requirements for various permitting actions. It also provides public notice examples and certification forms. Material mistakes in the public notice will require a re-notice before issuance of the permit.

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Unless otherwise allowed elsewhere in this document, the following items document proof of the applicant’s Public Notification. Please include this page in your proof of public notice submittal with checkmarks indicating which documents are being submitted with the application.

**New Permit** and **Significant Permit Revision** public notices must include all items in this list.

**Technical Revision** public notices require only items 1, 5, 9, and 10.

Per the Guidelines for Public Notification document mentioned above, include:

1.  A copy of the certified letter receipts with post marks (20.2.72.203.B NMAC)
  2.  A list of the places where the public notice has been posted in at least four publicly accessible and conspicuous places, including the proposed or existing facility entrance. (e.g: post office, library, grocery, etc.)
  3.  A copy of the property tax record (20.2.72.203.B NMAC).
  4.  A sample of the letters sent to the owners of record.
  5.  A sample of the letters sent to counties, municipalities, and Indian tribes.
  6.  A sample of the public notice posted and a verification of the local postings.
  7.  A table of the noticed citizens, counties, municipalities and tribes and to whom the notices were sent in each group.
  8.  A copy of the public service announcement (PSA) sent to a local radio station and documentary proof of submittal.
  9.  A copy of the classified or legal ad including the page header (date and newspaper title) or its affidavit of publication stating the ad date, and a copy of the ad. When appropriate, this ad shall be printed in both English and Spanish.
  10.  A copy of the display ad including the page header (date and newspaper title) or its affidavit of publication stating the ad date, and a copy of the ad. When appropriate, this ad shall be printed in both English and Spanish.
  11.  A map with a graphic scale showing the facility boundary and the surrounding area in which owners of record were notified by mail. This is necessary for verification that the correct facility boundary was used in determining distance for notifying land owners of record.
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N/A- Application being submitted under 20.2.70 NMAC

# Section 10

## Written Description of the Routine Operations of the Facility

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**A written description of the routine operations of the facility.** Include a description of how each piece of equipment will be operated, how controls will be used, and the fate of both the products and waste generated. For modifications and/or revisions, explain how the changes will affect the existing process. In a separate paragraph describe the major process bottlenecks that limit production. The purpose of this description is to provide sufficient information about plant operations for the permit writer to determine appropriate emission sources.

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Bluewater Compressor Station is a natural gas compressor station that compresses natural gas and delivers the compressed gas to a pipeline for mainline transportation. This facility consists of three natural gas-fired Solar Taurus 60-7302 turbines, identified as units B-01, B-02, and B-03, which provide power to the compressors. An auxiliary emergency generator engine (AUX-B-01), Waukesha H-24 GL HCR is maintained at the facility to provide electric power in the event that service from the local utility is interrupted.

# Section 11

## Source Determination

Source submitting under 20.2.70, 20.2.72, 20.2.73, and 20.2.74 NMAC

Sources applying for a construction permit, PSD permit, or operating permit shall evaluate surrounding and/or associated sources (including those sources directly connected to this source for business reasons) and complete this section. Responses to the following questions shall be consistent with the Air Quality Bureau's permitting guidance, Single Source Determination Guidance, which may be found on the Applications Page in the Permitting Section of the Air Quality Bureau website.

Typically, buildings, structures, installations, or facilities that have the same SIC code, that are under common ownership or control, and that are contiguous or adjacent constitute a single stationary source for 20.2.70, 20.2.72, 20.2.73, and 20.2.74 NMAC applicability purposes. Submission of your analysis of these factors in support of the responses below is optional, unless requested by NMED.

### A. Identify the emission sources evaluated in this section (list and describe):

See Table 2-A in Section 2 of this application.

### B. Apply the 3 criteria for determining a single source:

**SIC Code:** Surrounding or associated sources belong to the same 2-digit industrial grouping (2-digit SIC code) as this facility, **OR** surrounding or associated sources that belong to different 2-digit SIC codes are support facilities for this source.

Yes       No

**Common Ownership or Control:** Surrounding or associated sources are under common ownership or control as this source.

Yes       No

**Contiguous or Adjacent:** Surrounding or associated sources are contiguous or adjacent with this source.

Yes       No

### C. Make a determination:

The source, as described in this application, constitutes the entire source for 20.2.70, 20.2.72, 20.2.73, or 20.2.74 NMAC applicability purposes. If in "A" above you evaluated only the source that is the subject of this application, all "YES" boxes should be checked. If in "A" above you evaluated other sources as well, you must check **AT LEAST ONE** of the boxes "NO" to conclude that the source, as described in the application, is the entire source for 20.2.70, 20.2.72, 20.2.73, and 20.2.74 NMAC applicability purposes.

The source, as described in this application, **does not** constitute the entire source for 20.2.70, 20.2.72, 20.2.73, or 20.2.74 NMAC applicability purposes (A permit may be issued for a portion of a source). The entire source consists of the following facilities or emissions sources (list and describe):

# Section 12

## Section 12.A

### PSD Applicability Determination for All Sources

(Submitting under 20.2.72, 20.2.74 NMAC)

**A PSD applicability determination for all sources.** For sources applying for a significant permit revision, apply the applicable requirements of 20.2.74.AG and 20.2.74.200 NMAC and to determine whether this facility is a major or minor PSD source, and whether this modification is a major or a minor PSD modification. It may be helpful to refer to the procedures for Determining the Net Emissions Change at a Source as specified by Table A-5 (Page A.45) of the EPA New Source Review Workshop Manual to determine if the revision is subject to PSD review.

A. This facility is:

- a minor PSD source before and after this modification (if so, delete C and D below).
- a major PSD source before this modification. This modification will make this a PSD minor source.
- an existing PSD Major Source that has never had a major modification requiring a BACT analysis.
- an existing PSD Major Source that has had a major modification requiring a BACT analysis
- a new PSD Major Source after this modification.

