APPLICATION FOR TITLE V OPERTATING
BRININSTOOL COMPRESSOR STATION
LEA COUNTY, NM

MARCH 2023

Submitted to:
New Mexico Environment Department
Air Quality Bureau, Permits Section
525 Camino de los Marquez, Suite 1
Santa Fe, NM 87505

Prepared for:
Targa Midstream Services, LLC
811 Louisiana Suite 2100
Houston, TX 77002

Prepared by:
Altamira-US, LLC
525 Central Park Dr., Suite 500
Oklahoma City, OK 73105
405-702-1618

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

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-I 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.: in the amount of
☒ 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.
☒ I acknowledge there is an annual fee for permits in addition to the permit review fee: www.env.nm.gov/air-quality/permit-fees-2/.
☐ This facility qualifies for the small business fee reduction per 20.2.75.11.C. NMAC. The full $500.00 filing fee is included with this application and I understand the fee reduction will be calculated in the balance due invoice. The Small Business Certification Form has been previously submitted or is included with this application. (Small Business Environmental Assistance Program Information: www.env.nm.gov/air-quality/small-biz-eap-2/.)

Citation: Please provide the **low level citation** under which this application is being submitted: **20.2.72.200.A 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 1st 3 to 5 #s of permit IDEA ID No.): 35592	Permit/NOI #: 6317M3
1	Facility Name: Brininstool Compressor Station	Plant primary SIC Code (4 digits): 1311	
		Plant NAIC code (6 digits): 211111	
a	Facility Street Address (If no facility street address, provide directions from a prominent landmark): From Eunice, head south on NM-207 S/Main St. Turn right onto Delaware Basin Rd. after 26.5 miles. After 1.7 miles the facility will be on the right.		
2	Plant Operator Company Name: Targa Midstream Services, LLC	Phone/Fax: (575) 810-6023 / (575) 394-2714	
a	Plant Operator Address: Box 1909, Eunice, NM 88231		

b	Plant Operator's New Mexico Corporate ID or Tax ID: 1948249	
3	Plant Owner(s) name(s): Targa Midstream Services, LLC	Phone/Fax: (575) 810-6023 / (575) 394-2714
a	Plant Owner(s) Mailing Address(s): Box 1909, Eunice, NM 88231	
4	Bill To (Company): Targa Midstream Services, LLC	Phone/Fax: (575) 810-6023 / (575) 394-2714
a	Mailing Address: Box 1909, Eunice, NM 88231	E-mail:agroves@targaresources.com
5	☒ Preparer: Laura Worthen Lodes ☒ Consultant: Altamira-US, LLC	Phone/Fax: 405-919-4129
a	Mailing Address: 525 Central Park Dr, Suite 500 Oklahoma City, OK 73105	E-mail: Laura.Worthen-Lodes@altamira-us.com
6	Plant Operator Contact: Amber Groves	Phone/Fax: (575) 394-2534 / (575) 394-2714
a	Address: Box 1909, Eunice, NM 88231	E-mail: agroves@targaresources.com
7	Air Permit Contact: Charles Bates	Title: Manager - Air Quality
a	E-mail:cbates@targaresources.com	Phone/Fax: (713) 584-1064
b	Mailing Address: 811 Louisiana Suite 2100, Houston, TX 77002	
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? ☒ Yes ☐ No	1.b If yes to question 1.a, is it currently operating in New Mexico? ☒ Yes ☐ 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? ☐ Yes ☒ 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? ☒ Yes ☐ No
3	Is the facility currently shut down? ☐ Yes ☒ No	If yes, give month and year of shut down (MM/YY):
4	Was this facility constructed before 8/31/1972 and continuously operated since 1972? ☐ Yes ☒ 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? ☐Yes ☐No ☐N/A	
6	Does this facility have a Title V operating permit (20.2.70 NMAC)? ☐ Yes ☒No	If yes, the permit No. is: P-
7	Has this facility been issued a No Permit Required (NPR)? ☐ Yes ☒ No	If yes, the NPR No. is:
8	Has this facility been issued a Notice of Intent (NOI)? ☐ Yes ☒ No	If yes, the NOI No. is:
9	Does this facility have a construction permit (20.2.72/20.2.74 NMAC)? ☒ Yes ☐ No	If yes, the permit No. is: 6317M3
10	Is this facility registered under a General permit (GCP-1, GCP-2, etc.)? ☐Yes ☒ No	If yes, the register No. is:

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: 2.92 MMscf	Daily: 70 MMscf	Annually: 25,550 MMscf
b	Proposed	Hourly: 2.92 MMscf	Daily: 70 MMscf	Annually: 25,550 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: 2.92 MMscf	Daily: 70 MMscf	Annually: 25,550 MMscf
b	Proposed	Hourly: 2.92 MMscf	Daily: 70 MMscf	Annually: 25,550 MMscf

Section 1-D: Facility Location Information

1	Section: 14	Range: 33E	Township: 23S	County: Lea	Elevation (ft): 3,665
2	UTM Zone: ☐ 12 or ☒ 13			Datum: ☐ NAD 27 ☒ NAD 83 ☐ WGS 84	
a	UTM E (in meters, to nearest 10 meters): 637420			UTM N (in meters, to nearest 10 meters): 3574650	
b	**AND** Latitude (deg., min., sec.): 32° 18' 0.82"			Longitude (deg., min., sec.): 103° 32' 25.53"	
3	Name and zip code of nearest New Mexico town: Eunice, 88231				
4	Detailed Driving Instructions from nearest NM town (attach a road map if necessary): From Eunice, head south on NM-207 S/Main St. Turn right onto Delaware Basin Rd. after 26.5 miles. After 1.7 miles the facility will be on the right.				
5	The facility is 23.6 (distance) miles Southwest (direction) of Eunice (nearest town).				
6	Status of land at facility (check one): ☐ Private ☐ Indian/Pueblo ☐ Federal BLM ☐ Federal Forest Service ☒ Other (specify) State				
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: Municipalities - None; Indian Tribes - None; Counties - Lea, Eddy				
8	**20.2.72** NMAC applications **only**: 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 www.env.nm.gov/aqb/modeling/class1areas.html)? ☒ Yes ☐ No (20.2.72.206.A.7 NMAC) If yes, list all with corresponding distances in kilometers: Texas, 33 km				
9	Name nearest Class I area: Carlsbad Caverns National Park				
10	Shortest distance (in km) from facility boundary to the boundary of the nearest Class I area (to the nearest 10 meters): 79.3 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: 5,090 m				
12	Method(s) used to delineate the Restricted Area: "**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? ☐ Yes ☒ 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? ☒ No ☐ 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 **maximum** operating ($\frac{\text{hours}}{\text{day}}$): 24	($\frac{\text{days}}{\text{week}}$): 7	($\frac{\text{weeks}}{\text{year}}$): 52	($\frac{\text{hours}}{\text{year}}$): 8760			
2	Facility's maximum daily operating schedule (if less than 24 $\frac{\text{hours}}{\text{day}}$)?	Start:	☐AM ☐PM	End:	☐AM ☐PM		
3	Month and year of anticipated start of construction: February 2022						
4	Month and year of anticipated construction completion: April 2022						
5	Month and year of anticipated startup of new or modified facility: April 2022						
6	Will this facility operate at this site for more than one year? ☒ Yes ☐ 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? ☐ Yes ☒ No If yes, specify:

a	If yes, NOV date or description of issue:		NOV Tracking No:
b	Is this application in response to any issue listed in 1-F, 1 or 1a above? ☐ Yes ☐ No If Yes, provide the 1c & 1d info below:		
c	Document Title:	Date:	Requirement # (or page # and paragraph #):
d	Provide the required text to be inserted in this permit:		
2	Is air quality dispersion modeling or modeling waiver being submitted with this application? ☐ Yes ☒ 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? ☐ Yes ☒ No		
4	Will this facility be a source of federal Hazardous Air Pollutants (HAP)? ☒ Yes ☐ No		
a	If Yes, what type of source? ☐ **Major** (☐ ≥10 tpy of any single HAP **OR** ☐ ≥25 tpy of any combination of HAPS) **OR** ☒ **Minor** (☒ <10 tpy of any single HAP **AND** ☒ <25 tpy of any combination of HAPS)		
5	Is any unit exempt under 20.2.72.202.B.3 NMAC? ☐ Yes ☒ No		
a	If yes, include the name of company providing commercial electric power to the facility: Xcel 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	☐ I have filled out Section 18, "Addendum for Streamline Applications." ☒ N/A (This is not a Streamline application.)

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): Jimmy Oxford	Phone: (940) 220-2493
a	R.O. Title: Senior Vice President Operations	R.O. e-mail: joxford@targaresources.com
b	R. O. Address: 4401 North I-35 Suite 303, Denton, TX 76207	
2	Alternate Responsible Official (20.2.70.300.D.2 NMAC): N/A	Phone: N/A
a	A. R.O. Title: N/A	A. R.O. e-mail: N/A
b	A. R. O. Address: N/A	
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)	
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.): Targa Resources, Inc.	
a	Address of Parent Company: 811 Louisiana Street, Suite 2100, 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.): None	
6	Telephone numbers & names of the owners' agents and site contacts familiar with plant operations: (575) 631-7085 – Rebecca Woodell	
7	Affected Programs to include Other States, local air pollution control programs (i.e. Bernalillo) and Indian tribes: 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: 32.9 km from Texas; No Tribes or pueblos or local pollution control programs within 80 km.	

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-to 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 Laura Worthen Lodes

Email laura.worthen-lodes@altmaira-us.com

Phone number 405-919-4129

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-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[1]	Source Description	Make	Model #	Serial #	Manufacturer's Rated Capacity[3] (Specify Units)	Requested Permitted Capacity[3] (Specify Units)	Date of Manufacture[2] / Date of Construction/ Reconstruction[2]	Controlled by Unit # / Emissions vented to Stack #	Source Classification Code (SCC)	For Each Piece of Equipment, Check One	RICE Ignition Type (CI, SI, 4SLB, 4SRB, 2SLB)[4]	Replacing Unit No.
C-01	Compressor Engine	Waukesha	L7042GSI	401148	1478 Hp	1478 Hp	6/1989 2016	C-01 C-01	20200253	☒ Existing (unchanged) ☐ To be Removed ☐ New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced	4SRB	
RC-01	Reciprocating Compressor	Arial	JGK-4	F-8391	N/A	N/A	8/1992 2016	N/A N/A	N/A	☒ Existing (unchanged) ☐ To be Removed ☐ New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced	N/A	
C-02	Compressor Engine	Waukesha	L7042GSI	10812/5	1478 Hp	1478 Hp	3/1993 2016	C-02 C-02	20200253	☒ Existing (unchanged) ☐ To be Removed ☐ New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced	4SRB	
RC-02	Reciprocating Compressor	Arial	JGK-4	F-9991	N/A	N/A	10/1994 2016	N/A N/A	N/A	☒ Existing (unchanged) ☐ To be Removed ☐ New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced	N/A	
C-03	Compressor Engine	Waukesha	L7042GSI	402403	1478 Hp	1478 Hp	1/1991 2016	C-03 C-03	20200253	☒ Existing (unchanged) ☐ To be Removed ☐ New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced	4SRB	
RC-03	Reciprocating Compressor	Arial	JGK-4	F-8973	N/A	N/A	9/1953 2016	N/A N/A	N/A	☒ Existing (unchanged) ☐ To be Removed ☐ New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced	N/A	
C-04	Compressor Engine	Waukesha	L7042GSI	365715	1478 Hp	1478 Hp	7/1993 2016	C-04 C-04	20200253	☒ Existing (unchanged) ☐ To be Removed ☐ New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced	4SRB	
RC-04	Reciprocating Compressor	Arial	JGK-4	F-10054	N/A	N/A	3/1995 2016	N/A N/A	N/A	☒ Existing (unchanged) ☐ To be Removed ☐ New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced	N/A	
C-05	Compressor Engine	Waukesha	L7042GSI	401319	1478 Hp	1478 Hp	3/1990 2016	C-05 C-05	20200253	☒ Existing (unchanged) ☐ To be Removed ☐ New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced	4SRB	
RC-05	Reciprocating Compressor	Arial	JGK-4	F-9957	N/A	N/A	7/1994 2016	N/A N/A	N/A	☒ Existing (unchanged) ☐ To be Removed ☐ New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced	N/A	
C-06	Compressor Engine	Waukesha	L7042GSI	308019	1478 Hp	1478 Hp	8/2011 2017/2018	C-06 C-06	20200253	☒ Existing (unchanged) ☐ To be Removed ☐ New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced	4SRB	
RC-06	Reciprocating Compressor	Arial	JGK-4	F-36221	N/A	N/A	7/2011 2017/2018	N/A N/A	N/A	☒ Existing (unchanged) ☐ To be Removed ☐ New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced	N/A	
C-07	Compressor Engine	Waukesha	L7042GSI	5283704998	1478 Hp	1478 Hp	3/2016 2017/2018	C-07 C-07	20200253	☒ Existing (unchanged) ☐ To be Removed ☐ New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced	4SRB	
RC-07	Reciprocating Compressor	Arial	JGK-4	F-53645	N/A	N/A	3/2017 2017/2018	N/A N/A	N/A	☒ Existing (unchanged) ☐ To be Removed ☐ New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced	N/A	
C-08	Compressor Engine	Waukesha	L7042GSI	329436	1478 Hp	1478 Hp	4/1979 2017/2018	C-08 C-08	20200253	☒ Existing (unchanged) ☐ To be Removed ☐ New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced	4SRB	
RC-08	Reciprocating Compressor	IR	RDS-4	YRS-1837	N/A	N/A	1983 2017/2018	N/A N/A	N/A	☒ Existing (unchanged) ☐ To be Removed ☐ New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced	N/A	

Unit Number[1]	Source Description	Make	Model #	Serial #	Manufacturer's Rated Capacity[3] (Specify Units)	Requested Permitted Capacity[3] (Specify Units)	Date of Manufacture[2] / Date of Construction/ Reconstruction[2]	Controlled by Unit # / Emissions vented to Stack #	Source Classification Code (SCC)	For Each Piece of Equipment, Check One	RICE Ignition Type (CI, SI, 4SLB, 4SRB, 2SLB)[4]	Replacing Unit No.
C-09	Compressor Engine	Waukesha	L7042GSI	C-1202 5/5	1478 Hp	1478 Hp	4/1996 2020	C-09 C-09	20200253	☒ Existing (unchanged) ☐ To be Removed ☐ New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced	4SRB	
RC-09	Reciprocating Compressor	Ariel	JGK-4	F110-69	N/A	N/A	4/1996 2020	N/A N/A	N/A	☒ Existing (unchanged) ☐ To be Removed ☐ New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced	N/A	
C-10	Compressor Engine	Waukesha	L7042GSI	C-143 20/1	1478 Hp	1478 Hp	9/2002 2020	C-10 C-10	20200253	☒ Existing (unchanged) ☐ To be Removed ☐ New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced	4SRB	
RC-10	Reciprocating Compressor	Ariel	JGK-4	F16287	N/A	N/A	5/2005 2020	N/A N/A	N/A	☒ Existing (unchanged) ☐ To be Removed ☐ New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced	N/A	
C-11	Compressor Engine	Caterpillar	G3606	TBD	TBD	TBD	Post 7/1/2010 TBD	C-11 C-11	20200254	☐ Existing (unchanged) ☐ To be Removed ☒ New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced	4SLB	
RC-11	Reciprocating Compressor	TBD	TBD	TBD	N/A	N/A	TBD TBD	N/A N/A	N/A	☐ Existing (unchanged) ☐ To be Removed ☒ New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced	N/A	
C-12	Compressor Engine	Caterpillar	G3606	TBD	TBD	TBD	Post 7/1/2010 TBD	C-12 C-12	20200254	☐ Existing (unchanged) ☐ To be Removed ☒ New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced	4SLB	
RC-12	Reciprocating Compressor	TBD	TBD	TBD	N/A	N/A	TBD TBD	N/A N/A	N/A	☐ Existing (unchanged) ☐ To be Removed ☒ New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced	N/A	
C-13	Compressor Engine	Waukesha	L7042GSI	TBD	TBD	TBD	Post 7/1/2010 TBD	C-13 C-13	20200253	☐ Existing (unchanged) ☐ To be Removed ☒ New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced	4SRB	
RC-13	Reciprocating Compressor	TBD	TBD	TBD	N/A	N/A	TBD TBD	N/A N/A	N/A	☐ Existing (unchanged) ☐ To be Removed ☒ New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced	N/A	
FUG	Facility-Wide Fugitive Emissions	N/A	N/A	N/A	N/A	N/A	2016 2016	N/A N/A	310888811	☐ Existing (unchanged) ☐ To be Removed ☐ New/Additional ☐ Replacement Unit ☒ To Be Modified ☐ To be Replaced	N/A	
F-01	Process Flare	Hero	F60UR6	H17063	20 MMscf/yr	20 MMscf/yr	2017 2017	N/A F-01	31000205	☒ Existing (unchanged) ☐ To be Removed ☐ New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced	N/A	
Vent SSM	Venting Startup, Shutdown, and Maintenance	N/A	N/A	N/A	N/A	N/A	2016 2016	N/A N/A	31088811	☒ Existing (unchanged) ☐ To be Removed ☐ New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced	N/A	
M	Malfunction	N/A	N/A	N/A	N/A	N/A	2016 2016	N/A N/A	31088811	☒ Existing (unchanged) ☐ To be Removed ☐ New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced	N/A	

[1] 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.