B. This facility **[is or is not]** one of the listed 20.2.74.501 Table I – PSD Source Categories. The “project” emissions for this modification are **[significant or not significant]**. **[Discuss why.]** The “project” emissions listed below **[do or do not]** only result from changes described in this permit application, thus no emissions from other **[revisions or modifications, past or future]** to this facility. Also, specifically discuss whether this project results in “de-bottlenecking”, or other associated emissions resulting in higher emissions. The project emissions (before netting) for this project are as follows [see Table 2 in 20.2.74.502 NMAC for a complete list of significance levels]:

- a. NOx: **XX.X** TPY
- b. CO: **XX.X** TPY
- c. VOC: **XX.X** TPY
- d. SOx: **XX.X** TPY
- e. PM: **XX.X** TPY
- f. PM10: **XX.X** TPY
- g. PM2.5: **XX.X** TPY
- h. Fluorides: **XX.X** TPY
- i. Lead: **XX.X** TPY
- j. Sulfur compounds (listed in Table 2): **XX.X** TPY
- k. GHG: **XX.X** TPY

C. Netting **[is required, and analysis is attached to this document.] OR [is not required (project is not significant)] OR [Applicant is submitting a PSD Major Modification and chooses not to net.]**

D. BACT is **[not required for this modification, as this application is a minor modification.] OR [required, as this application is a major modification. List pollutants subject to BACT review and provide a full top down BACT determination.]**

E. If this is an existing PSD major source, or any facility with emissions greater than 250 TPY (or 100 TPY for 20.2.74.501 Table 1 – PSD Source Categories), determine whether any permit modifications are related, or could be considered a single project with this action, and provide an explanation for your determination whether a PSD modification is triggered.



# Section 13

## Determination of State & Federal Air Quality Regulations

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**This section lists each state and federal air quality regulation that may apply to your facility and/or equipment that are stationary sources of regulated air pollutants.**

Not all state and federal air quality regulations are included in this list. Go to the Code of Federal Regulations (CFR) or to the Air Quality Bureau's regulation page to see the full set of air quality regulations.

### **Required Information for Specific Equipment:**

For regulations that apply to specific source types, in the 'Justification' column **provide any information needed to determine if the regulation does or does not apply. For example**, to determine if emissions standards at 40 CFR 60, Subpart IIII apply to your three identical stationary engines, we need to know the construction date as defined in that regulation; the manufacturer date; the date of reconstruction or modification, if any; if they are or are not fire pump engines; if they are or are not emergency engines as defined in that regulation; their site ratings; and the cylinder displacement.

### **Required Information for Regulations that Apply to the Entire Facility:**

See instructions in the 'Justification' column for the information that is needed to determine if an 'Entire Facility' type of regulation applies (e.g. 20.2.70 or 20.2.73 NMAC).

### **Regulatory Citations for Regulations That Do Not, but Could Apply:**

If there is a state or federal air quality regulation that does not apply, but you have a piece of equipment in a source category for which a regulation has been promulgated, you must **provide the low level regulatory citation showing why your piece of equipment is not subject to or exempt from the regulation. For example** if you have a stationary internal combustion engine that is not subject to 40 CFR 63, Subpart ZZZZ because it is an existing 2 stroke lean burn stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions, your citation would be 40 CFR 63.6590(b)(3)(i). **We don't want a discussion of every non-applicable regulation, but if it is possible a regulation could apply, explain why it does not. For example**, if your facility is a power plant, you do not need to include a citation to show that 40 CFR 60, Subpart OOO does not apply to your non-existent rock crusher.

### **Regulatory Citations for Emission Standards:**

**For each unit that is subject to an emission standard in a source specific regulation, such as 40 CFR 60, Subpart OOO or 40 CFR 63, Subpart HH, include the low level regulatory citation of that emission standard.** Emission standards can be numerical emission limits, work practice standards, or other requirements such as maintenance. **Here are examples:** a glycol dehydrator is subject to the general standards at 63.764C(1)(i) through (iii); an engine is subject to 63.6601, Tables 2a and 2b; a crusher is subject to 60.672(b), Table 3 and all transfer points are subject to 60.672(e)(1)

### **Federally Enforceable Conditions:**

All federal regulations are federally enforceable. All Air Quality Bureau State regulations are federally enforceable except for the following: affirmative defense portions at 20.2.7.6.B, 20.2.7.110(B)(15), 20.2.7.11 through 20.2.7.113, 20.2.7.115, and 20.2.7.116; 20.2.37; 20.2.42; 20.2.43; 20.2.62; 20.2.63; 20.2.86; 20.2.89; and 20.2.90 NMAC. Federally enforceable means that EPA can enforce the regulation as well as the Air Quality Bureau and federally enforceable regulations can count toward determining a facility's potential to emit (PTE) for the Title V, PSD, and nonattainment permit regulations.

INCLUDE ANY OTHER INFORMATION NEEDED TO COMPLETE AN APPLICABILITY DETERMINATION OR THAT IS RELEVANT TO YOUR FACILITY'S NOTICE OF INTENT OR PERMIT.

**EPA Applicability Determination Index for 40 CFR 60, 61, 63, etc:** <http://cfpub.epa.gov/adi/>

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**Table for STATE REGULATIONS:**

<u>STATE REGULATIONS</u> CITATION	Title	Applies? Enter Yes or No	Unit(s) or Facility	<b>JUSTIFICATION:</b> <b>(You may delete instructions or statements that do not apply in the justification column to shorten the document.)</b>
20.2.1 NMAC	General Provisions	Yes	Facility	General Provisions apply to Notice of Intent, Construction, and Title V permit applications.
20.2.3 NMAC	Ambient Air Quality Standards NMAAQS	No	Facility	Per 20.2.3.9 NMAC, requirements of 20.2.3 are not applicable requirements under 20.2.7 NMAC.
20.2.7 NMAC	Excess Emissions	Yes	Facility	All Title V major sources are subject to Air Quality Control Regulations, as defined in 20.2.7 NMAC, and are thus subject to the requirements of this regulation. Also listed as applicable in TV Permit P139-R3.
20.2.23 NMAC	Fugitive Dust Control	No for permitted facilities, possible for NOIs	Facility	The facility is not defined as a notice of intent (NOI) per 20.2.73 NMAC.
20.2.33 NMAC	Gas Burning Equipment - Nitrogen Dioxide	No	N/A	Not applicable as this facility does not contain oil burning equipment having a heat input of greater than 1,000,000 million British Thermal Units per year per unit.
20.2.34 NMAC	Oil Burning Equipment: NO <sub>2</sub>	No	N/A	Not applicable as this facility does not contain oil burning equipment having a heat input of greater than 1,000,000 million British Thermal Units per year per unit.
20.2.35 NMAC	Natural Gas Processing Plant – Sulfur	No	N/A	Not applicable as this facility is not a “natural gas processing plant” as the term is understood.
<u>20.2.38</u> NMAC	Hydrocarbon Storage Facility	No	N/A	Not applicable as this facility is not a “petroleum processing facility” or “petroleum production facility” and does not contain a “tank battery” or a “hydrocarbon storage facility” associated with a “petroleum processing facility” as the terms are understood.
<u>20.2.39</u> NMAC	Sulfur Recovery Plant - Sulfur	No	N/A	Not applicable as this facility is not a “natural gas processing plant” as the term is understood.
20.2.61.109 NMAC	Smoke & Visible Emissions	Yes	B-01, B-02, B-03, AUX-B-01	This regulation establishes controls on smoke and visible emissions from certain sources, including stationary combustion equipment. Units B-01 to B-03 and AUX-B-01 are stationary combustion equipment that comply by using pipeline-quality natural gas.
20.2.70 NMAC	Operating Permits	Yes	Facility	Facility is a Title V major facility. The facility has been issued Title V permit P139-R3.
20.2.71 NMAC	Operating Permit Fees	Yes	Facility	This facility is subject to 20.2.70 NMAC and is in turn subject to 20.2.71 NMAC.
20.2.72 NMAC	Construction Permits	Yes	Facility	This facility is subject to 20.2.72 NMAC and has been issued NSR Permit 3004-M1.
20.2.73 NMAC	NOI & Emissions Inventory Requirements	Yes	Facility	All Title V major sources meet the applicability requirements of 20.2.73.300 NMAC. This regulation requires facilities to respond to request for inventory information. EPNG has and will continue to respond as required.
20.2.74 NMAC	Permits – Prevention of Significant Deterioration (PSD)	Yes	Facility	Bluewater Compressor Station is an existing PSD major source. The facility has not undergone a major modification and does not currently require a PSD permit.

<u>STATE REGULATIONS</u> CITATION	Title	Applies? Enter Yes or No	Unit(s) or Facility	JUSTIFICATION:  (You may delete instructions or statements that do not apply in the justification column to shorten the document.)
20.2.75 NMAC	Construction Permit Fees	No	N/A	This regulation establishes a schedule of operating permit emission fees. The facility is subject to 20.2.71 NMAC (Operating Permit Emission Fees) and, therefore, is not subject to the requirements of this regulation, per 20.2.75.11.E. In the event of an NSR permit action, EPNG would be required to pay the appropriate filing and review fees.
20.2.77 NMAC	New Source Performance	Yes	B-01, B-02, B-03	This regulation establishes state authority to implement new source performance standards (NSPS) for stationary sources. Units B-02, B-02, and B-03 are subject to NSPS Subparts A and GG. Accordingly, 20.2.77 NMAC applies.
20.2.78 NMAC	Emission Standards for HAPS	No	N/A	This regulation establishes state authority to implement emission standards for hazardous air pollutants subject to 40 CFR Part 61. This facility does not emit hazardous air pollutants which are subject to the requirements of 40 CFR Part 61 and is therefore not subject to this regulation.
20.2.79 NMAC	Permits – Nonattainment Areas	No	N/A	This regulation establishes the requirements for obtaining a non-attainment area permit. This facility is not located in a non-attainment area and therefore is not subject to this regulation.
20.2.80 NMAC	Stack Heights	No	N/A	This regulation establishes requirements for the evaluation of stack heights and other dispersion techniques. This regulation does not apply as all stacks at this facility follow good engineering practice.
20.2.82 NMAC	MACT Standards for source categories of HAPS	Yes	AUX-B-01	This regulation applies to all sources emitting hazardous air pollutants, which are subject to the requirements of 40 CFR Part 63, as amended through August 29, 2013. Unit AUX-B-01 is subject to MACT ZZZZ and is, therefore, subject to this regulation.

**Table for Applicable FEDERAL REGULATIONS:**

<u>FEDERAL REGULATIONS</u> CITATION	Title	Applies? Enter Yes or No	Unit(s) or Facility	JUSTIFICATION:
40 CFR 50	NAAQS	Yes	Facility	This regulation defines national ambient air quality standards. Bluewater Compressor Station meets all applicable national ambient air quality standards for PM <sub>10</sub> , PM <sub>2.5</sub> , SO <sub>2</sub> , H <sub>2</sub> S, CO, and NO <sub>x</sub> under this regulation.
NSPS 40 CFR 60, Subpart A	General Provisions	Yes	B-01, B-02, B-03	This regulation defines general provisions for relevant standards that have been set under this part. Units B-01, B-02, and B-03 are subject to this regulation because Subpart GG applies to the turbines.
NSPS 40 CFR60.40a, Subpart Da	Subpart Da, Performance Standards for <b>Electric Utility Steam Generating Units</b>	No	N/A	Not applicable as there are no electric utility steam generating units at this facility.
NSPS 40 CFR60.40b Subpart Db	<b>Electric Utility Steam Generating Units</b>	No	N/A	This regulation establishes standards of performance for industrial-commercial-institutional steam generating units. This regulation does not apply because this facility does not operate any industrial-commercial-institutional steam generating units.
40 CFR 60.40c, Subpart Dc	Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units	No	N/A	Not applicable as there are no small industrial-commercial-institutional steam generating units at the facility.