[2] Specify dates required to determine regulatory applicability.

[3] 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.

[4] "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-B: Insignificant Activities[1] (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), 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 https://www.env.nm.gov/wp-content/uploads/sites/2/2017/10/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[2]	For Each Piece of Equipment, Check Onc
			Serial No.	Capacity Units	Insignificant Activity citation (e.g. IA List Item #1.a)	Date of Installation /Construction[2]	
TK-1	Methanol Storage Tank	N/A	N/A	500	20.2.72.202.B.5 NMAC	2016	☒ Existing (unchanged) ☐ To be Removed ☐ New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced
			N/A	gal		2016	
TK-4	Lube Oil Storage Tank	N/A	N/A	1500	20.2.72.202.B.2 NMAC	2016	☒ Existing (unchanged) ☐ To be Removed ☐ New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced
			N/A	gal		2016	
TK-5	Antifreeze Storage Tank	N/A	N/A	4000	20.2.72.202.B.2 NMAC	2016	☒ Existing (unchanged) ☐ To be Removed ☐ New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced
			N/A	gal		2016	
TK-6	Produced Water Tank	Permian Tank & Manufacturing CO	N/A	210	20.2.72.202.B.5 NMAC	2016	☒ Existing (unchanged) ☐ To be Removed ☐ New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced
			F58322	bbl		2016	
TK-7	Water Storage Tank	N/A	N/A	62	20.2.72.202.B.5 NMAC	2016	☒ Existing (unchanged) ☐ To be Removed ☐ New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced
			N/A	bbl		2016	
Load	Produced Water Loading	N/A	N/A	22,630	20.2.72.202.B.5 NMAC	2016	☒ Existing (unchanged) ☐ To be Removed ☐ New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced
			N/A	bbl		2016	
Haul	Haul Road	N/A	N/A	N/A	20.2.72.202.B.5 NMAC	2016	☒ Existing (unchanged) ☐ To be Removed ☐ New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced
			N/A	N/A		2016	
GEN	Emergency Generator	Generac	SG300	460	20.2.72.202.B.3 NMAC	20018	☒ Existing (unchanged) ☐ To be Removed ☐ New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced
			3002583743	460		2018	
							☐ Existing (unchanged) ☐ To be Removed ☐ New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced
							☐ Existing (unchanged) ☐ To be Removed ☐ New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced
							☐ Existing (unchanged) ☐ To be Removed ☐ New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced
							☐ Existing (unchanged) ☐ To be Removed ☐ New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced
							☐ Existing (unchanged) ☐ To be Removed ☐ New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced

[1] 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.

[2] Specify date(s) required to determine regulatory applicability.

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)[1]	Efficiency (% Control by Weight)	Method used to Estimate Efficiency
C-01	3-way catalyst	2016	NOx, CO, VOC, HCOH	C-01	96.2% NOx, 95% CO, 50% VOC, 84% HCOH	Manufacturer's Data
C-02	3-way catalyst	2016	NOx, CO, VOC, HCOH	C-02	96.2% NOx, 95% CO, 50% VOC, 84% HCOH	Manufacturer's Data
C-03	3-way catalyst	2016	NOx, CO, VOC, HCOH	C-03	96.2% NOx, 95% CO, 50% VOC, 84% HCOH	Manufacturer's Data
C-04	3-way catalyst	2016	NOx, CO, VOC, HCOH	C-04	96.2% NOx, 95% CO, 50% VOC, 84% HCOH	Manufacturer's Data
C-05	3-way catalyst	2016	NOx, CO, VOC, HCOH	C-05	96.2% NOx, 95% CO, 50% VOC, 84% HCOH	Manufacturer's Data
C-06	3-way catalyst	2017	NOx, CO, VOC, HCOH	C-06	96.2% NOx, 95% CO, 50% VOC, 84% HCOH	Manufacturer's Data
C-07	3-way catalyst	2017	NOx, CO, VOC, HCOH	C-07	96.2% NOx, 95% CO, 50% VOC, 84% HCOH	Manufacturer's Data
C-08	3-way catalyst	2017	NOx, CO, VOC, HCOH	C-08	96.2% NOx, 95% CO, 50% VOC, 84% HCOH	Manufacturer's Data
C-09	3-way catalyst	2020	NOx, CO, VOC, HCOH	C-09	96.2% NOx, 95% CO, 50% VOC, 84% HCOH	Manufacturer's Data
C-10	3-way catalyst	2020	NOx, CO, VOC, HCOH	C-10	96.2% NOx, 95% CO, 50% VOC, 84% HCOH	Manufacturer's Data
C-11	Oxidation Catalyst	TBD	CO, VOC, HCOH	C-11	88.6% CO, 13.8% VOC, 59.4% HCOH	Manufacturer's Data

Control Equipment Unit No.	Control Equipment Description	Date Installed	Controlled Pollutant(s)	Controlling Emissions for Unit Number(s)[1]	Efficiency (% Control by Weight)	Method used to Estimate Efficiency
C-12	Oxidation Catalyst	TBD	CO, VOC, HCOH	C-12	88.6% CO, 13.8% VOC, 59.4% HCOH	Manufacturer's Data
C-13	3-way catalyst	TBD	NOx, CO, VOC, HCOH	C-13	96.2% NOx, 95% CO, 50% VOC, 84% HCOH	Manufacturer's Data

[1] 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[1]		PM10[1]		PM2.5[1]		H_2S		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
C-01	42.36	185.53	29.33	128.45	0.98	4.28	0.01	0.03	0.22	0.96	0.22	0.96	0.22	0.96	-	-		
C-02	42.36	185.53	29.33	128.45	0.98	4.28	0.01	0.03	0.22	0.96	0.22	0.96	0.22	0.96	-	-		
C-03	42.36	185.53	29.33	128.45	0.98	4.28	0.01	0.03	0.22	0.96	0.22	0.96	0.22	0.96	-	-		
C-04	42.36	185.53	29.33	128.45	0.98	4.28	0.01	0.03	0.22	0.96	0.22	0.96	0.22	0.96	-	-		
C-05	42.36	185.53	29.33	128.45	0.98	4.28	0.01	0.03	0.22	0.96	0.22	0.96	0.22	0.96	-	-		
C-06	42.36	185.53	29.33	128.45	0.98	4.28	0.01	0.03	0.22	0.96	0.22	0.96	0.22	0.96	-	-		
C-07	42.36	185.53	29.33	128.45	0.98	4.28	0.01	0.03	0.22	0.96	0.22	0.96	0.22	0.96	-	-		
C-08	42.36	185.53	29.33	128.45	0.98	4.28	0.01	0.03	0.22	0.96	0.22	0.96	0.22	0.96	-	-		
C-09	42.36	185.53	29.33	128.45	0.98	4.28	0.01	0.03	0.22	0.96	0.22	0.96	0.22	0.96	-	-		
C-10	42.36	185.53	29.33	128.45	0.98	4.28	0.01	0.03	0.22	0.96	0.22	0.96	0.22	0.96	-	-		
C-11	2.07	9.05	9.09	39.83	1.20	5.25	0.01	0.04	0.14	0.62	0.14	0.62	0.14	0.62	-	-		
C-12	2.07	9.05	9.09	39.83	1.20	5.25	0.01	0.04	0.14	0.62	0.14	0.62	0.14	0.62	-	-		
C-13	42.36	185.53	29.33	128.45	0.98	4.28	0.01	0.03	0.22	0.96	0.22	0.96	0.22	0.96	-	-		
FUG	-	-	-	-	5.46	23.91	-	-	-	-	-	-	-	-	0.024	0.10		
F-01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Vent SSM	-	-	-	-	-	10	-	-	-	-	-	-	-	-	-	1		
M	-	-	-	-	-	10	-	-	-	-	-	-	-	-	-	1		
Totals	470.09	2058.99	340.77	1492.58	18.61	101.51	0.090	0.39	2.70	11.85	2.70	11.85	2.70	11.85	0.02	2.10		

[1]**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 $1.41E^{-4}$).

Unit No.	NOx		CO		VOC		SOx		PM[1]		PM10[1]		PM2.5[1]		H_2S		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
C-01	2.01	8.81	1.83	8.03	0.61	2.68	0.0067	0.029	0.22	0.96	0.22	0.96	0.22	0.96	-	-		
C-02	2.01	8.81	1.83	8.03	0.61	2.68	0.0067	0.029	0.22	0.96	0.22	0.96	0.22	0.96	-	-		
C-03	2.01	8.81	1.83	8.03	0.61	2.68	0.0067	0.029	0.22	0.96	0.22	0.96	0.22	0.96	-	-		
C-04	2.01	8.81	1.83	8.03	0.61	2.68	0.0067	0.029	0.22	0.96	0.22	0.96	0.22	0.96	-	-		
C-05	2.01	8.81	1.83	8.03	0.61	2.68	0.0067	0.029	0.22	0.96	0.22	0.96	0.22	0.96	-	-		
C-06	2.01	8.81	1.83	8.03	0.61	2.68	0.0067	0.029	0.22	0.96	0.22	0.96	0.22	0.96	-	-		
C-07	2.01	8.81	1.83	8.03	0.61	2.68	0.0067	0.029	0.22	0.96	0.22	0.96	0.22	0.96	-	-		
C-08	2.01	8.81	1.83	8.03	0.61	2.68	0.0067	0.029	0.22	0.96	0.22	0.96	0.22	0.96	-	-		
C-09	2.01	8.81	1.83	8.03	0.61	2.68	0.0067	0.029	0.22	0.96	0.22	0.96	0.22	0.96	-	-		
C-10	2.01	8.81	1.83	8.03	0.61	2.68	0.0067	0.029	0.22	0.96	0.22	0.96	0.22	0.96	-	-		
C-11	2.58	11.32	1.03	4.53	1.03	4.53	0.0083	0.036	0.14	0.62	0.14	0.62	0.14	0.62	-	-		
C-12	2.58	11.32	1.03	4.53	1.03	4.53	0.0083	0.036	0.14	0.62	0.14	0.62	0.14	0.62	-	-		
C-13	2.01	8.81	1.83	8.03	0.61	2.68	0.0067	0.029	0.22	0.96	0.22	0.96	0.22	0.96	-	-		
FUG	-	-	-	-	5.46	23.91	-	-	-	-	-	-	-	-	0.024	0.10		
F-01	0.68	0.83	3.11	3.80	2.73	3.27	1.73	2.07	-	-	-	-	-	-	0.019	0.022		
Vent SSM	-	-	-	-	-	10	-	-	-	-	-	-	-	-	-	1		
M	-	-	-	-	-	10	-	-	-	-	-	-	-	-	-	1		
Totals	27.98	120.41	25.33	101.16	16.97	85.67	1.82	2.47	2.70	11.85	2.70	11.85	2.70	11.85	0.04	2.13		

[1] **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).

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 scehduled 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 explanations of SSM emissions in Section 6 and 6a.

All applications for facilities that have emissions during routine our predictable startup, shutdown or scheduled maintenance (SSM)[1], 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) 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^2		$PM10^2$		$PM2.5^2$		H_2S		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
Vent SSM						10										1		
M						10										1		
Totals																		

[1] **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.

[2] **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).

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		□ H_2S or □ 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
Totals:																	

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)			
C-01	C-01	Vertical	No	40	1126	164.8	-	-	209.9	1.0
C-02	C-02	Vertical	No	40	1126	164.8	-	-	209.9	1.0
C-03	C-03	Vertical	No	40	1126	164.8	-	-	209.9	1.0
C-04	C-04	Vertical	No	40	1126	164.8	-	-	209.9	1.0
C-05	C-05	Vertical	No	40	1126	164.8	-	-	209.9	1.0
C-06	C-06	Vertical	No	40	1126	164.8	-	-	209.9	1.0
C-07	C-07	Vertical	No	40	1126	164.8	-	-	209.9	1.0
C-08	C-08	Vertical	No	40	1126	164.8	-	-	209.9	1.0
C-09	C-09	Vertical	No	40	1126	164.8	-	-	209.9	1.0
C-10	C-10	Vertical	No	40	1126	164.8	-	-	209.9	1.0
C-11	C-11	Vertical	No	27.78	835	114.1	-	-	52.07	1.67
C-12	C-12	Vertical	No	27.78	835	114.1	-	-	52.07	1.67
C-13	C-13	Vertical	No	40	1126	164.8	-	-	209.9	1.0
F-01	F-01	Vertical	No	40	1832	-	-	-	65.6	1.3

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		Formaldehydee □ HAP or □ TAP		Benzene □ HAP or □ TAP		Acetaldehyde □ HAP or □ TAP		Acrolein □ HAP or □ TAP		Provide Pollutant Name Here □ HAP or □ TAP		Provide Pollutant Name Here □ HAP or □ TAP		Provide Pollutant Name Here □ HAP or □ TAP		Provide Pollutant Name Here □ HAP or □ 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
C-01	C-01	0.1	0.5	-	0.1	-	0.1	-	0.1	-	0.1								
C-02	C-02	0.1	0.5	-	0.1	-	0.1	-	0.1	-	0.1								
C-03	C-03	0.1	0.5	-	0.1	-	0.1	-	0.1	-	0.1								
C-04	C-04	0.1	0.5	-	0.1	-	0.1	-	0.1	-	0.1								
C-05	C-05	0.1	0.5	-	0.1	-	0.1	-	0.1	-	0.1								
C-06	C-06	0.1	0.5	-	0.1	-	0.1	-	0.1	-	0.1								
C-07	C-07	0.1	0.5	-	0.1	-	0.1	-	0.1	-	0.1								
C-08	C-08	0.1	0.5	-	0.1	-	0.1	-	0.1	-	0.1								
C-09	C-09	0.1	0.5	-	0.1	-	0.1	-	0.1	-	0.1								
C-10	C-10	0.1	0.5	-	0.1	-	0.1	-	0.1	-	0.1								
C-11	C-11	0.5	2.4	0.3	1.5	-	-	0.1	0.5	0.1	0.3								
C-12	C-12	0.5	2.4	0.3	1.5	-	-	0.1	0.5	0.1	0.3								
C-13	C-13	0.1	0.5	-	0.1	-	0.1	-	0.1	-	0.1								
FUG	FUG	-	1.7	-	-	-	0.2	-	-	-	-								
F-01	F-01	0.1	0.1	-	-	-	-	-	-	-	-								
Vent SSM	Vent SSM	-	1	-	-	-	-	-	-	-	-								
M	M	-	1	-	-	-	-	-	-	-	-								
Totals:		2.2	14.1	0.6	4.1	-	1.3	0.2	2.1	0.2	1.7								