<u>FEDERAL REGU- LATIONS CITATION</u>	<b>Title</b>	<b>Applies? Enter Yes or No</b>	<b>Unit(s) or Facility</b>	<b>JUSTIFICATION:</b>
NSPS 40 CFR 60, Subpart Ka	Standards of Performance for <b>Storage Vessels for Petroleum Liquids</b> for which Construction, Reconstruction, or Modification Commenced After May 18, 1978, and <b>Prior</b> to July 23, 1984	No	N/A	This regulation establishes performance standards for storage vessels for petroleum liquids for which construction, reconstruction, or modification commenced after May 18, 1978, and prior to July 23, 1984. The capacities of the tanks at the facility are less than 40,000 gallons and are not subject to this regulation. [40 CFR Part 60.110a(a)]
NSPS 40 CFR 60, Subpart Kb	Standards of Performance for <b>Volatile Organic Liquid Storage Vessels</b> (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced <b>After</b> July 23, 1984	No	N/A	This facility does not have any tanks with a storage capacity equal to or greater than 75 cubic meters used to store volatile organic liquids (VOL) for which construction, reconstruction or modification commenced after July 23, 1984.
NSPS 40 CFR 60.330 Subpart GG	<b>Stationary Gas Turbines</b>	Yes	B-01, B-02, B-03	This regulation sets standards of performance for certain stationary gas turbines. Unit B-01, B-02 and B-03 have a heat input greater than the 10 MMBtu/hour threshold and were manufactured after the October 3, 1977 applicability date [40 CFR 60.330(a)]. Accordingly, this regulation applies.
NSPS 40 CFR 60, Subpart KKK	Leaks of VOC from <b>Onshore Gas Plants</b>	No	N/A	This regulation defines standards of performance for equipment leaks of VOC emissions from onshore natural gas processing plants for which construction, reconstruction, or modification commenced after January 20, 1984, and on or before August 23, 2011. This regulation does not apply as the facility is not a gas plant.
NSPS 40 CFR Part 60 Subpart LLL	Standards of Performance for <b>Onshore Natural Gas Processing: SO<sub>2</sub> Emissions</b>	No	N/A	This regulation establishes standards of performance for SO <sub>2</sub> emissions from onshore natural gas processing for which construction, reconstruction, or modification of the amine sweetening unit commenced after January 20, 1984 and on or before August 23, 2011. This regulation does not apply as this facility is not a natural gas processing plant.
NSPS 40 CFR Part 60 Subpart OOOO	Standards of Performance for Crude Oil and Natural Gas Production, Transmission, and Distribution for which construction, modification or reconstruction commenced after August 23, 2011 and before September 18, 2015	No	N/A	This regulation establishes standards of performance for crude oil and natural gas production, transmission and distribution. The facility does not have any affected units that have been modified or reconstructed on or after August 23, 2011 and before September 18, 2015. [40 CFR 60.5360]

<u>FEDERAL REGU- LATIONS CITATION</u>	<b>Title</b>	<b>Applies? Enter Yes or No</b>	<b>Unit(s) or Facility</b>	<b>JUSTIFICATION:</b>
NSPS 40 CFR Part 60 Subpart OOOa	Standards of Performance for Crude Oil and Natural Gas Facilities for which Construction, Modification or Reconstruction Commenced After September 18, 2015	No	N/A	This regulation establishes standards of performance for crude oil and natural gas production, transmission and distribution. The facility does not have any affected units that have been modified or reconstructed after September 18, 2015.
NSPS 40 CFR 60 Subpart IIII	Standards of performance for Stationary Compression Ignition Internal Combustion Engines	No	N/A	This regulation establishes standards of performance for stationary compression ignition combustion engines. This facility does not operate any compression ignition internal combustion engines. Accordingly, this regulation does not apply.
NSPS 40 CFR Part 60 Subpart JJJ	Standards of Performance for Stationary Spark Ignition Internal Combustion Engines	No	N/A	This regulation establishes standards of performance for stationary spark ignition combustion engines. AUX-B0-1 is a stationary SI ICE which was constructed prior to June 12, 2006. Accordingly, this regulation does not apply.
NSPS 40 CFR 60 Subpart TTTT	Standards of Performance for Greenhouse Gas Emissions for Electric Generating Units	No	N/A	The facility does not have any steam generating units and is therefore not subject to this regulation.
NSPS 40 CFR 60 Subpart UUUU	Emissions Guidelines for Greenhouse Gas Emissions and Compliance Times for Electric Utility Generating Units	No	N/A	The facility does not operate any sources that are applicable to this subpart.
NSPS 40 CFR 60, Subparts WWW, XXX, Cc, and Cf	Standards of performance for Municipal Solid Waste (MSW) Landfills	No	N/A	The facility is not a municipal solid waste landfill and is therefore no subject to this regulation.
NESHAP 40 CFR 61 Subpart A	General Provisions	No	N/A	Bluewater Compressor Station does not emit or have threshold quantities of regulated substances at the facility and/or the facility is not involved in the triggering activity.
NESHAP 40 CFR 61 Subpart E	National Emission Standards for <b>Mercury</b>	No	N/A	This regulation establishes a national emission standard for mercury. The facility does not have stationary sources which process mercury ore to recover mercury, use mercury chlor-alkali cells to produce chlorine gas and alkali metal hydroxide, and incinerate or dry wastewater treatment plant sludge [40 CFR Part 61.50]. The facility is not subject to this regulation.
NESHAP 40 CFR 61 Subpart V	National Emission Standards for <b>Equipment Leaks</b> (Fugitive Emission Sources)	No	N/A	This regulation establishes national emission standards for equipment leaks (fugitive emission sources). The facility does not have equipment that operates in volatile hazardous air pollutant (VHAP) service [40 CFR Part 61.240]. The regulated activities subject to this regulation do not take place at this facility. The facility is not subject to this regulation.