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
C-01	Field Gas	Raw/Field Natural Gas	1000 Btu/scf	0.011 MMscf/hr	99.37 MMscf/yr	0.32%	-
C-02	Field Gas	Raw/Residue Gas	1000 Btu/scf	0.011 MMscf/hr	99.37 MMscf/yr	0.32%	-
C-03	Field Gas	Raw/Field Natural Gas	1000 Btu/scf	0.011 MMscf/hr	99.37 MMscf/yr	0.32%	-
C-04	Field Gas	Raw/Field Natural Gas	1000 Btu/scf	0.011 MMscf/hr	99.37 MMscf/yr	0.32%	-
C-05	Field Gas	Raw/Field Natural Gas	1000 Btu/scf	0.011 MMscf/hr	99.37 MMscf/yr	0.32%	-
C-06	Field Gas	Raw/Field Natural Gas	1000 Btu/scf	0.011 MMscf/hr	99.37 MMscf/yr	0.32%	-
C-07	Field Gas	Raw/Field Natural Gas	1000 Btu/scf	0.011 MMscf/hr	99.37 MMscf/yr	0.32%	-
C-08	Field Gas	Raw/Field Natural Gas	1000 Btu/scf	0.011 MMscf/hr	99.37 MMscf/yr	0.32%	-
C-09	Field Gas	Raw/Field Natural Gas	1000 Btu/scf	0.011 MMscf/hr	99.37 MMscf/yr	0.32%	-
C-10	Field Gas	Raw/Field Natural Gas	1000 Btu/scf	0.011 MMscf/hr	99.37 MMscf/yr	0.32%	-
C-11	Field Gas	Raw/Field Natural Gas	1000 Btu/scf	0.014 MMscf/hr	124.1 MMscf/yr	0.32%	-
C-12	Field Gas	Raw/Field Natural Gas	1000 Btu/scf	0.014 MMscf/hr	124.1 MMscf/yr	0.32%	-
C-13	Field Gas	Raw/Field Natural Gas	1000 Btu/scf	0.011 MMscf/hr	99.37 MMscf/yr	0.32%	-
F-01	Field Gas	Raw/Field Natural Gas	1000 Btu/scf	0.0023 MMscf/hr	20 MMscf/yr	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)
All tanks are exempt units.									

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^3)			Roof	Shell			
All tanks are exempt units.													

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^3 = 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)**
Natural Gas	Mixed Hydrocarbons	Gas	70 MMscf/day	Natural Gas	Mixed Hydrocarbons	Gas	70 MMscf/day

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
N/A - There is no CEM equipment located 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
N/A - There is no PEM equipment located 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 CO2e emissions are less than 75,000 tons per year.

		CO_2 ton/yr	N_2O ton/yr	CH_4 ton/yr	SF_6 ton/yr	PFC/HFC ton/yr[2]									**Total GHG** Mass Basis ton/yr[4]	**Total CO_2e** ton/yr[5]
Unit No.	**GWPs [1]**	**1**	**298**	**25**	**22,800**	**footnote 3**										
C-01	**mass GHG**	5812.03	0.011	0.11											5812.15	
	CO_2e	5812.03	3.26	2.74												5818.03
C-02	**mass GHG**	5812.03	0.011	0.11											5812.15	
	CO_2e	5812.03	3.26	2.74												5818.03
C-03	**mass GHG**	5812.03	0.011	0.11											5812.15	
	CO_2e	5812.03	3.26	2.74												5818.03
C-04	**mass GHG**	5812.03	0.011	0.11											5812.15	
	CO_2e	5812.03	3.26	2.74												5818.03
C-05	**mass GHG**	5812.03	0.011	0.11											5812.15	
	CO_2e	5812.03	3.26	2.74												5818.03
C-06	**mass GHG**	5812.03	0.011	0.11											5812.15	
	CO_2e	5812.03	3.26	2.74												5818.03
C-07	**mass GHG**	5812.03	0.011	0.11											5812.15	
	CO_2e	5812.03	3.26	2.74												5818.03
C-08	**mass GHG**	5812.03	0.011	0.11											5812.15	
	CO_2e	5812.03	3.26	2.74												5818.03
C-09	**mass GHG**	5812.03	0.011	0.11											5812.15	
	CO_2e	5812.03	3.26	2.74												5818.03
C-10	**mass GHG**	5812.03	0.011	0.11											5812.15	
	CO_2e	5812.03	3.26	2.74												5818.03
C-11	**mass GHG**	7258.86	0.014	0.14											7259.01	
	CO_2e	7258.86	4.17	3.50												7266.53
C-12	**mass GHG**	7258.86	0.014	0.14											7259.01	
	CO_2e	7258.86	4.17	3.50												7266.53
C-13	**mass GHG**	5812.03	0.011	0.11											5812.15	
	CO_2e	5812.03	3.26	2.74												5818.03
F-01	**mass GHG**	1542.84	0.0027	5.81											1548.65	
	CO_2e	1542.84	0.80	145.25												1688.89
FUG	**mass GHG**	2.78		23.41											26.19	
	CO2e	2.78		585.25												588.03
	mass GHG															
	CO_2e															
Total	**mass GHG**	79995.67	0.15	30.71											80026.53	
	CO_2e	79995.67	45.01	767.64												80808.32

[1] **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.

[2] For **HFCs** or **PFCs** describe the specific HFC or PFC compound and use a separate column for each individual compound.

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

[4] Green house gas emissions on a **mass basis** is the ton per year green house gas emission before adjustment with its GWP.

[5] **CO_2e** 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

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) for more detailed instructions on SSM emissions.

Targa Midstream Services, LLC (Targa) owns and operates Brininstool Compressor Station (Facility), which is located approximately 23.6 miles southwest of Eunice in Lea County, New Mexico. Ten (10) Waukesha L7042GSI compressor engines and associated compressors, one (1) flare, and site-wide fugitives are currently authorized under NSR-6371-M3. The Facility also has various tanks, produced water loading, and an emergency generator that are exempt.

Targa has added two (2) Caterpillar G3606 compressor engines, one (1) additional Waukesha L7042GSI compressor engine and associated compressors at the Facility.

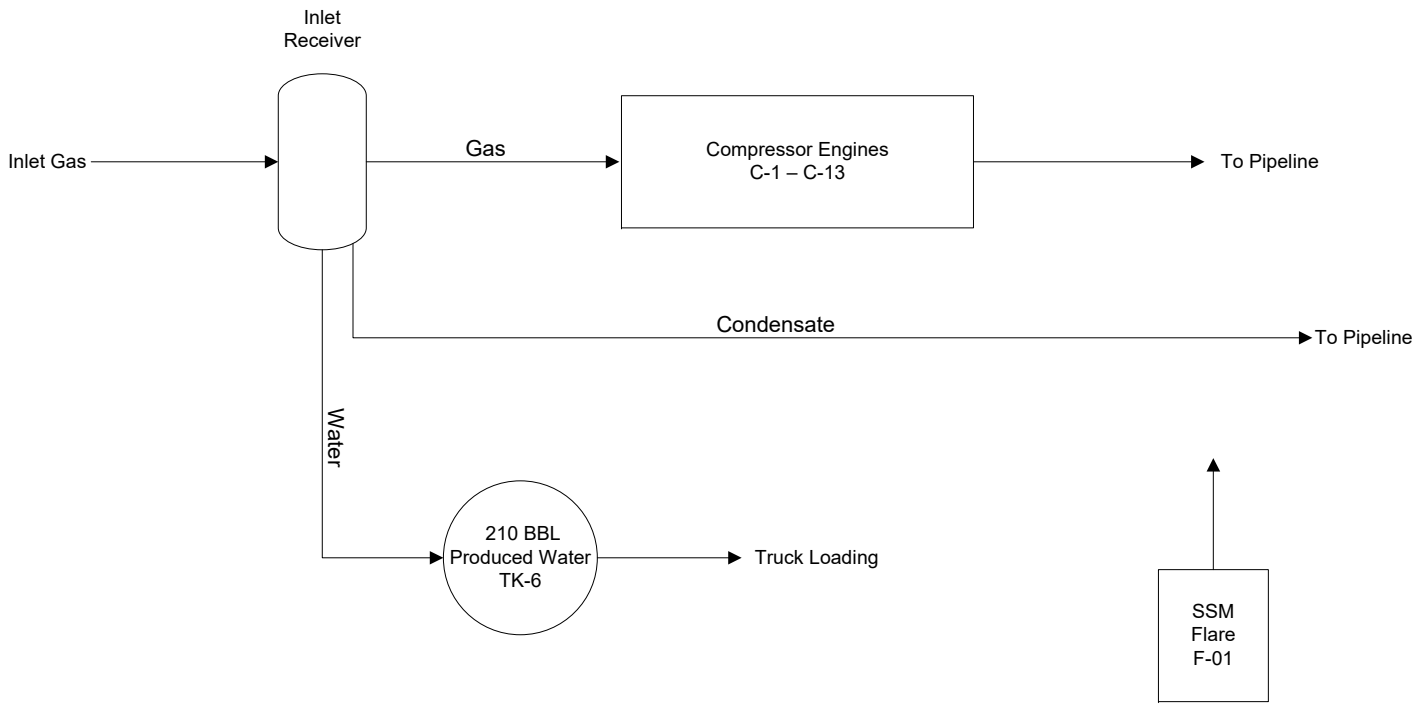
Targa is requesting 10 tpy VOC, 1 tpy H_2S and 1 tpy HAP SSM emissions. In addition, Targa is requesting 10 tpy VOC, 1 tpy H_2S and 1 tpy HAP malfunction emissions.

Section 4

Process Flow Sheet

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.

A Process flow sheet is included in this section.
.



ALTAMIRA
525 Central Park Dr, Ste 500
Oklahoma City, OK 73105
www.altamira-us.com

FIGURE TITLE
PROCESS FLOW DIAGRAM

DOCUMENT TITLE
TV PERMIT APPLICATION

CLIENT
TARGA MIDSTREAM SERVICES, LLC

LOCATION
BRININSTOOL COMPRESSOR STATION
LEA COUNTY, NEW MEXICO

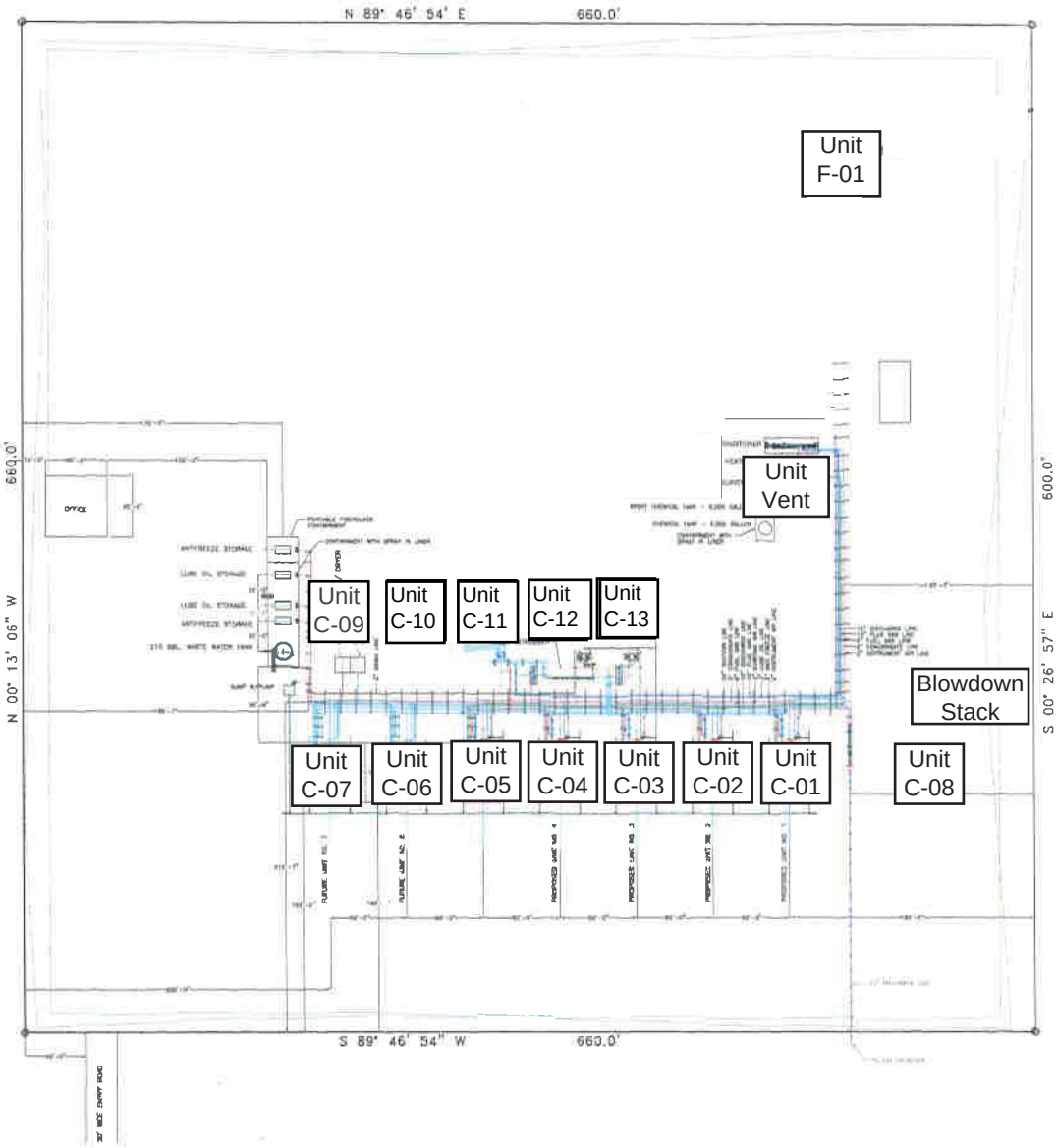
DATE	10/29/2021
SCALE	NOT TO SCALE
DESIGNED BY	AD
APPROVED BY	RZ
DRAWN BY	AD
PROJECT NUMBER	
Attachment	
SECTION 4	

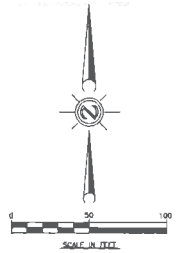
Section 5

Plot Plan Drawn To Scale

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.

A Plot Plan is included in this section.





REFERENCE DRAWINGS

NUMBER	DESCRIPTION

REVISIONS

DATE	REVISION	DESCRIPTION

ENGINEERED PIPELINE SYSTEMS, INC.
P.O. BOX 14989
ODESSA, TEXAS 79768

TARGA RESOURCES
BRININSTOOL COMPRESSOR STATION
LEA COUNTY, NEW MEXICO

SITE PIPING LAYOUT

DRAWN BY: PJB
CHECKED BY:
DATE: 7/29/15
DRAWING NO. 15-052-SPL

Section 6

All Calculations

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 rational 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) 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.

All calculations are included in this section.