<u>FEDERAL REGULATIONS CITATION</u>	<b>Title</b>	<b>Applies? Enter Yes or No</b>	<b>Unit(s) or Facility</b>	<b>JUSTIFICATION:</b>
MACT 40 CFR 63, Subpart A	General Provisions	Yes	AUX-B-01	This regulation defines general provisions for relevant standards that have been set under this part. Unit AUX-B-01 is subject to MACT ZZZZ, therefore Subpart A also applies.
MACT 40 CFR 63.760 Subpart HH	<b>Oil and Natural Gas Production Facilities</b>	No	N/A	This regulation establishes national emission standards for hazardous air pollutants from oil and natural gas production facilities. This facility is not an Oil or Natural Gas Production Facility, as defined by this regulation therefore it is not subject to this regulation.
MACT 40 CFR 63 Subpart HHH	Natural Gas Transmission and Storage Facilities	No	N/A	This facility is not a major source of HAPS, nor does it contain an affected unit. As stated in 63.1270(c), a facility that does not contain an affected source is not subject to the requirements of this subpart.
MACT 40 CFR 63 Subpart ZZZZ	National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines ( <b>RICE MACT</b> )	Yes	AUX-B-01	This regulation defines national emissions standards for HAPs for stationary reciprocating Internal Combustion Engines. Unit AUX-B-01 is an existing (constructed before 6/12/2006) auxiliary reciprocating engine for the backup generator located at an area source of HAPs. Per 40 CFR 63.6585, the unit is subject to the operation and maintenance requirements of the subpart.
40 CFR 64	<b>Compliance Assurance Monitoring</b>	No	N/A	This regulation defines compliance assurance monitoring. Bluewater Compressor Station is a Title V major source. However, none of the units at the facility are required to use a control device to achieve compliance with an emission limit.
40 CFR 68	<b>Chemical Accident Prevention</b>	No	N/A	This facility is regulated under DOT Office of Pipeline Safety Regulations (49 CFR 192, 193 and 195); therefore, it is not subject to this regulation. This regulation arises from section 112(r) of the Clean Air Act and establishes thresholds based on inventoried quantities of specific substances in process. As established at 40 CFR 68.3, the term "stationary source" does not apply to the transportation of any regulated substance or any other extremely hazardous substance under the provisions of this part, provided that such transportation is regulated under 49 CFR parts 192, 193, or 195 (DOT Office of Pipeline Safety Regulations).
Title IV – Acid Rain 40 CFR 72	<b>Acid Rain</b>	No	N/A	This part establishes the acid rain program. This part does not apply because the facility is not covered by this regulation. [40 CFR Part 72.6]
Title IV – Acid Rain 40 CFR 73	<b>Sulfur Dioxide Allowance Emissions</b>	No	N/A	This regulation establishes sulfur dioxide allowance emissions for certain types of facilities. This part does not apply because the facility is not the type covered by this regulation [40 CFR Part 73.2].
Title IV-Acid Rain 40 CFR 75	<b>Continuous Emissions Monitoring</b>	No	N/A	The facility does not generate commercial electric power or electric power for sale and is therefore not subject to this regulation.
Title IV – Acid Rain 40 CFR 76	<b>Acid Rain Nitrogen Oxides Emission Reduction Program</b>	No	N/A	This regulation establishes an acid rain nitrogen oxides emission reduction program. This regulation applies to each coal-fired utility unit that is subject to an acid rain emissions limitation or reduction requirement for SO <sub>2</sub> . This part does not apply because the facility does not operate any coal-fired units [40 CFR Part 76.1].
Title VI – 40 CFR 82	<b>Protection of Stratospheric Ozone</b>	Yes	Facility	EPNG owns appliances containing CFCs and is therefore subject to this requirement. However, this requirement imposes no obligations on the facility beyond those imposed on any individual or corporate owner of such appliances, and is mentioned here only in the interest of being thorough. EPNG uses only certified technicians for the maintenance, service, repair and disposal of appliances and maintains the appropriate records for this requirement.

# Section 14

## Operational Plan to Mitigate Emissions

(Submitting under 20.2.70, 20.2.72, 20.2.74 NMAC)

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- Title V Sources** (20.2.70 NMAC): By checking this box and certifying this application the permittee certifies that it has developed an **Operational Plan to Mitigate Emissions During Startups, Shutdowns, and Emergencies** defining the measures to be taken to mitigate source emissions during startups, shutdowns, and emergencies as required by 20.2.70.300.D.5(f) and (g) NMAC. This plan shall be kept on site to be made available to the Department upon request. This plan should not be submitted with this application.
- NSR** (20.2.72 NMAC), **PSD** (20.2.74 NMAC) & **Nonattainment** (20.2.79 NMAC) **Sources:** By checking this box and certifying this application the permittee certifies that it has developed an **Operational Plan to Mitigate Source Emissions During Malfunction, Startup, or Shutdown** defining the measures to be taken to mitigate source emissions during malfunction, startup, or shutdown as required by 20.2.72.203.A.5 NMAC. This plan shall be kept on site to be made available to the Department upon request. This plan should not be submitted with this application.
- Title V** (20.2.70 NMAC), **NSR** (20.2.72 NMAC), **PSD** (20.2.74 NMAC) & **Nonattainment** (20.2.79 NMAC) **Sources:** By checking this box and certifying this application the permittee certifies that it has established and implemented a Plan to Minimize Emissions During Routine or Predictable Startup, Shutdown, and Scheduled Maintenance through work practice standards and good air pollution control practices as required by 20.2.7.14.A and B NMAC. This plan shall be kept on site or at the nearest field office to be made available to the Department upon request. This plan should not be submitted with this application.
- 

EPNG maintains the required planning and excess emission mitigation documents at Bluewater Compressor Station.

# Section 15

## Alternative Operating Scenarios

(Submitting under 20.2.70, 20.2.72, 20.2.74 NMAC)

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**Alternative Operating Scenarios:** Provide all information required by the department to define alternative operating scenarios. This includes process, material and product changes; facility emissions information; air pollution control equipment requirements; any applicable requirements; monitoring, recordkeeping, and reporting requirements; and compliance certification requirements. Please ensure applicable Tables in this application are clearly marked to show alternative operating scenario.

**Construction Scenarios:** When a permit is modified authorizing new construction to an existing facility, NMED includes a condition to clearly address which permit condition(s) (from the previous permit and the new permit) govern during the interval between the date of issuance of the modification permit and the completion of construction of the modification(s). There are many possible variables that need to be addressed such as: Is simultaneous operation of the old and new units permitted and, if so for example, for how long and under what restraints? In general, these types of requirements will be addressed in Section A100 of the permit, but additional requirements may be added elsewhere. Look in A100 of our NSR and/or TV permit template for sample language dealing with these requirements. Find these permit templates at: [https://www.env.nm.gov/aqb/permit/aqb\\_pol.html](https://www.env.nm.gov/aqb/permit/aqb_pol.html). Compliance with standards must be maintained during construction, which should not usually be a problem unless simultaneous operation of old and new equipment is requested.

In this section, under the bolded title “Construction Scenarios”, specify any information necessary to write these conditions, such as: conservative-realistic estimated time for completion of construction of the various units, whether simultaneous operation of old and new units is being requested (and, if so, modeled), whether the old units will be removed or decommissioned, any PSD ramifications, any temporary limits requested during phased construction, whether any increase in emissions is being requested as SSM emissions or will instead be handled as a separate Construction Scenario (with corresponding emission limits and conditions, etc).

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The term “alternative operating scenario” is not defined by regulation. EPNG understands this term to apply to a source which may routinely operate with alternative fuels or processes in such a manner as to potentially affect emissions. Based on this understanding, this facility has no alternative operating scenarios.

Units at the facility may be shut down from time to time due to factors including but not limited to market demand, maintenance, malfunctions, and emergency shutdowns. Operating in alternative modes and temporary shutdowns are not alternative operating scenarios as EPNG understands the term.



# Section 16

## Air Dispersion Modeling

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- 1) Minor Source Construction (20.2.72 NMAC) and Prevention of Significant Deterioration (PSD) (20.2.74 NMAC) ambient impact analysis (modeling): Provide an ambient impact analysis as required at 20.2.72.203.A(4) and/or 20.2.74.303 NMAC and as outlined in the Air Quality Bureau’s Dispersion Modeling Guidelines found on the Planning Section’s modeling website. If air dispersion modeling has been waived for one or more pollutants, attach the AQB Modeling Section modeling waiver approval documentation.
- 2) SSM Modeling: Applicants must conduct dispersion modeling for the total short term emissions during routine or predictable startup, shutdown, or maintenance (SSM) using realistic worst case scenarios following guidance from the Air Quality Bureau’s dispersion modeling section. Refer to "Guidance for Submittal of Startup, Shutdown, Maintenance Emissions in Permit Applications ([http://www.env.nm.gov/aqb/permit/app\\_form.html](http://www.env.nm.gov/aqb/permit/app_form.html)) for more detailed instructions on SSM emissions modeling requirements.
- 3) Title V (20.2.70 NMAC) ambient impact analysis: Title V applications must specify the construction permit and/or Title V Permit number(s) for which air quality dispersion modeling was last approved. Facilities that have only a Title V permit, such as landfills and air curtain incinerators, are subject to the same modeling required for preconstruction permits required by 20.2.72 and 20.2.74 NMAC.

What is the purpose of this application?	Enter an X for each purpose that applies
New PSD major source or PSD major modification (20.2.74 NMAC). See #1 above.	
New Minor Source or significant permit revision under 20.2.72 NMAC (20.2.72.219.D NMAC). See #1 above. <b>Note:</b> Neither modeling nor a modeling waiver is required for VOC emissions.	
Reporting existing pollutants that were not previously reported.	
Reporting existing pollutants where the ambient impact is being addressed for the first time.	
Title V application (new, renewal, significant, or minor modification. 20.2.70 NMAC). See #3 above.	
Relocation (20.2.72.202.B.4 or 72.202.D.3.c NMAC)	
Minor Source Technical Permit Revision 20.2.72.219.B.1.d.vi NMAC for like-kind unit replacements.	
Other: i.e. SSM modeling. See #2 above.	
This application does not require modeling since this is a No Permit Required (NPR) application.	
This application does not require modeling since this is a Notice of Intent (NOI) application (20.2.73 NMAC).	
This application does not require modeling according to 20.2.70.7.E(11), 20.2.72.203.A(4), 20.2.74.303, 20.2.79.109.D NMAC and in accordance with the Air Quality Bureau’s Modeling Guidelines.	X

**Check each box that applies:**

- See attached, approved modeling **waiver for all** pollutants from the facility.
- See attached, approved modeling **waiver for some** pollutants from the facility.
- Attached in Universal Application Form 4 (UA4) is a **modeling report for all** pollutants from the facility.
- Attached in UA4 is a **modeling report for some** pollutants from the facility.
- No modeling is required.

# Section 17

## Compliance Test History

(Submitting under 20.2.70, 20.2.72, 20.2.74 NMAC)

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**Compliance Test History Table**

Unit No.	Test Description	Test Date
B-01	Compliance testing for NO <sub>x</sub> and CO.	7/8/2019, 10/8/2012, 10/22/2009
B-02	Compliance testing for NO <sub>x</sub> and CO.	7/10/2019, 10/8/2012, 10/21/2009
B-03	Compliance testing for NO <sub>x</sub> and CO.	7/9/2019, 10/11/2012, 10/20/2009

# Section 19

## Requirements for Title V Program

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### Who Must Use this Attachment:

- \* Any major source as defined in 20.2.70 NMAC.
  - \* Any source, including an area source, subject to a standard or other requirement promulgated under Section 111 - Standards of Performance for New Stationary Sources, or Section 112 Hazardous Air Pollutants, of the 1990 federal Clean Air Act ("federal Act"). Non-major sources subject to Sections 111 or 112 of the federal Act are exempt from the obligation to obtain an 20.2.70 NMAC operating permit until such time that the EPA Administrator completes rulemakings that require such sources to obtain operating permits. In addition, sources that would be required to obtain an operating permit solely because they are subject to regulations or requirements under Section 112(r) of the federal Act are exempt from the requirement to obtain an Operating Permit.
  - \* Any Acid Rain source as defined under title IV of the federal Act. The Acid Rain program has additional forms. See <http://www.env.nm.gov/aqb/index.html>. Sources that are subject to both the Title V and Acid Rain regulations are encouraged to submit both applications simultaneously.
  - \* Any source in a source category designated by the EPA Administrator ("Administrator"), in whole or in part, by regulation, after notice and comment.
- 

Bluewater Compressor Station is a major source, as defined in 20.2.70 NMAC.