TABLE 6-1

Targa Midstream Services LLC –
Brininstool Compressor Station

Emissions Summary

Facility Emissions

Uncontrolled Emissions

Unit No.	Description/Source	NOx pph	NOx tpy	CO pph	CO tpy	VOC pph	VOC tpy	SO_2 pph	SO_2 tpy	TSP pph	TSP tpy	PM-10 pph	PM-10 tpy	PM-2.5 pph	PM-2.5 tpy	H_2S pph	H_2S tpy
Unchanged Sources																	
C-01	Waukesha L7042GSI	42.36	185.53	29.33	128.45	0.98	4.28	0.0067	0.029	0.22	0.96	0.22	0.96	0.22	0.96	-	-
C-02	Waukesha L7042GSI	42.36	185.53	29.33	128.45	0.98	4.28	0.0067	0.029	0.22	0.96	0.22	0.96	0.22	0.96	-	-
C-03	Waukesha L7042GSI	42.36	185.53	29.33	128.45	0.98	4.28	0.0067	0.029	0.22	0.96	0.22	0.96	0.22	0.96	-	-
C-04	Waukesha L7042GSI	42.36	185.53	29.33	128.45	0.98	4.28	0.0067	0.029	0.22	0.96	0.22	0.96	0.22	0.96	-	-
C-05	Waukesha L7042GSI	42.36	185.53	29.33	128.45	0.98	4.28	0.0067	0.029	0.22	0.96	0.22	0.96	0.22	0.96	-	-
C-06	Waukesha L7042GSI	42.36	185.53	29.33	128.45	0.98	4.28	0.0067	0.029	0.22	0.96	0.22	0.96	0.22	0.96	-	-
C-07	Waukesha L7042GSI	42.36	185.53	29.33	128.45	0.98	4.28	0.0067	0.029	0.22	0.96	0.22	0.96	0.22	0.96	-	-
C-08	Waukesha L7042GSI	42.36	185.53	29.33	128.45	0.98	4.28	0.0067	0.029	0.22	0.96	0.22	0.96	0.22	0.96	-	-
C-09	Waukesha L7042GSI	42.36	185.53	29.33	128.45	0.98	4.28	0.0067	0.029	0.22	0.96	0.22	0.96	0.22	0.96	-	-
C-10	Waukesha L7042GSI	42.36	185.53	29.33	128.45	0.98	4.28	0.0067	0.029	0.22	0.96	0.22	0.96	0.22	0.96	-	-
FUG	Facility-wide Fugitive Emissions	-	-	-	-	5.46	23.91	-	-	-	-	-	-	-	-	0.024	0.10
F-01	Process Flare	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Vent	Venting SSM	-	-	-	-	-	10.00	-	-	-	-	-	-	-	-	-	1.00
SSM/M	Malfunction	-	-	-	-	-	10.00	-	-	-	-	-	-	-	-	-	1.00
Proposed Equipment																	
C-11	Caterpillar G3606	2.07	9.05	9.09	39.83	1.20	5.25	0.0083	0.036	0.14	0.62	0.14	0.62	0.14	0.62	-	-
C-12	Caterpillar G3606	2.07	9.05	9.09	39.83	1.20	5.25	0.0083	0.036	0.14	0.62	0.14	0.62	0.14	0.62	-	-
C-13	Waukesha L7042GSI	42.4	185.5	29.3	128.4	0.98	4.28	0.0067	0.029	0.22	0.96	0.22	0.96	0.22	0.96	-	-
	Total	**470.09**	**2058.99**	**340.77**	**1492.58**	**18.61**	**101.51**	**0.090**	**0.39**	**2.70**	**11.85**	**2.70**	**11.85**	**2.70**	**11.85**	**0.02**	**2.10**

Controlled Emissions

Unit No.	Description/Source	NOx pph	NOx tpy	CO pph	CO tpy	VOC pph	VOC tpy	SO_2 pph	SO_2 tpy	TSP pph	TSP tpy	PM-10 pph	PM-10 tpy	PM-2.5 pph	PM-2.5 tpy	H_2S pph	H_2S tpy
Unchanged Sources																	
C-01	Waukesha L7042GSI	2.01	8.81	1.83	8.03	0.61	2.68	0.0067	0.029	0.22	0.96	0.22	0.96	0.22	0.96	-	-
C-02	Waukesha L7042GSI	2.01	8.81	1.83	8.03	0.61	2.68	0.0067	0.029	0.22	0.96	0.22	0.96	0.22	0.96	-	-
C-03	Waukesha L7042GSI	2.01	8.81	1.83	8.03	0.61	2.68	0.0067	0.029	0.22	0.96	0.22	0.96	0.22	0.96	-	-
C-04	Waukesha L7042GSI	2.01	8.81	1.83	8.03	0.61	2.68	0.0067	0.029	0.22	0.96	0.22	0.96	0.22	0.96	-	-
C-05	Waukesha L7042GSI	2.01	8.81	1.83	8.03	0.61	2.68	0.0067	0.029	0.22	0.96	0.22	0.96	0.22	0.96	-	-
C-06	Waukesha L7042GSI	2.01	8.81	1.83	8.03	0.61	2.68	0.0067	0.029	0.22	0.96	0.22	0.96	0.22	0.96	-	-
C-07	Waukesha L7042GSI	2.01	8.81	1.83	8.03	0.61	2.68	0.0067	0.029	0.22	0.96	0.22	0.96	0.22	0.96	-	-
C-08	Waukesha L7042GSI	2.01	8.81	1.83	8.03	0.61	2.68	0.0067	0.029	0.22	0.96	0.22	0.96	0.22	0.96	-	-
C-09	Waukesha L7042GSI	2.01	8.81	1.83	8.03	0.61	2.68	0.0067	0.029	0.22	0.96	0.22	0.96	0.22	0.96	-	-
C-10	Waukesha L7042GSI	2.01	8.81	1.83	8.03	0.61	2.68	0.0067	0.029	0.22	0.96	0.22	0.96	0.22	0.96	-	-
FUG	Facility-wide Fugitive Emissions	-	-	-	-	5.46	23.91	-	-	-	-	-	-	-	-	0.024	0.10
F-01	Process Flare	0.68	0.83	3.11	3.80	2.73	3.27	1.73	2.07	-	-	-	-	-	-	0.019	0.022
Vent	Venting SSM	-	-	-	-	-	10.00	-	-	-	-	-	-	-	-	-	1.00
SSM/M	Startup, Shutdown, Maintenance, and Malfunction	-	-	-	-	-	10.00	-	-	-	-	-	-	-	-	-	1.00
Proposed Equipment																	
C-11	Caterpillar G3606	2.58	11.32	1.03	4.53	1.03	4.53	0.0083	0.036	0.14	0.62	0.14	0.62	0.14	0.62	-	-
C-12	Caterpillar G3606	2.58	11.32	1.03	4.53	1.03	4.53	0.0083	0.036	0.14	0.62	0.14	0.62	0.14	0.62	-	-
C-13	Waukesha L7042GSI	2.01	8.81	1.83	8.03	0.61	2.68	0.0067	0.029	0.22	0.96	0.22	0.96	0.22	0.96	-	-
	Total	**27.98**	**120.41**	**25.33**	**101.16**	**16.97**	**85.67**	**1.82**	**2.47**	**2.70**	**11.85**	**2.70**	**11.85**	**2.70**	**11.85**	**0.04**	**2.13**

"-" Indicates emissions of this pollutant are not expected
"*" Indicates hourly emissions are not appropriate for this unit

Targa Midstream Services LLC –
Brininstool Compressor Station

Emissions Summary

Facility Emissions

Uncontrolled Emissions

Unit No.	Description/Source	Total HAP pph	Total HAP tpy	Formaldehyde pph	Formaldehyde tpy	Benzene pph	Benzene tpy	Toluene pph	Toluene tpy	Acetaldehyde pph	Acetaldehyde tpy	Acrolein pph	Acrolein tpy	CO_2 tpy	CH_4 tpy	N_2O tpy	CO_2e tpy
Unchanged Sources																	
C-01	Waukesha L7042GSI	0.25	1.10	0.16	0.71	1.79E-02	7.85E-02	6.33E-03	2.77E-02	3.16E-02	0.14	2.98E-02	0.13	5812.03	0.11	1.10E-02	5818.03
C-02	Waukesha L7042GSI	0.25	1.10	0.16	0.71	1.79E-02	7.85E-02	6.33E-03	2.77E-02	3.16E-02	0.14	2.98E-02	0.13	5812.03	0.11	1.10E-02	5818.03
C-03	Waukesha L7042GSI	0.25	1.10	0.16	0.71	1.79E-02	7.85E-02	6.33E-03	2.77E-02	3.16E-02	0.14	2.98E-02	0.13	5812.03	0.11	1.10E-02	5818.03
C-04	Waukesha L7042GSI	0.25	1.10	0.16	0.71	1.79E-02	7.85E-02	6.33E-03	2.77E-02	3.16E-02	0.14	2.98E-02	0.13	5812.03	0.11	1.10E-02	5818.03
C-05	Waukesha L7042GSI	0.25	1.10	0.16	0.71	1.79E-02	7.85E-02	6.33E-03	2.77E-02	3.16E-02	0.14	2.98E-02	0.13	5812.03	0.11	1.10E-02	5818.03
C-06	Waukesha L7042GSI	0.25	1.10	0.16	0.71	1.79E-02	7.85E-02	6.33E-03	2.77E-02	3.16E-02	0.14	2.98E-02	0.13	5812.03	0.11	1.10E-02	5818.03
C-07	Waukesha L7042GSI	0.25	1.10	0.16	0.71	1.79E-02	7.85E-02	6.33E-03	2.77E-02	3.16E-02	0.14	2.98E-02	0.13	5812.03	0.11	1.10E-02	5818.03
C-08	Waukesha L7042GSI	0.25	1.10	0.16	0.71	1.79E-02	7.85E-02	6.33E-03	2.77E-02	3.16E-02	0.14	2.98E-02	0.13	5812.03	0.11	1.10E-02	5818.03
C-09	Waukesha L7042GSI	0.25	1.10	0.16	0.71	1.79E-02	7.85E-02	6.33E-03	2.77E-02	3.16E-02	0.14	2.98E-02	0.13	5812.03	0.11	1.10E-02	5818.03
C-10	Waukesha L7042GSI	0.25	1.10	0.16	0.71	1.79E-02	7.85E-02	6.33E-03	2.77E-02	3.16E-02	0.14	2.98E-02	0.13	5812.03	0.11	1.10E-02	5818.03
FUG	Facility-wide Fugitive Emissions	*	1.69	-	-	*	0.21	*	0.29	-	-	-	-	2.78	23.41	-	587.92
F-01	Process Flare	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Vent	Venting SSM	-	1.00	-	-	-	-	-	-	-	-	-	-	0.76	6.40	-	160.70
SSM/M	Malfunction	-	1.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Proposed Equipment																	
C-11	Caterpillar G3606	1.03	4.53	0.83	3.62	6.23E-03	2.73E-02	5.78E-03	2.53E-02	0.12	0.52	7.28E-02	0.32	7258.86	0.14	1.37E-02	7266.36
C-12	Caterpillar G3606	1.03	4.53	0.83	3.62	6.23E-03	2.73E-02	5.78E-03	2.53E-02	0.12	0.52	7.28E-02	0.32	7258.86	0.14	1.37E-02	7266.36
C-13	Waukesha L7042GSI	0.25	1.10	0.16	0.71	1.79E-02	7.85E-02	6.33E-03	2.77E-02	3.16E-02	0.14	2.98E-02	0.13	5812.03	0.11	1.10E-02	5818.03
	Total	**4.83**	**24.84**	**3.45**	**15.09**	**0.21**	**1.13**	**0.08**	**0.65**	**0.59**	**2.56**	**0.47**	**2.08**	**78,453.60**	**31.28**	**0.15**	**79,279.70**

Controlled Emissions

Unit No.	Description/Source	Total HAP pph	Total HAP tpy	Formaldehyde pph	Formaldehyde tpy	Benzene pph	Benzene tpy	Toluene pph	Toluene tpy	Acetaldehyde pph	Acetaldehyde tpy	Acrolein pph	Acrolein tpy	CO_2 tpy	CH_4 tpy	N_2O tpy	CO_2e tpy
Unchanged Sources																	
C-01	Waukesha L7042GSI	0.12	0.53	3.26E-02	0.14	1.79E-02	7.85E-02	6.33E-03	2.77E-02	3.16E-02	0.14	2.98E-02	0.13	5812.03	0.11	0.011	5818.03
C-02	Waukesha L7042GSI	0.12	0.53	3.26E-02	0.14	1.79E-02	7.85E-02	6.33E-03	2.77E-02	3.16E-02	0.14	2.98E-02	0.13	5812.03	0.11	0.011	5818.03
C-03	Waukesha L7042GSI	0.12	0.53	3.26E-02	0.14	1.79E-02	7.85E-02	6.33E-03	2.77E-02	3.16E-02	0.14	2.98E-02	0.13	5812.03	0.11	0.011	5818.03
C-04	Waukesha L7042GSI	0.12	0.53	3.26E-02	0.14	1.79E-02	7.85E-02	6.33E-03	2.77E-02	3.16E-02	0.14	2.98E-02	0.13	5812.03	0.11	0.011	5818.03
C-05	Waukesha L7042GSI	0.12	0.53	3.26E-02	0.14	1.79E-02	7.85E-02	6.33E-03	2.77E-02	3.16E-02	0.14	2.98E-02	0.13	5812.03	0.11	0.011	5818.03
C-06	Waukesha L7042GSI	0.12	0.53	3.26E-02	0.14	1.79E-02	7.85E-02	6.33E-03	2.77E-02	3.16E-02	0.14	2.98E-02	0.13	5812.03	0.11	0.011	5818.03
C-07	Waukesha L7042GSI	0.12	0.53	3.26E-02	0.14	1.79E-02	7.85E-02	6.33E-03	2.77E-02	3.16E-02	0.14	2.98E-02	0.13	5812.03	0.11	0.011	5818.03
C-08	Waukesha L7042GSI	0.12	0.53	3.26E-02	0.14	1.79E-02	7.85E-02	6.33E-03	2.77E-02	3.16E-02	0.14	2.98E-02	0.13	5812.03	0.11	0.011	5818.03
C-09	Waukesha L7042GSI	0.12	0.53	3.26E-02	0.14	1.79E-02	7.85E-02	6.33E-03	2.77E-02	3.16E-02	0.14	2.98E-02	0.13	5812.03	0.11	0.011	5818.03
C-10	Waukesha L7042GSI	0.12	0.53	3.26E-02	0.14	1.79E-02	7.85E-02	6.33E-03	2.77E-02	3.16E-02	0.14	2.98E-02	0.13	5812.03	0.11	0.011	5818.03
FUG	Facility-wide Fugitive Emissions	*	1.69	-	-	*	0.21	*	0.29	-	-	-	-	2.78	23.41	-	587.92
F-01	Process Flare	0.085	0.10	-	-	-	-	-	-	-	-	-	-	1542.84	5.81	0.0027	1688.93
Vent	Venting SSM	-	1.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SSM/M	Startup, Shutdown, Maintenance, and Malfunction	-	1.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Proposed Equipment																	
C-11	Caterpillar G3606	0.54	2.38	0.34	1.47	6.23E-03	2.73E-02	5.78E-03	2.53E-02	0.12	0.52	7.28E-02	0.32	7258.86	0.14	0.014	7266.36
C-12	Caterpillar G3606	0.54	2.38	0.34	1.47	6.23E-03	2.73E-02	5.78E-03	2.53E-02	0.12	0.52	7.28E-02	0.32	7258.86	0.14	0.014	7266.36
C-13	Waukesha L7042GSI	0.12	0.53	3.26E-02	0.14	1.79E-02	7.85E-02	6.33E-03	2.77E-02	3.16E-02	0.14	2.98E-02	0.13	5812.03	0.11	0.011	5818.03
	Total	**2.50**	**14.37**	**1.03**	**4.51**	**0.21**	**1.13**	**0.081**	**0.65**	**0.59**	**2.56**	**0.47**	**2.08**	**79,995.68**	**30.70**	**0.15**	**80,807.93**

"-" Indicates emissions of this pollutant are not expected
"*" Indicates hourly emissions are not appropriate for this unit

TABLE 6-2

Targa Midstream Services LLC – Brininstool Compressor Station

Waukesha L7042GSI Compressor Engines

Unit No(s): C-01 to C-10, C-13
Description: Waukesha L7042GSI Rich Burn Engine

Engine Data

Horsepower:	1478	hp	Catalyst Manufactuer Data
Fuel consumption:	7675	Btu/hp-hr	MFG Data
Fuel heat value:	1000	Btu/scf	Nominal
Heating rate:	11.3	MMBtu/hr	
Fuel usage:	0.011	MMscf/hr	
	99.37	MMscf/yr	
Operating hours:	8760.0	hours/year	