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### **19.1 - 40 CFR 64, Compliance Assurance Monitoring (CAM) (20.2.70.300.D.10.e NMAC)**

Any source subject to 40CFR, Part 64 (Compliance Assurance Monitoring) must submit all the information required by section 64.7 with the operating permit application. The applicant must prepare a separate section of the application package for this purpose; if the information is already listed elsewhere in the application package, make reference to that location. Facilities not subject to Part 64 are invited to submit periodic monitoring protocols with the application to help the AQB to comply with 20.2.70 NMAC. Sources subject to 40 CFR Part 64, must submit a statement indicating your source's compliance status with any enhanced monitoring and compliance certification requirements of the federal Act.

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After reasonable inquiry, EPNG states that the facility does not meet the applicability requirements of 40 CFR 64.2. Specifically, no sources at the facility are controlled major sources of regulated pollutants. EPNG will submit the necessary items should the facility or requirements change such that this regulation becomes applicable.

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### **19.2 - Compliance Status (20.2.70.300.D.10.a & 10.b NMAC)**

Describe the facility's compliance status with each applicable requirement at the time this permit application is submitted. This statement should include descriptions of or references to all methods used for determining compliance. This statement should include descriptions of monitoring, recordkeeping and reporting requirements and test methods used to determine compliance with all applicable requirements. Refer to Section 2, Tables 2-N and 2-O of the Application Form as necessary. (20.2.70.300.D.11 NMAC) For facilities with existing Title V permits, refer to most recent Compliance Certification for existing requirements. Address new requirements such as CAM, here, including steps being taken to achieve compliance.

---

EPNG believes that Bluewater Compressor Station is in compliance with each applicable requirement identified in Section 19.2. This belief was formed after reasonable inquiry. In the event that EPNG should discover new information affecting the compliance status of the facility, EPNG will make appropriate notification and/or take corrective action.

Pursuant to Condition 6.1 of Title V Permit P139-R3, EPNG has certified compliance with the terms of conditions of the permit. The most recent certification was submitted by the January 31<sup>st</sup> deadline. Since that time, EPNG has continued to be in compliance with applicable requirements.

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### 19.3 - Continued Compliance (20.2.70.300.D.10.c NMAC)

Provide a statement that your facility will continue to be in compliance with requirements for which it is in compliance at the time of permit application. This statement must also include a commitment to comply with other applicable requirements as they come into effect during the permit term. This compliance must occur in a timely manner or be consistent with such schedule expressly required by the applicable requirement.

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As described in Section 19.2, after reasonable inquiry EPNG states that Bluewater Compressor Station will continue to operate in compliance with applicable requirements. Additionally, EPNG will meet additional applicable requirements that become effective during the permit term in a timely manner or on such a time schedule as expressly required by the applicable requirement. In the event EPNG should discover new information affecting the compliance status of the facility, EPNG will make appropriate notifications and/or take corrective actions as appropriate.

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### 19.4 - Schedule for Submission of Compliance (20.2.70.300.D.10.d NMAC)

You must provide a proposed schedule for submission to the department of compliance certifications during the permit term. This certification must be submitted annually unless the applicable requirement or the department specifies a more frequent period. A sample form for these certifications will be attached to the permit.

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Condition A109.B of Operating Permit P139-R3 requires EPNG to submit compliance certification reports to the New Mexico Environment Department (NMED) Air Quality Bureau (aqb) and to the EPA no later than January 31st of each year.

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### 19.5 - Stratospheric Ozone and Climate Protection

In addition to completing the four (4) questions below, you must submit a statement indicating your source's compliance status with requirements of Title VI, Section 608 (National Recycling and Emissions Reduction Program) and Section 609 (Servicing of Motor Vehicle Air Conditioners).

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1. Does your facility have any air conditioners or refrigeration equipment that uses CFCs, HCFCs or other ozone-depleting substances?  Yes  No
  2. Does any air conditioner(s) or any piece(s) of refrigeration equipment contain a refrigeration charge greater than 50 lbs?  Yes  No  
(If the answer is yes, describe the type of equipment and how many units are at the facility.)
  3. Do your facility personnel maintain, service, repair, or dispose of any motor vehicle air conditioners (MVACs) or appliances ("appliance" and "MVAC" as defined at 82. 152)?  Yes  No
  4. Cite and describe which Title VI requirements are applicable to your facility (i.e. 40 CFR Part 82, Subpart A through G.)
- 

40 CFR 82 Subpart F. EPNG owns appliances containing regulated refrigerants. EPNG outsources services and repairs of its air conditioners at Bluewater Compressor Station to refrigeration companies who utilize certified technicians.

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## 19.6 - Compliance Plan and Schedule

Applications for sources, which are not in compliance with all applicable requirements at the time the permit application is submitted to the department, must include a proposed compliance plan as part of the permit application package. This plan shall include the information requested below:

**A. Description of Compliance Status:** (20.2.70.300.D.11.a NMAC)

A narrative description of your facility's compliance status with respect to all applicable requirements (as defined in 20.2.70 NMAC) at the time this permit application is submitted to the department.

**B. Compliance plan:** (20.2.70.300.D.11.B NMAC)

A narrative description of the means by which your facility will achieve compliance with applicable requirements with which it is not in compliance at the time you submit your permit application package.

**C. Compliance schedule:** (20.2.70.300D.11.c NMAC)

A schedule of remedial measures that you plan to take, including an enforceable sequence of actions with milestones, which will lead to compliance with all applicable requirements for your source. This schedule of compliance must be at least as stringent as that contained in any consent decree or administrative order to which your source is subject. The obligations of any consent decree or administrative order are not in any way diminished by the schedule of compliance.