Emission Rates

Uncontrolled Emissions

NO_x	CO	VOC[1]	SO_2[2]	PM^3	HCOH	Acetaldehyde[4]	Acrolein[4]	Benzene[4]	Ethylbenzene[4]	n-hexane[4]	Toluene[4]	Xylene[4]	Total HAPs[4]	
13	9	0.3			0.05									g/hp-hr
			5.88E-04	0.01941		0.00279	0.00263	0.00158	0.0000248	-	0.000558	0.000195		lb/MMBtu
42.36	**29.33**	**0.98**	**0.00667**	**0.22**	**0.16**	**0.032**	**0.030**	**0.018**	**0.00028**	**-**	**0.00633**	**0.00221**	**0.25**	**lb/hr**
185.53	**128.45**	**4.28**	**0.0292**	**0.96**	**0.71**	**0.14**	**0.13**	**0.079**	**0.0012**	**-**	**0.028**	**0.0097**	**1.10**	**tpy**

Controlled Emissions

NO_x	CO	VOC[1]	SO_2[2]	PM^3	HCOH	Acetaldehyde[4]	Acrolein[4]	Benzene[4]	Ethylbenzene[4]	n-hexane[4]	Toluene[4]	Xylene[4]	Total HAPs[4]		
0.494	**0.45**	**0.15**			**0.008**									g/hp-hr	Catalyst Manufacturer Data[5]
25%	**25%**	**25%**			**25%**									Safety Factor	
0.62	0.56	0.188			0.010									g/hp-hr	
95.3%	93.8%	37.5%			80.0%									%	Control Efficiency
				0.01941		0.00279	0.00263	0.00158	0.0000248	-	0.000558	0.000195		lb/MMBtu	AP-42 Table 3.2-3
2.01	**1.83**	**0.61**	**0.0067**	**0.22**	**0.033**	**0.032**	**0.030**	**0.018**	**0.00028**	**-**	**0.00633**	**0.00221**	**0.12**	**lb/hr**	
8.81	**8.03**	**2.68**	**0.0292**	**0.96**	**0.14**	**0.14**	**0.13**	**0.079**	**0.0012**	**-**	**0.028**	**0.0097**	**0.53**	**tpy**	

Greenhouse Gas Emissions

CO_2	CH_4	N_2O	CO_2e	
53.06	0.001	0.0001		kg/MMBtu 40 CFR 98 Subpart C
5812.03	**0.110**	**0.0110**	**5818.03**	**tpy**
1	25	298		GWP
	2.73842	3.2642		

Notes

[1] VOC emissions include VOC plus HCOH emisions.

[2] SO_2 emissions are based on the conversion of H_2S to SO_2 during the combustion process and a 1:1 molar ratio conversion of H_2S to SO_2. The fuel gas concentration is based on 60 ppm of H_2S.

[3] It is assumed that TSP = PM_{10} = $PM_{2.5}$

[4] Total HAPs were calculated using GRI-HAPCalc 3.01 with the manufacturer's HCOH emission rate substituted for the HAPCalc HCOH emission rate. Other individual HAPs calculated using GRI-HAPCalc 3.01.

[5] IAC Acoustics 3-way catalyst manufacturer's data. Please note the catalyst efficiency guaranteed by the manufacture shows a higher efficiency that what is used in the calculation on the CO and HCHO. The engines meet NSPS JJJJ and MACT ZZZZ emission requirements where applicable.

Exhaust Flow Rate:	9890	acfm
Exhaust Temp.:	1126	°F
Diameter:	1.0	ft
Velocity:	209.9	ft/s

TABLE 6-3

Targa Midstream Services LLC – Brininstool Compressor Station

Caterpillar G3606 Compressor Engines

Unit No(s): C-11, C-12
Description: Caterpillar G3606 Lean Burn Engine

Engine Data

Horsepower:	1875	hp	Catalyst Manufactuer Data
Fuel consumption:	7556	Btu/hp-hr	MFG Data
Fuel heat value:	1000	Btu/scf	Nominal
Heating rate:	14.2	MMBtu/hr	
Fuel usage:	0.014	MMscf/hr	
	124.1	MMscf/yr	
Operating hours:	8760.0	hours/year	

Emission Rates

Uncontrolled Emissions

NO_x	CO	VOC[1]	SO_2[2]	PM^3	HCOH	Acetaldehyde[4]	Acrolein[4]	Benzene[4]	Ethylbenzene[4]	n-hexane[4]	Toluene[4]	Xylene[4]	Total HAPs[4]		
0.5	2.2	0.29			0.2									g/hp-hr	
			5.88E-04	0.009987		0.00836	0.00514	0.00044	0.0000397	-	0.000408	0.000184		lb/MMBtu	
2.07	**9.09**	**1.20**	**0.00833**	**0.14**	**0.83**	**0.118**	**0.073**	**0.006**	**0.00056**	**-**	**0.00578**	**0.00261**	**1.03**	**lb/hr**	
9.05	**39.83**	**5.25**	**0.0365**	**0.62**	**3.62**	**0.52**	**0.32**	**0.027**	**0.0025**	**-**	**0.025**	**0.0114**	**4.53**	**tpy**	

Controlled Emissions

NO_x	CO	VOC[1]	SO_2[2]	PM^3	HCOH	Acetaldehyde[4]	Acrolein[4]	Benzene[4]	Ethylbenzene[4]	n-hexane[4]	Toluene[4]	Xylene[4]	Total HAPs[4]		
0.5	**0.2**	**0.2**			**0.065**									g/hp-hr	Catalyst Manufacturer Data[5]
25%	**25%**	**25%**			**25%**									Safety Factor	
0.63	0.25	0.250			0.081									g/hp-hr	
	88.6%	13.8%			59.4%									%	Control Efficiency
				0.009987		0.00836	0.00514	0.00044	0.0000397	-	0.000408	0.000184		lb/MMBtu	AP-42 Table 3.2-2
2.58	**1.03**	**1.03**	**0.0083**	**0.14**	**0.336**	**0.118**	**0.073**	**0.006**	**0.00056**	**-**	**0.00578**	**0.00261**	**0.54**	**lb/hr**	
11.32	**4.53**	**4.53**	**0.0365**	**0.62**	**1.47**	**0.52**	**0.32**	**0.027**	**0.0025**	**-**	**0.025**	**0.0114**	**2.38**	**tpy**	

Greenhouse Gas Emissions

CO_2	CH_4	N_2O	CO_2e		
53.06	0.001	0.0001		kg/MMBtu	40 CFR 98 Subpart C
7258.86	**0.137**	**0.0137**	**7266.36**	**tpy**	
1	25	298		GWP	

Notes

[1] VOC emissions include VOC plus HCOH emisions.

[2] SO_2 emissions are based on the conversion of H_2S to SO_2 during the combustion process and a 1:1 molar ratio conversion of H_2S to SO_2. The fuel gas concentration is based on 60 ppm of H_2S.

[3] It is assumed that TSP = PM_{10} = $PM_{2.5}$

Total HAPs were calculated using GRI-HAPCalc 3.01 with the manufacturer's HCOH emission rate substituted for the HAPCalc HCOH emission rate. Other individual HAPs calculated using

[4] GRI-HAPCalc 3.01.

[5] IAC Acoustics 3-way catalyst manufacturer's data. Please note the catalyst efficiency guaranteed by the manufacture shows a higher efficiency that what is used in the calculation on the CO and HCHO. The engines me NSPS JJJJ and MACT ZZZZ emission requirements where applicable.

Exhaust Flow Rate:	6843	acfm
Exhaust Temp.:	835	°F
Diameter:	1.67	ft
Velocity:	52.07	ft/s

TABLE 6-4

Targa Midstream Services LLC – Brininstool Compressor Station

Flare

Unit No(s): Flare
Description: Flaring

Flow Rate:

Vent Gas	20.0	MMscf/yr	Assumed SSM Flaring
	0.0083	MMscf/hr	based on MFG
	9.94	MMBtu/hr	scfh * Maximum heating value / 1000
Pilot	78.0	scf/hr	flare pilot
	0.0019	MMscf/d	scf/hr * 24 (hr/day) / 1e6 SCF/MMscf
	1000	BTU/scf	Nominal, sweet natural gas
	0.078	MMBtu/hr	
Flash Gas + Vent Gas + Pilot	10.02	MMBtu/hr	

Emission Calculations

Pilot Emissions	**NOx**	**CO**	**SO_2**	**H_2S**	**VOC**	**HAPs**	**Units**	
	0.0680	0.3100			0.66		lb/MMBtu	AP-42 Table 13.5-1 and 13.5-2
			2000	-			grains/10^6 scf	
							mol%	Assume no VOC content fuel (methane)
	0.0053	0.024			0.051		lb/hr	lb/MMBtu * MMBtu/hr
			1.30E-05	**-**		**-**	lb/hr	98% combustion H_2S; 100% conversion to SO_2
	0.02	**0.11**	**5.71E-05**	**-**	**2.25E-01**	**-**	tpy	8760 hrs/yr

Vent Gas Flaring	**NO_X**	**CO**	**SO_2**	**H_2S**	**VOC**	**HAPs**		
	0.0680	0.3100					lb/MMBtu	AP-42 Table 13.5-1 and 13.5-2
				0.94	136	4	lb/hr	Gas Analysis
				98%	98%	98%		Estimated control efficiency for H_2S and VOC
			100%					Estimated H_2S conversion to SO_2 (1-1 molar ratio)
	0.68	3.08	1.73	0.02	2.73	0.08	lb/hr	Based on pilot plus flared gas
	0.81	3.70	2.07	0.02	3.27	0.10	tpy	

Total Pilot + Flaring	**NO_X**	**CO**	**SO_2**	**H_2S**	**VOC**	**HAPs**	
	0.68	**3.11**	**1.73**	**0.0187**	**2.73**	**0.08**	**lb/hr**
	0.83	**3.80**	**2.07**	**0.022**	**3.27**	**0.10**	**tpy**

TABLE 6-5

Targa Midstream Services LLC - Brininstool Compressor Station

Flare GHG Emissions

§98.233(n) Flare stack GHG emissions.

Step 1. Calculate contribution of un-combusted CH_4 emissions from the regenerator combustion gas vent (actual conditions).

$E_{a,CH4}$ (un-combusted) = V_a * (1- η)* X_{CH4} *(Equation W-39B)*

where:

$E_{a,CH4}$ = contribution of annual un-combusted CH_4 emissions from regenerator in cubic feet under actual conditions.

V_a = volume of gas sent to combustion unit during the year (cf)

η = Fraction of gas combusted by a burning flare (or regenerator), default value from Subpart W = 0.98
For gas sent to an unlit flare, η is zero.

X_{CH4} = Mole fraction of CH_4 in gas to the flare = 0.7079 (Client gas analysis)

Step 2. Calculate contribution of un-combusted CO_2 emissions from the regenerator combustion gas vent (actual conditions).

$E_{a,CO2}$ = V_a * X_{CO2} *(Equation W-20)*

where:

$E_{a,CO2}$ = contribution of annual un-combusted CO_2 emissions from regenerator in cubic feet under actual conditions.

V_a = volume of gas sent to combustion unit during the year (cf)

X_{CO2} = Mole fraction of CO_2 in gas to the flare = 0.03

Step 3. Calculate contribution of combusted CO_2 emissions from the regenerator combustion gas vent (actual conditions).

$E_{a,CO2}$ (combusted) = $\sum$ (η * V_a * Y_j * R_j) *(Equation W-21)*

where:

η = Fraction of gas combusted by a burning flare (or regenerator) = 0.98
For gas sent to an unlit flare, η is zero.

V_a = volume of gas sent to combustion unit during the year (cf)

Y_j = mole fraction of gas hydrocarbon constituents j:

Constituent j, Methane =	0.7079	(Client gas analysis)
Constituent j, Ethane =	0.1203	
Constituent j, Propane =	0.0671	
Constituent j, Butane =	0.03058	
Constituent j, Pentanes Plus =	0.019354	

R_j = number of carbon atoms in the gas hydrocarbon constituent j:

Constituent j, Methane =	1
Constituent j, Ethane =	2
Constituent j, Propane =	3
Constituent j, Butane =	4
Constituent j, Pentanes Plus =	5

Step 4. Calculate GHG volumetric emissions at standard conditions (scf)

$$E_{s,n} = \frac{E_{a,n} * (459.67 + T_s) * P_a}{(459.67 + T_a) * P_s}$$ *(Equation W-33)*

where:

$E_{s,n}$ = GHG i volumetric emissions at standard temperature and pressure (STP) in cubic feet

$E_{a,n}$ = GHG i volumetric emissions at actual conditions (cf)

T_s = Temperature at standard conditions (F) = 60 F

T_a = Temperature at actual conditions (F) = 76 F (Hobbs, NM from Western Regional Climate Center)

P_s = Absolute pressure at standard conditions (psia) = 14.7 psia

P_a = Absolute pressure at actual conditions (psia) = 14.7 psia (Assumption)

Constant = 459.67 (temperature conversion from F to R)

Step 5. Calculate annual CH_4 and CO_2 mass emissions (ton).

$Mass_{s,i}$ = $E_{s,i}$ * ρ_i * 0.0011023 *(Equation W-36)*

where:

$Mass_{s,i}$ = GHG i (CO_2, CH_4, or N_2O) mass emissions at standard conditions in tons (tpy)

$E_{s,i}$ = GHG i (CO_2, CH_4, or N_2O) volumetric emissions at standard conditions (cf)

ρ_i = Density of GHG i. Use:

CH_4:	0.0192 kg/ft^3 (at 60F and 14.7 psia)
CO_2:	0.0526 kg/ft^3 (at 60F and 14.7 psia)

Step 6. Calculate annual N_2O emissions from portable or stationary fuel combustion sources under actual conditions (cf) using Equation W-4

$Mass_{N2O}$ = 0.0011023 * Fuel * HHV * EF *(Equation W-40)*

where:

$Mass_{N2O}$ = annual N_2O emissions from combustion of a particular type of fuel (tons).

Fuel = mass or volume of the fuel combusted

HHV = high heat value of the fuel

Field gas HHV = 1.235E-03 MMBtu/scf (Default provided in Subpart W Final Amendment;)

EF = 1.00E-04 kg N_2O/MMBtu

10^{-3} = conversion factor from kg to metric tons.

Step 7. Calculate total annual emission from flare (regenerator) by summing Equations W-40, W-19, W-20, and W-21.

Gas Sent to Flare (cf/yr)	CH_4 Un-Combusted, $E_{a,CH4}$ (cf)	CO_2 Un-Combusted, $E_{a,CO2}$ (cf)	CO_2 Combusted, $E_{a,CO2}$ (cf)	CH_4 Un-Combusted, $E_{a,CH4}$ (scf)	CO_2 Un-Combusted, $E_{a,CO2}$ (scf)	CO_2 Combusted, $E_{a,CO2}$ (scf)	CH_4 Un-Combusted, $E_{a,CH4}$ (tpy)	CO_2 Un-Combusted, $E_{a,CO2}$ (tpy)	CO_2 Combusted, $E_{a,CO2}$ (tpy)	N_2O Mass Emissions (tpy)
20,000,000	283180	613,183	26,830,936	274,568	594,535	26,014,949	5.81	34.47	1,508.37	0.00272

TABLE 6-6

Targa Midstream Services LLC – Brininstool Compressor Station

Facility-Wide Fugitive Emissions

Emission Unit: FUG

Source Description: Facility-Wide Fugitive Emissions

COMPONENT	CURRENT COUNT [1]	EPA[2] FACTOR (lb/hr-src)	REDUCTION ALLOWED FOR LDAR	% VOC IN $STREAM_3$	VOC EMISSIONS (lb/hr)	VOC EMISSIONS (tpy)	% H_2S IN STREAM[3]	H_2S EMISSIONS (lb/hr)	H_2S EMISSIONS (tpy)	% HAP IN STREAM	HAP EMISSIONS (lb/hr)	HAP EMISSIONS (tpy)	% BENZENE IN STREAM	BENZENE EMISSIONS (lb/hr)	BENZENE EMISSIONS (tpy)	% TOLUENE IN STREAM	TOLUENE EMISSIONS (lb/hr)	TOLUENE EMISSIONS (tpy)
Inlet Gas (gas)																		
VALVES	817	0.00992	0%	30.0%	2.43	10.65	0.18%	1.5E-02	6.4E-02	0.69%	5.6E-02	2.5E-01	0.16%	1.3E-02	5.6E-02	0.071%	5.8E-03	2.5E-02
FLANGES	1906	0.00086	0%	30.0%	0.492	2.15	0.18%	3.0E-03	1.3E-02	0.69%	1.1E-02	5.0E-02	0.16%	2.6E-03	1.1E-02	0.071%	1.2E-03	5.1E-03
CONNECTORS	817	0.00044	0%	30.0%	0.108	0.47	0.18%	6.5E-04	2.8E-03	0.69%	2.5E-03	1.1E-02	0.16%	5.7E-04	2.5E-03	0.071%	2.6E-04	1.1E-03
RELIEF VALVES	31	0.01940	0%	30.0%	0.18	0.79	0.18%	1.1E-03	4.7E-03	0.69%	4.2E-03	1.8E-02	0.16%	9.6E-04	4.2E-03	0.071%	4.3E-04	1.9E-03
COMPRESSOR SEALS	12	0.01940	0%	30.0%	0.07	0.31	0.18%	4.2E-04	1.8E-03	0.69%	1.6E-03	7.0E-03	0.16%	3.7E-04	1.6E-03	0.071%	1.7E-04	7.2E-04
PUMP SEALS	7	0.00529	0%	30.0%	1.1E-02	0.05	0.18%	6.7E-05	2.9E-04	0.69%	2.6E-04	1.1E-03	0.16%	5.9E-05	2.6E-04	0.071%	2.6E-05	1.2E-04
Condensate (light oil)																		
VALVES	300	5.5E-03	0%	100.0%	1.65	7.2	0.18%	3.0E-03	1.3E-02	14.3%	2.4E-01	1.04	1.4%	2.3E-02	1.0E-01	2.7%	4.5E-02	2.0E-01
FLANGES	600	2.4E-04	0%	100.0%	1.5E-01	0.6	0.18%	2.6E-04	1.1E-03	14.3%	2.1E-02	0.0913	1.4%	2.0E-03	9.0E-03	2.7%	3.9E-03	1.7E-02
CONNECTORS	300	4.6E-04	0%	100.0%	1.4E-01	0.6	0.18%	2.5E-04	1.1E-03	14.3%	2.0E-02	0.087	1.4%	2.0E-03	8.6E-03	2.7%	3.7E-03	1.6E-02
PUMP SEALS	8	2.9E-02	0%	100.0%	0.23	1.0	0.18%	4.1E-04	1.8E-03	14.3%	3.3E-02	0.14	1.4%	3.2E-03	1.4E-02	2.7%	6.2E-03	2.7E-02
TOTAL EMISSIONS					5.46	23.91		0.024	0.104		0.39	1.69		0.048	0.210		0.066	0.290

[1] Fugitive emission source counts were calculated based on the types of field equipment at the facility and a general source count per equipment.

[2] Factors are from Protocol for Equipment Leak Emission Estimates from the EPA (Table 2-4).

[3] VOC concentrations are conservatively estimated. Condensate H_2S concentration is conservatively set equal to inlet gas H_2S concentration. Fuel Gas H2S concentration is based on 60 ppm of H2S.

TABLE 6-7

Targa Midstream Services LLC – Brininstool Compressor Station

Storage Tank Emissions

Unit No(s): TK-1, TK-3, TK-4, TK-5, TK-6, TK-7
Description: 500 gal storage tank

Facility Tank Summary

Unit	Tank Contents	Exemption
TK-1	Methanol	20.2.72.202.B.5.NMAC
TK-3	Glycol	20.2.72.202.B.2 NMAC
TK-4	Lube Oil	20.2.72.202.B.2 NMAC
TK-5	Antifreeze	20.2.72.202.B.2 NMAC
TK-6	Produced Water	20.2.72.202.B.5.NMAC
TK-7	Water	20.2.72.202.B.5.NMAC

Tank Emissions

Uncontrolled Annual Emissions

Unit	Tank Description	Annual Throughput (gal/yr)	W&B (lb/yr)	W&B Losses (lb/hr)	W&B Losses (tpy)	Flash Losses (lb/hr)	Flash Losses (tpy)	Annual VOC Emissions (lb/yr)	Hourly VOC Emissions (lb/hr)	Annual VOC Emissions (tpy)	Hourly H_2S Emissions (lb/hr)	Annual H_2S Emissions (tpy)
TK-1	500 gal Methanol [1, 2]	1,500	16.62	-	-	-	-	16.62	-	0.0083	-	-
TK-6	Produced Water [3]	950,460	-	0.086	0.039	0.62	0.092	-	0.70	0.13	0.030	0.0036

[1] Standing and working losses calculated using TANKS 4.0.9d.

[2] Methanol tank does not have flash losses.

[3] ProMax was used to calculate emissions for the produced water tank. Hourly emissions are based on the maximum pump rate and the annual emissions are based on throughput.

Section 6.a

Green House Gas Emissions

(Submitting under 20.2.70, 20.2.72 20.2.74 NMAC)

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_2), nitrous oxide (N_2O), methane (CH_4), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF_6).

Calculating GHG Emissions:

1. Calculate the ton per year (tpy) GHG mass emissions and GHG CO_2e 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_2e 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_2e 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 CO2e 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 CO2e emissions are less than 75,000 tons per year. **GHG emission calculations are included in Section 6.**

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_2 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)

Section 7

Information Used To Determine Emissions

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.

Information used to determine emissions is included in this section.

SHIPPING ADDRESS:
2800 WESTOVER STREET
ODESSA, TEXAS 79764

BILLING ADDRESS:
P.O. BOX 69210
ODESSA, TEXAS 79769-0210

MOBILE ANALYTICAL

LABORATORIES, INC.

LABORATORY IN ODESSA
PHONE (432) 337-4744 | FAX (432) 337-8781

LAB 61650

C6+ GAS ANALYSIS REPORT

COMPANY . . .	TARGA	STATION	118110051
LEASE/PLANT .	BRINNSTOOL	PRESS. PSIG	715
OPERATOR . .	TARGA	TEMP. DEG. F	57
SAMPLE	FUEL GAS	SAMPLE TYPE . . .	SPOT
CYLINDER . .	291	SAMPLED / RECEIVED .	10/22/21
H2S PPM . . .	0.0	SAMPLED BY	SR

FRACTIONAL ANALYSIS

COMPONENT	MOL %	GPM C2+	GPM C5+
NITROGEN	1.573	0.000	0.000
CARBON DIOXIDE . .	0.049	0.000	0.000
METHANE	97.213	0.000	0.000
ETHANE	1.151	0.307	0.000
PROPANE	0.014	0.004	0.000
ISO-BUTANE	0.000	0.000	0.000
N-BUTANE	0.000	0.000	0.000
ISO-PENTANE	0.000	0.000	0.000
N-PENTANE	0.000	0.000	0.000
HEXANES PLUS . . .	0.000	0.000	0.000
TOTALS	100.000	0.311	0.000

CALC. SP.GRAVITY 0.567

BTU/CU. FT. (14.650 PSIA, 60 DEG. F)
CALC. GROSS WET 984
CALC. GROSS DRY 1001

DISTRIBUTION:
MS CINDY KLEIN

NOTES:

REPORT DATE: 10/27/21

G3606

GAS ENGINE SITE SPECIFIC TECHNICAL DATA
Golden Station

GAS COMPRESSION APPLICATION

ENGINE SPEED (rpm):	1000	RATING STRATEGY:	STANDARD
COMPRESSION RATIO:	7.6	FUEL SYSTEM:	GAV
AFTERCOOLER TYPE:	SCAC		WITH AIR FUEL RATIO CONTROL
AFTERCOOLER - STAGE 2 INLET (°F):	130	**SITE CONDITIONS:**	
AFTERCOOLER - STAGE 1 INLET (°F):	174	FUEL:	McKnight
JACKET WATER OUTLET (°F):	190	FUEL PRESSURE RANGE(psig): (See note 1)	58.0-70.3
ASPIRATION:	TA	FUEL METHANE NUMBER:	91.0
COOLING SYSTEM:	JW+1AC, OC+2AC	FUEL LHV (Btu/scf):	915
CONTROL SYSTEM:	ADEM4	ALTITUDE(ft):	2650
EXHAUST MANIFOLD:	DRY	INLET AIR TEMPERATURE(°F):	110
COMBUSTION:	LOW EMISSION	STANDARD RATED POWER:	1875 bhp@1000rpm
NOx EMISSION LEVEL (g/bhp-hr NOx):	0.5		
SET POINT TIMING:	18		

				MAXIMUM RATING	SITE RATING AT MAXIMUM INLET AIR TEMPERATURE		
RATING		**NOTES**	**LOAD**	**100%**	**100%**	**75%**	**50%**
ENGINE POWER	(WITHOUT FAN)	(2)	bhp	1875	1875	1406	938
INLET AIR TEMPERATURE			°F	110	110	110	110
ENGINE DATA							
FUEL CONSUMPTION (LHV)		(3)	Btu/bhp-hr	6811	6811	7089	7668
FUEL CONSUMPTION (HHV)		(3)	Btu/bhp-hr	7556	7556	7864	8506
AIR FLOW (@inlet air temp, 14.7 psia)	(WET)	(4)(5)	ft3/min	4868	4868	3687	2536
AIR FLOW	(WET)	(4)(5)	lb/hr	20334	20334	15403	10593
FUEL FLOW (60ºF, 14.7 psia)			scfm	233	233	182	131
INLET MANIFOLD PRESSURE		(6)	in Hg(abs)	100.0	100.0	76.7	54.9
EXHAUST TEMPERATURE - ENGINE OUTLET		(7)	°F	835	835	907	990
EXHAUST GAS FLOW (@engine outlet temp, 14.5 psia)	(WET)	(8)(5)	ft3/min	11810	11810	9458	6915
EXHAUST GAS MASS FLOW	(WET)	(8)(5)	lb/hr	20948	20948	15882	10939
EMISSIONS DATA - ENGINE OUT							
NOx (as NO2)		(9)(10)	g/bhp-hr	0.50	0.50	0.50	0.50
CO		(9)(10)	g/bhp-hr	2.20	2.20	2.20	2.20
THC (mol. wt. of 15.84)		(9)(10)	g/bhp-hr	4.60	4.60	4.81	5.08
NMHC (mol. wt. of 15.84)		(9)(10)	g/bhp-hr	0.43	0.43	0.44	0.47
NMNEHC (VOCs) (mol. wt. of 15.84)		(9)(10)(11)	g/bhp-hr	0.29	0.29	0.30	0.32
HCHO (Formaldehyde)		(9)(10)	g/bhp-hr	0.20	0.20	0.21	0.24
CO2		(9)(10)	g/bhp-hr	433	433	447	484
EXHAUST OXYGEN		(9)(12)	% DRY	10.9	10.9	10.7	10.3
HEAT REJECTION							
HEAT REJ. TO JACKET WATER (JW)		(13)	Btu/min	21991	21991	17926	14591
HEAT REJ. TO ATMOSPHERE		(13)	Btu/min	5684	5684	5573	5374
HEAT REJ. TO LUBE OIL (OC)		(13)	Btu/min	11708	11708	10800	9347
HEAT REJ. TO A/C - STAGE 1 (1AC)		(13)(14)	Btu/min	17942	17942	8874	2675
HEAT REJ. TO A/C - STAGE 2 (2AC)		(13)(14)	Btu/min	7794	7794	4705	2310
COOLING SYSTEM SIZING CRITERIA							
TOTAL JACKET WATER CIRCUIT (JW+1AC)		(14)(15)	Btu/min	43029			
TOTAL STAGE 2 AFTERCOOLER CIRCUIT (OC+2AC)		(14)(15)	Btu/min	22234			

A cooling system safety factor of 0% has been added to the cooling system sizing criteria.

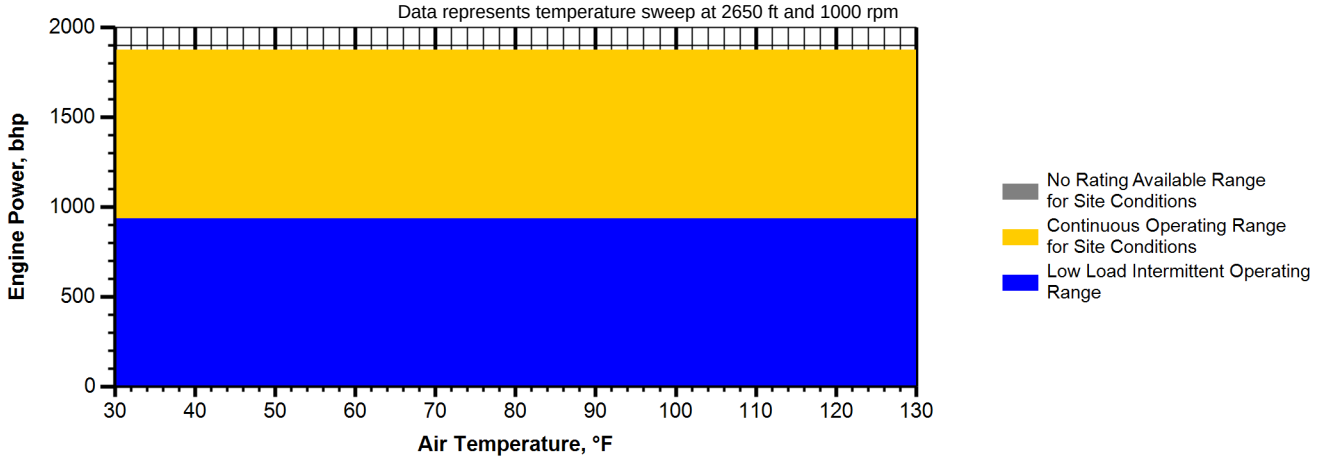
CONDITIONS AND DEFINITIONS

Engine rating obtained and presented in accordance with ISO 3046/1, adjusted for fuel, site altitude and site inlet air temperature. 100% rating at maximum inlet air temperature is the maximum engine capability for the specified fuel at site altitude and maximum site inlet air temperature. Maximum rating is the maximum capability at the specified aftercooler inlet temperature for the specified fuel at site altitude and reduced inlet air temperature. Lowest load point is the lowest continuous duty operating load allowed. No overload permitted at rating shown.

For notes information consult page three.