**D. Schedule of Certified Progress Reports:** (20.2.70.300.D.11.d NMAC)

A proposed schedule for submission to the department of certified progress reports must also be included in the compliance schedule. The proposed schedule must call for these reports to be submitted at least every six (6) months.

**E. Acid Rain Sources:** (20.2.70.300.D.11.e NMAC)

If your source is an acid rain source as defined by EPA, the following applies to you. For the portion of your acid rain source subject to the acid rain provisions of title IV of the federal Act, the compliance plan must also include any additional requirements under the acid rain provisions of title IV of the federal Act. Some requirements of title IV regarding the schedule and methods the source will use to achieve compliance with the acid rain emissions limitations may supersede the requirements of title V and 20.2.70 NMAC. You will need to consult with the Air Quality Bureau permitting staff concerning how to properly meet this requirement.

**NOTE:** The Acid Rain program has additional forms. See <http://www.env.nm.gov/aqb/index.html>. Sources that are subject to both the Title V and Acid Rain regulations are **encouraged** to submit both applications **simultaneously**.

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To the best of our knowledge, EPNG believes that Bluewater Compressor Station is in compliance with the applicable requirements in this section. No compliance plan, compliance schedule, or compliance reports are required.

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## 19.7 - 112(r) Risk Management Plan (RMP)

Any major sources subject to section 112(r) of the Clean Air Act must list all substances that cause the source to be subject to section 112(r) in the application. The permittee must state when the RMP was submitted to and approved by EPA.

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Bluewater Compressor Station is not subject to the requirements of 40 CFR 68, Chemical Accident Prevention Provisions. The definitions in 40 CFR 68.3 state the term "stationary source" does not apply to transportation of any regulated substance or any other extremely hazardous substance under the provisions of this part, provided that such transportation is regulated under 49 CFR Parts 192, 193 or 195 (DOT Office of Pipeline Safety Regulations). Bluewater Compressor Station is regulated under the DOT Office of Pipeline Safety Regulations and, therefore, is not subject to 112(r).

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**19.8 - Distance to Other States, Bernalillo, Indian Tribes and Pueblos**

Will the property on which the facility is proposed to be constructed or operated be closer than 80 km (50 miles) from other states, local pollution control programs, and Indian tribes and pueblos (20.2.70.402.A.2 and 20.2.70.7.B NMAC)?

(If the answer is yes, state which apply and provide the distances.)

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Bluewater Compressor Station is located 74.78 km from the State of Arizona, 28.61 km from Navajo Nation, 29.08 km from Zuni Indian Reservation, 29.31 km from Ramah Navajo, 56.22 km from Acoma, and 63.81 km from Laguna.

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**19.9 - Responsible Official**

Provide the Responsible Official as defined in 20.2.70.7.AD NMAC:

Alternate Responsible Official: Joseph (Joe) E. McLaughlin

R.O. Title: Operations Vice President

R.O. Address: 1001 Louisiana Street, Suite 1000, Houston, TX 77002

Phone: (713) 369-9847

R.O. Email: [Joe\\_McLaughlin@kindermorgan.com](mailto:Joe_McLaughlin@kindermorgan.com)

# Section 20

## Other Relevant Information

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**Other relevant information.** Use this attachment to clarify any part in the application that you think needs explaining. Reference the section, table, column, and/or field. Include any additional text, tables, calculations or clarifying information.

Additionally, the applicant may propose specific permit language for AQB consideration. In the case of a revision to an existing permit, the applicant should provide the old language and the new language in track changes format to highlight the proposed changes. If proposing language for a new facility or language for a new unit, submit the proposed operating condition(s), along with the associated monitoring, recordkeeping, and reporting conditions. In either case, please limit the proposed language to the affected portion of the permit.

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EPNG would like to identify the North American Energy Standards Board (NAESB) Day as the basis for records tracking at Bluewater Compressor Station and other facilities.

The United States uses six different standardized time zones from east to west; the energy industry uses a seventh time zone developed by the NAESB. This Board serves as an industry platform for the development and promotion of industry practices and standards that lead to the seamless marketing of wholesale and retail natural gas and electricity. Since 2003, the NAESB Day has been recognized by its customers, the business community, participants, and federal and state regulatory entities. As such, a NAESB Day is a 24-hour period derived from a uniform time zone that occurs simultaneously nationwide and is the basis of EPNG's COMET data acquisition system "day" data. Unit information defined and stored according to the NAESB Day includes monitored gas flows or volumes, hours of operation, maintenance and repair activities, and routine emissions.

Data obtained from outside agencies (including test reports and summaries) or submitted pursuant to 20.2.7 NMAC reporting requirements is based on the "day" as defined by the local time zone.

# Section 22: Certification

Company Name: El Paso Natural Gas Company, L.L.C.

I, Joseph E. McLaughlin, hereby certify that the information and data submitted in this application are true and as accurate as possible, to the best of my knowledge and professional expertise and experience.

Signed this 4th day of December, 2019, upon my oath or affirmation, before a notary of the State of

Texas.

Joseph E. McLaughlin  
\*Signature

12/4/2019  
Date

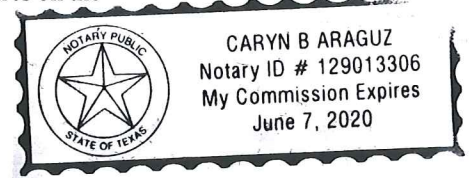
Joseph E. McLaughlin  
Printed Name

VP - Operations  
Title

Scribed and sworn before me on this 4th day of December, 2019.

My authorization as a notary of the State of Texas expires on the

7th day of June, 2020.



Caryn B. Araguz  
Notary's Signature

12-4-19  
Date

Caryn B. Araguz  
Notary's Printed Name

\*For Title V applications, the signature must be of the Responsible Official as defined in 20.2.70.7.AE NMAC.