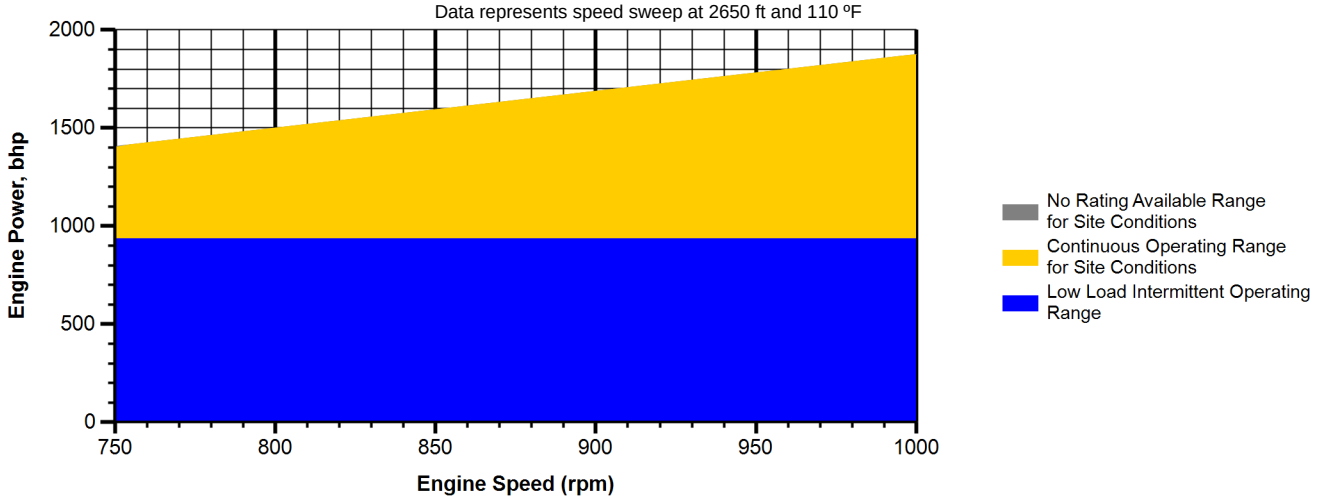
Engine Power vs. Inlet Air Temperature

Data represents temperature sweep at 2650 ft and 1000 rpm



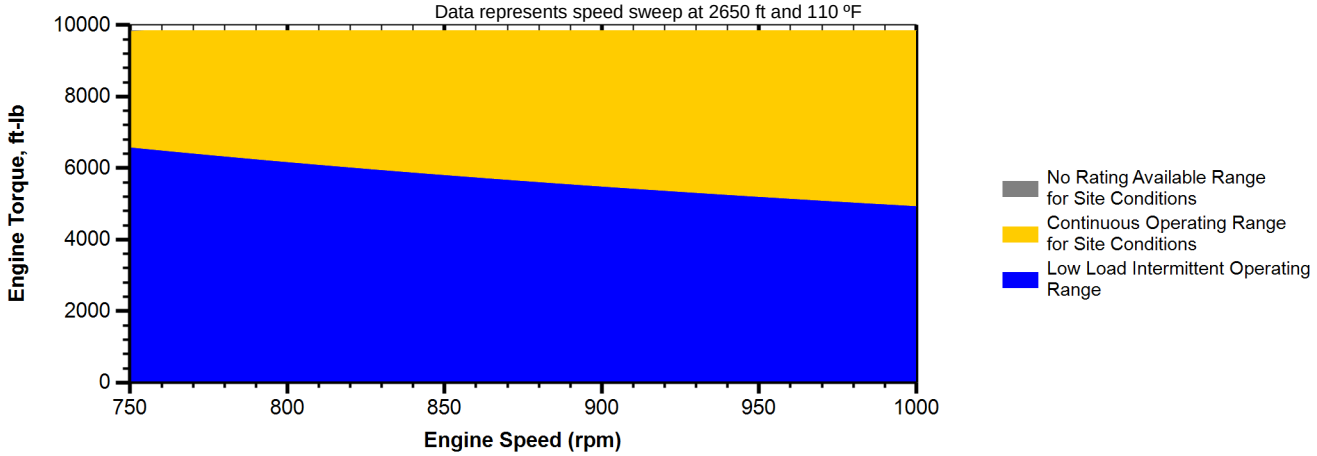
Engine Power vs. Engine Speed

Data represents speed sweep at 2650 ft and 110 ºF



Engine Torque vs. Engine Speed

Data represents speed sweep at 2650 ft and 110 ºF



Note:
At site conditions of 2650 ft and 110°F inlet air temp., constant torque can be maintained down to 755 rpm.The minimum speed for loading at these conditions is 750 rpm.

NOTES:

1. Fuel pressure range specified is to the engine gas shutoff valve (GSOV). Additional fuel train components should be considered in pressure and flow calculations.

2. Engine rating is with two engine driven water pumps. Tolerance is ± 3% of full load.

3. Engine rating obtained and presented in accordance with ISO 3046/1, adjusted for fuel, site altitude and site ambient temperature.

4. Air flow value is on a 'wet' basis. Flow is a nominal value with a tolerance of ± 5 %.

5. Inlet and Exhaust Restrictions must not exceed A&I limits based on full load flow rates from the standard technical data sheet.

6. Inlet manifold pressure is a nominal value with a tolerance of ± 5 %.

7. Exhaust temperature is a nominal value with a tolerance of (+)63°F, (-)54°F.

8. Exhaust flow value is on a "wet" basis. Flow is a nominal value with a tolerance of ± 6 %.

9. Emissions data is at engine exhaust flange prior to any after treatment.

10. Values listed are higher than nominal levels to allow for instrumentation, measurement, and engine-to-engine variations. They indicate the maximum values expected under steady state conditions. Fuel methane number cannot vary more than ± 3. THC, NMHC, and NMNEHC do not include aldehydes. An oxidation catalyst may be required to meet Federal, State or local CO or HC requirements.

11. VOCs - Volatile organic compounds as defined in US EPA 40 CFR 60, subpart JJJJ

12. Exhaust Oxygen level is the result of adjusting the engine to operate at the specified NOx level. Tolerance is ± 0.5.

13. Heat rejection values are nominal. Tolerances, based on treated water, are ± 10% for jacket water circuit, ± 50% for radiation, ± 20% for lube oil circuit, and ± 5% for aftercooler circuit.

14. Aftercooler heat rejection includes an aftercooler heat rejection factor for the site elevation and inlet air temperature specified. Aftercooler heat rejection values at part load are for reference only. Do not use part load data for heat exchanger sizing.

15. Cooling system sizing criteria are maximum circuit heat rejection for the site, with applied tolerances.

GAS ENGINE SITE SPECIFIC TECHNICAL DATA
Golden Station

GAS COMPRESSION APPLICATION

Constituent	Abbrev	Mole %	Norm
Water Vapor	H2O	0.0000	0.0000
Methane	CH4	94.9790	94.9799
Ethane	C2H6	2.7730	2.7730
Propane	C3H8	0.1200	0.1200
Isobutane	iso-C4H10	0.0040	0.0040
Norbutane	nor-C4H10	0.0110	0.0110
Isopentane	iso-C5H12	0.0030	0.0030
Norpentane	nor-C5H12	0.0030	0.0030
Hexane	C6H14	0.0150	0.0150
Heptane	C7H16	0.0000	0.0000
Nitrogen	N2	2.0810	2.0810
Carbon Dioxide	CO2	0.0100	0.0100
Hydrogen Sulfide	H2S	0.0000	0.0000
Carbon Monoxide	CO	0.0000	0.0000
Hydrogen	H2	0.0000	0.0000
Oxygen	O2	0.0000	0.0000
Helium	HE	0.0000	0.0000
Neopentane	neo-C5H12	0.0000	0.0000
Octane	C8H18	0.0000	0.0000
Nonane	C9H20	0.0000	0.0000
Ethylene	C2H4	0.0000	0.0000
Propylene	C3H6	0.0000	0.0000
TOTAL (Volume %)		99.9990	99.9999

Fuel Makeup:	McKnight
Unit of Measure:	English

Calculated Fuel Properties

Caterpillar Methane Number:	91.0
Lower Heating Value (Btu/scf):	915
Higher Heating Value (Btu/scf):	1015
WOBBE Index (Btu/scf):	1203
THC: Free Inert Ratio:	46.82
Total % Inerts (% N2, CO2, He):	2.091%
RPC (%) (To 905 Btu/scf Fuel):	100%
Compressibility Factor:	0.998
Stoich A/F Ratio (Vol/Vol):	9.55
Stoich A/F Ratio (Mass/Mass):	16.53
Specific Gravity (Relative to Air):	0.578
Fuel Specific Heat Ratio (K):	1.313

CONDITIONS AND DEFINITIONS

Caterpillar Methane Number represents the knock resistance of a gaseous fuel. It should be used with the Caterpillar Fuel Usage Guide for the engine and rating to determine the rating for the fuel specified. A Fuel Usage Guide for each rating is included on page 2 of its standard technical data sheet.

RPC always applies to naturally aspirated (NA) engines, and turbocharged (TA or LE) engines only when they are derated for altitude and ambient site conditions.

Project specific technical data sheets generated by the Caterpillar Gas Engine Rating Pro program take the Caterpillar Methane Number and RPC into account when generating a site rating.

Fuel properties for Btu/scf calculations are at 60F and 14.696 psia.

Caterpillar shall have no liability in law or equity, for damages, consequently or otherwise, arising from use of program and related material or any part thereof.

FUEL LIQUIDS

Field gases, well head gases, and associated gases typically contain liquid water and heavy hydrocarbons entrained in the gas. To prevent detonation and severe damage to the engine, hydrocarbon liquids must not be allowed to enter the engine fuel system. To remove liquids, a liquid separator and coalescing filter are recommended, with an automatic drain and collection tank to prevent contamination of the ground in accordance with local codes and standards.

To avoid water condensation in the engine or fuel lines, limit the relative humidity of water in the fuel to 80% at the minimum fuel operating temperature.

Jason Martindale
Direct: 505.592.1318
jmartindale@emittechnologies.com

PREPARED FOR: Alan Benavides
TARGA RESOURCES

QUOTE: EQN-2005-0106-R1
EXPIRES: 9/18/2020

GOLDEN STATION

APPLICATION INFORMATION

Driver:	Engine
Make:	Caterpillar
Model:	G3606 A4
Horsepower:	1875
RPM:	1000
Compression Ratio:	7.6:1
Exhaust Flow Rate:	11810
Exhaust Temperature:	835
Reference:	GERP
Fuel:	Natural Gas
Annual Operating Hours:	8760

PERFORMANCE DETAIL

HOUSING REFERENCE	ELH-5000-1820F-6CE0-362
CATALYST ELEMENTS	
Model:	RT-3615-H
Catalyst Type:	Premium Oxidation
Substrate Type:	Brazed
Element Size:	Rectangle, 36"x15"x3.5"
Element Quantity:	(3) Elements
Minimum Pre Cat Exhaust Temperature:	**710* F**

****POST CATALYST EMISSIONS ARE ONLY GUARANTEED FOR CATALYST ELEMENTS SUPPLIED BY EMIT**

UNCONTROLLED EMISSIONS DATA

	g/bhp-hr	lb/hr	Tons/Year
NOx:	0.5	2.07	9.05
CO:	2.2	9.09	39.83
THC:	4.6	19.01	83.29
NMHC:	0.43	1.78	7.79
NMNEHC:	0.29	1.2	5.25
HCHO:	0.2	0.83	3.62
Oxygen:	10.90%		

BEST ACHIEVABLE POST CATALYST EMISSIONS DATA

	g/bhp-hr	lb/hr
NOx:	Unaffected by Oxidation Catalyst	
CO:	< 0.20	0.83
VOC:	< 0.20	0.83
HCHO:	< 0.065	0.27

WARRANTY

EMIT Technologies,Inc. warrants that the goods supplied will be free from defects in workmanship by EMIT Technologies, Inc. for a period of one (1) year from date of shipment. EMIT Technologies, Inc. will not be responsible for any defects which result from improper use, neglect, failure to properly maintain or which are attributable to defects, errors or omissions in any drawings, specifications, plans or descriptions, whether written or oral, supplied to EMIT Technologies, Inc. by Buyer.

Catalyst performance using an EMIT Air/Fuel ratio controller is dependent upon properly defined set-points, variable with engine and fuel gas composition. Air/fuel ratio controller performance is guaranteed, but not limited, to fuel gas with an HHV content of 1400 BTU/SCF.

Catalyst performance will be guaranteed for a period of 2 years from installation, or 17,000 operating hours, whichever comes first. The catalyst shall be operated with an automatic air/fuel ratio controller. The performance guarantee shall not cover the effects of excessive ash masking due to operation at low load, improper engine maintenance, or inappropriate lubrication oil. The performance guarantee shall not cover the effects of continuous engine misfires (cylinder or ignition) exposing the catalyst to excessive exothermic reaction temperatures.

Unless otherwise stated the exhaust temperature operating range at the converter inlet is 600°F minimum for oxidation catalyst and 750°F for NSCR catalyst and 1250°F maximum.

If a high temperature shut down switch is not installed, thermal deactivation of catalyst at temperatures above 1300 °F is not covered.

The catalyst conversion efficiencies (% reduction) will be guaranteed for engine loads of 50 to 100 percent.

Engine lubrication oil shall contain less than 0.6% ash (by weight) with a maximum allowable specific oil consumption of 0.01 gal/bhp-hr. The maximum ash loading on the catalyst shall be limited to 350 g/m3. Phosphorous and zinc additives are limited to 0.03% (by weight).

The catalyst must not be exposed to the following known poisoning agents, including: iron, nickel, sodium, chromium, arsenic, zinc, lead, phosphorous, silicon, potassium, magnesium, copper, tin, and mercury. Total poison concentrations in the gas are limited to 0.3 ppm.

Shipment - Promised shipping dates are approximate and are not guaranteed and are from the point of manufacture. EMIT Technologies,Inc. will not be liable for any loss, damage or delay in manufacture or delivery resulting from any cause beyond its control including, but not limited to a period equal to the time lost by reason of that delay. All products will be crated as per best practice to prevent any damage during shipment. Unless otherwise specified, Buyer will pay for any special packing and shipping requirements. Acceptance of goods by common carrier constitutes delivery to Buyer. EMIT Technologies,Inc. shall not be responsible for goods damaged or lost in transit.

PAYMENT TERMS AND ADVANCE PAYMENT REQUIREMENT

Terms: Credit is extended to purchaser for net 30 time period. If payment is not received in the net 30 timeframe, interest on the unpaid balance will accrue at a rate of 1.5% per month from the invoice date.

Advance Payment Requirement: Proposals with a project value of $100,000 or greater, and 60 days or greater time to completion, will require an advance payment of 30% of the total value. The advance payment will be invoiced to the customer upon receipt of the customer's purchase order. Advance payment is due 30 days after the date of the invoice. If payment is not received in the net 30 timeframe, interest on the unpaid balance will accrue at teh rate of 1.5% per month from the invoice date. Failure to pay this invoice may delay completion of the project outlined in this proposal.

Order Cancellation Terms: Upon cancellation of an order once submittal of a Purchase Order has occurred, the customer will pay a 25% restocking fee for Catalyst Housings, Catalyst Elements, and Air/Fuel Ratio Controllers; 50% restocking fee for Cooler Top Solutions,Exhaust System Accessories, and other Custom Built Products; 100% of all associated shipping costs incurred by EMIT; 100% of all project expenses incurred by EMIT for Field Services.

iac acoustics
making the world a quieter place

Emission Control Application Data Sheet

POWERTHERM Co., Inc.

IAC Acoustics
10635 Brighton Lane
Stafford, Texas 77477
Phone: 832 554-0980
Fax: 832 554-0990

Customer: **comp gen svc** Project: **7042gsi** Date: **3/18/2015**

Customer Contact IAC Contact: Order/Quote #: **31815**

Engine Data:

Engine Model:	**Waukesha L7042GSI**		Speed:	**1200**	RPM
Fuel & Operating Type:	**Natural Gas Rich Burn**		Engine Power:	**1478** **1103**	Hp KW
Exhaust Flow Rate:	**9890** **16803** **14816**	**acfm** **m^3/hr** **lbs/hr**	Exhaust Temperature:	**1126** **608**	°F °C

Catalyst Data:

Number of Core layers:	**1**				
Model:	**201V3-4-3-4114-1**		Inlet Size:	**14**	in
Grade:	**Residential**		Outlet Size:	**14**	in
Body Diameter:		in	Body Length:		in
Estimated weight:		lbs Kg	Estimated Back Pressure of the unit:	**10.00** **24.9**	in of WC mbar
Core Part Number:	**3ECI-RE13-154248-300-35-CH1019** Qty **3**		Speed through inlet:	**9576**	ft/min
Cell Density	300	cpsi	Back Pressure across Element(s) only	2.36 **5.9**	in of WC mbar

Emission:

Min. Temp. at Core Face: **1112** °F **600** °C
Max. Temp. at Core Face: **1215** °F **657** °C

Catalyst Type: **3-Way**

O_2 in Exhaust vol %
H_2O in Exhaust vol %

	Pollutant					
	NOx	CO	NMHC/VOC	CH_2O/CHCO	ORGANIC PM10	
Engine Out / Pre Emission:	13	9	0.3	0.05	0	g/bhp-hr
	3686.02	**2551.86**	**85.06**	**14.18**	**0.00**	mg/Nm3
Post Emission:	**0.494**	**0.450**	**0.150**	**0.008**	**0.000**	g/bhp-hr
	140.07	**127.59**	**42.53**	**2.13**	**0.00**	mg/Nm3
	96.2	***95.0***	***50.0***	***85.0***	***50.0***	% Reduction
	1.61	1.47	0.49	0.02		lb/hr
	7.05	6.42	2.14	0.11		tons/year operation **8760** hr/year
	67.3	61.3	20.4	1.0		ppmv
						ppmvd @ 15% O2

Acoustics:

Frequency Band (Hz):	31.5	63	125	250	500	1000	2000	4000	8000	
Raw Noise SPL (dB) at 3.28 ft.:	0	0	0	0	0	0	0	0	0	7 dBA
Estimated Attenuation (dB):	10	20	27	29	23	18	17	18	19	No Element
Plus:	10	21	29	31	27	23	23	24	24	One Element Layer
Silenced SPL (dB) at ft.:										

Warranty & Notes:

- **If Pre-Emission levels are not as noted above, contact IAC Acoustics for a re-quote.**
- To achieve Post Emissions levels detailed above, exhaust temperature and Pre-Emission data must be as specified.
- Maximum allowable exhaust temperature at core face is 1350°F.
- If applicable, the engine will require an air/fuel ratio controller to meet above emission levels. For Rich Burn engines λ must be 0.96 - 0.99.
- Catalyst cleaning/regeneration required, if initial backpressure increases by 2" of WC.
- Engine operation to be stable and reproducible.
- QAC is not designed to withstand a backfire, therefore measures should be taken prior to QAC unit to alleviate backfire pressure.
- Maximum lubrication oil consumption rate to be less than 0.0015 lb/bhp/hr.
- Lube oil sulfate ash contents should not exceed 0.5%.
- Phosphorus and/or Zinc should not exceed 5 ppmv in the exhaust stream.
- A high temperature alarm/shutdown to be maintained at downstream of catalyst at 1300°F.
- Fuel not to contain heavy or transition metals such as Pb, Ar, Zn, Cu, Sn, Fe, Ba, Ni, Cr etc.
- Chlorinated or Silicone containing compounds in the exhaust not to exceed 1 ppmv.
- Sulfur compounds in the exhaust gas stream not to exceed 25 ppmv.
- Performance guarantee is voided should the catalyst become masked or de-activated by any contaminant in the exhaust stream.
- Engine to be maintained and operated in accordance within manufacturer's recommended practice.
- Under no condition will IAC Acoustics assume any contingent liabilities.
- Operating manual is available online at www.maximsilencers.com or contact a Maxim sales representative.
- Nomenclature: QAC4-292-8, 4 is grade (Super Critical), 29 is catalyst block size, 2 is no. of catalyst(s) and 8 is flange diameter.
- Organic PM10 are estimate only and not a guarantee because of the variability in fuels and additives which change PM10.
- IAC's standard one year warranty applies.

Rev level: 86

3/18/2015

POWER RATINGS: L7042GSI VHP™ SERIES GAS ENGINE

Model	I.C. Water Inlet Temp.	C.R.	Brake Horsepower (kWb Output) 800 rpm	900 rpm	1000 rpm	1200 rpm
L7042GSI	85° (29°)	8:1	1031 (769)	1160 (865)	1289 (961)	1547 (1154)
	130° (54°)	8:1	987 (736)	1110 (828)	1233 (920)	1480 (1104)

Rating Standard: All models: Ratings are based on ISO 3046/1-1995 with mechanical efficiency of 90% and auxiliary water temperature Tcra (clause 10.1) as specified above limited to ± 10° F (± 5° C). Ratings are also valid for SAE J1349, BS5514, DIN6271 and AP17B-11C standard atmospheric conditions.

ISO Standard Power/Continuous Power Rating: The highest load and speed which can be applied 24 hours a day, seven days a week, 365 days per year except for normal maintenance. It is permissible to operate the engine at up to 10% overload, or maximum load indicated by the intermittent rating, whichever is lower, for two hours in each 24 hour period.

All natural gas engine ratings are based on a fuel of 900 Btu/ft^3 (35.3 MJ/nm^3) SLHV value, with a 91 Waukesha Knock Index®.

For conditions or fuels other than standard, contact the Waukesha Engine Sales Engineering Department.

PERFORMANCE: L7042GSI VHP™ SERIES GAS ENGINE

English 130° F I.C. Water Temperature

RPM	1200	1000
Power (Bhp)	1480	1233
BSFC (Btu/bhp-hr)	7675	7440
NOx (grams/bhp-hr)	16.0	16.0
CO (grams/bhp-hr)	13.0	13.0
NMHC (grams/bhp-hr)	0.25	0.25

Metric 54° C I.C. Water Temperature

RPM	1200	1000
Power (kWb)	1104	920
BSFC (kJ/kW-hr)	10860	10525
NOx (g/nm^3)	5.9	5.9
CO (g/nm^3)	4.8	4.8
NMHC (g/nm^3)	0.1	0.1

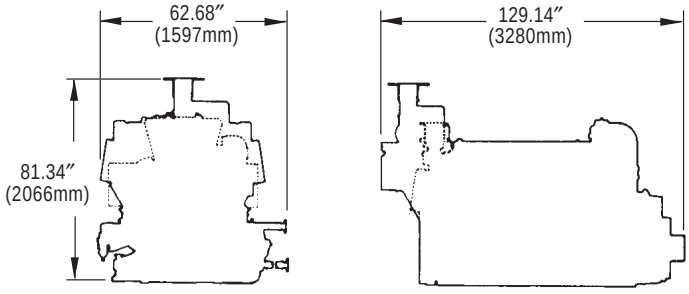
NOTES:

1) Fuel consumption and exhaust emissions are based on ISO 3046/1-1995 standard reference conditions and commercial quality natural gas of 900 Btu/ft^3 (35.38 MJ/m^3 [25, V(0; 101.325)]) saturated lower heat value, Waukesha Knock Index® of 91 and 93% methane content by volume.
ISO 3046/1-1995 standard reference conditions are 77°F (25°C) ambient temperature, 29.54 inches Hg (100 kPa) barometric pressure, 30% relative humidity (1kPa/0.3 inches Hg water vapor pressure).

2) S.I. exhaust emissions are corrected to 5% O_2 (0°C and 101.325 kPa).

3) Data will vary due to variations in site conditions. For conditions and/or fuels other than standard, consult the Waukesha Engine Sales Engineering Department.

4) Fuel consumption bassed on ISO 3046/1-1995 with a +5% tolerance for commercial quality natural gas having a 900 Btu/ft^3 saturated low heat valve



DRESSER
Waukesha

WAUKESHA ENGINE
DRESSER, INC.
1101 West St. Paul Avenue
Waukesha, WI 53188-4999
Phone: (262) 547-3311 Fax: (262) 549-2795
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EUROPEAN REGIONAL OFFICE
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Phone/Fax: +48 22 409 13 70
Mobile: +48 605 310 757
Email: tomasz.staszek@waukeshaengine.dresser.com

Consult your local Waukesha Distributor for system application assistance. The manufacturer reserves the right to change or modify without notice, the design or equipment specifications as herein set forth without incurring any obligation either with respect to equipment previously sold or in the process of construction except where otherwise specifically guaranteed by the manufacturer.

Table 3.2-3. UNCONTROLLED EMISSION FACTORS FOR 4-STROKE RICH-BURN ENGINES[a]
(SCC 2-02-002-53)

Pollutant	Emission Factor (lb/MMBtu)[b] (fuel input)	Emission Factor Rating
Criteria Pollutants and Greenhouse Gases		
NO_x[c] 90 - 105% Load	2.21 E+00	A
NO_x[c] <90% Load	2.27 E+00	C
CO[c] 90 - 105% Load	3.72 E+00	A
CO[c] <90% Load	3.51 E+00	C
CO_2[d]	1.10 E+02	A
SO_2[e]	5.88 E-04	A
TOC[f]	3.58 E-01	C
Methane[g]	2.30 E-01	C
VOC[h]	2.96 E-02	C
PM10 (filterable)[i,j]	9.50 E-03	E
PM2.5 (filterable)[j]	9.50 E-03	E
PM Condensable[k]	9.91 E-03	E
Trace Organic Compounds		
1,1,2,2-Tetrachloroethane[l]	2.53 E-05	C
1,1,2-Trichloroethane[l]	<1.53 E-05	E
1,1-Dichloroethane	<1.13 E-05	E
1,2-Dichloroethane	<1.13 E-05	E
1,2-Dichloropropane	<1.30 E-05	E
1,3-Butadiene[l]	6.63 E-04	D
1,3-Dichloropropene[l]	<1.27 E-05	E
Acetaldehyde[l,m]	2.79 E-03	C
Acrolein[l,m]	2.63 E-03	C
Benzene[l]	1.58 E-03	B
Butyr/isobutyraldehyde	4.86 E-05	D
Carbon Tetrachloride[l]	<1.77 E-05	E

Table 3.2-3. UNCONTROLLED EMISSION FACTORS FOR 4-STROKE RICH-BURN ENGINES (Concluded)

Pollutant	Emission Factor (lb/MMBtu)[b] (fuel input)	Emission Factor Rating
Chlorobenzene[l]	<1.29 E-05	E
Chloroform[l]	<1.37 E-05	E
Ethane[n]	7.04 E-02	C
Ethylbenzene[l]	<2.48 E-05	E
Ethylene Dibromide[l]	<2.13 E-05	E
Formaldehyde[l,m]	2.05 E-02	A
Methanol[l]	3.06 E-03	D
Methylene Chloride[l]	4.12 E-05	C
Naphthalene[l]	<9.71 E-05	E
PAH[l]	1.41 E-04	D
Styrene[l]	<1.19 E-05	E
Toluene[l]	5.58 E-04	A
Vinyl Chloride[l]	<7.18 E-06	E
Xylene[l]	1.95 E-04	A

[a] Reference 7. Factors represent uncontrolled levels. For NO_x, CO, and PM-10, "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 NOx 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. PM10 = 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.

[b] Emission factors were calculated in units of (lb/MMBtu) based on procedures in EPA Method 19. To convert from (lb/MMBtu) to (lb/10^6 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:

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

[c] Emission tests with unreported load conditions were not included in the data set.

[d] Based on 99.5% conversion of the fuel carbon to CO_2. CO_2 [lb/MMBtu] = (3.67)(%CON)(C)(D)(1/h), where %CON = percent conversion of fuel carbon to CO_2,

C = carbon content of fuel by weight (0.75), D = density of fuel, 4.1 E+04 lb/10^6 scf, and h = heating value of natural gas (assume 1020 Btu/scf at 60°F).

[e] Based on 100% conversion of fuel sulfur to SO_2. Assumes sulfur content in natural gas of 2,000 gr/10^6 scf.

[f] Emission factor for TOC is based on measured emission levels from 6 source tests.

[g] Emission factor for methane is determined by subtracting the VOC and ethane emission factors from the TOC emission factor.

[h] VOC emission factor is based on the sum of the emission factors for all speciated organic compounds. Methane and ethane emissions were not measured for this engine category.

[i] No data were available for uncontrolled engines. PM10 emissions are for engines equipped with a PCC.

[j] Considered $\leq$ 1 μm in aerodynamic diameter. Therefore, for filterable PM emissions, PM10(filterable) = PM2.5(filterable).

[k] No data were available for condensable emissions. The presented emission factor reflects emissions from 4SLB engines.

[l] Hazardous Air Pollutant as defined by Section 112(b) of the Clean Air Act.

[m] For rich-burn engines, no interference is suspected in quantifying aldehyde emissions. The presented emission factors are based on FTIR and CARB 430 emissions data measurements.

[n] Ethane emission factor is determined by subtracting the VOC emission factor from the NMHC emission factor.

United States Environmental Protection Agency
Office of Air Quality Planning and Standards Research Triangle Park NC 27711
EPA-453/R-95-017 November 1995
Air

EPA

Protocol for Equipment Leak Emission Estimates

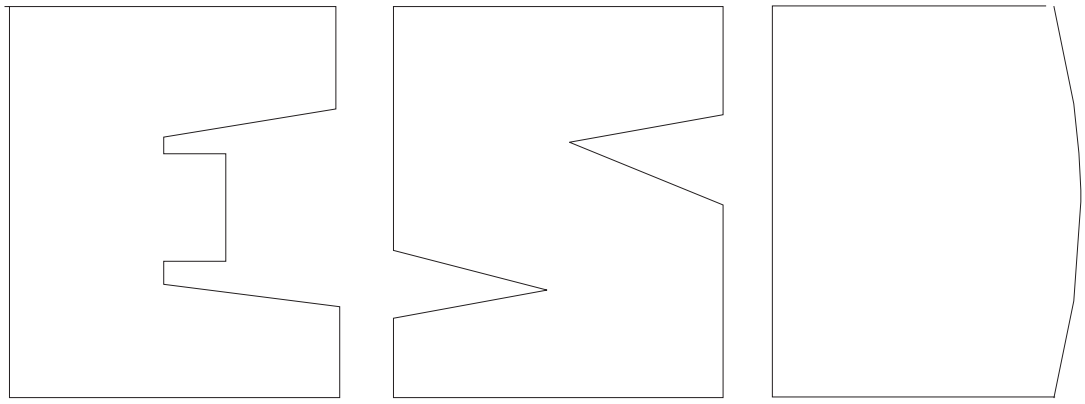

TABLE 2-4. OIL AND GAS PRODUCTION OPERATIONS AVERAGE EMISSION FACTORS (kg/hr/source)

Equipment Type	Service[a]	Emission Factor (kg/hr/source)[b]
Valves	Gas	4.5E-03
	Heavy Oil	8.4E-06
	Light Oil	2.5E-03
	Water/Oil	9.8E-05
Pump seals	Gas	2.4E-03
	Heavy Oil	NA
	Light Oil	1.3E-02
	Water/Oil	2.4E-05
Others[c]	Gas	8.8E-03
	Heavy Oil	3.2E-05
	Light Oil	7.5E-03
	Water/Oil	1.4E-02
Connectors	Gas	2.0E-04
	Heavy Oil	7.5E-06
	Light Oil	2.1E-04
	Water/Oil	1.1E-04
Flanges	Gas	3.9E-04
	Heavy Oil	3.9E-07
	Light Oil	1.1E-04
	Water/Oil	2.9E-06
Open-ended lines	Gas	2.0E-03
	Heavy Oil	1.4E-04
	Light Oil	1.4E-03
	Water/Oil	2.5E-04

[a]Water/Oil emission factors apply to water streams in oil service with a water content greater than 50%, from the point of origin to the point where the water content reaches 99%. For water streams with a water content greater than 99%, the emission rate is considered negligible.

[b]These factors are for total organic compound emission rates (including non-VOC's such as methane and ethane) and apply to light crude, heavy crude, gas plant, gas production, and off shore facilities. "NA" indicates that not enough data were available to develop the indicated emission factor.

[c]The "other" equipment type was derived from compressors, diaphrams, drains, dump arms, hatches, instruments, meters, pressure relief valves, polished rods, relief valves, and vents. This "other" equipment type should be applied for any equipment type other than connectors, flanges, open-ended lines, pumps, or valves.

Section 8

Map(s)

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	

An Area map and satellite map are included in this section.

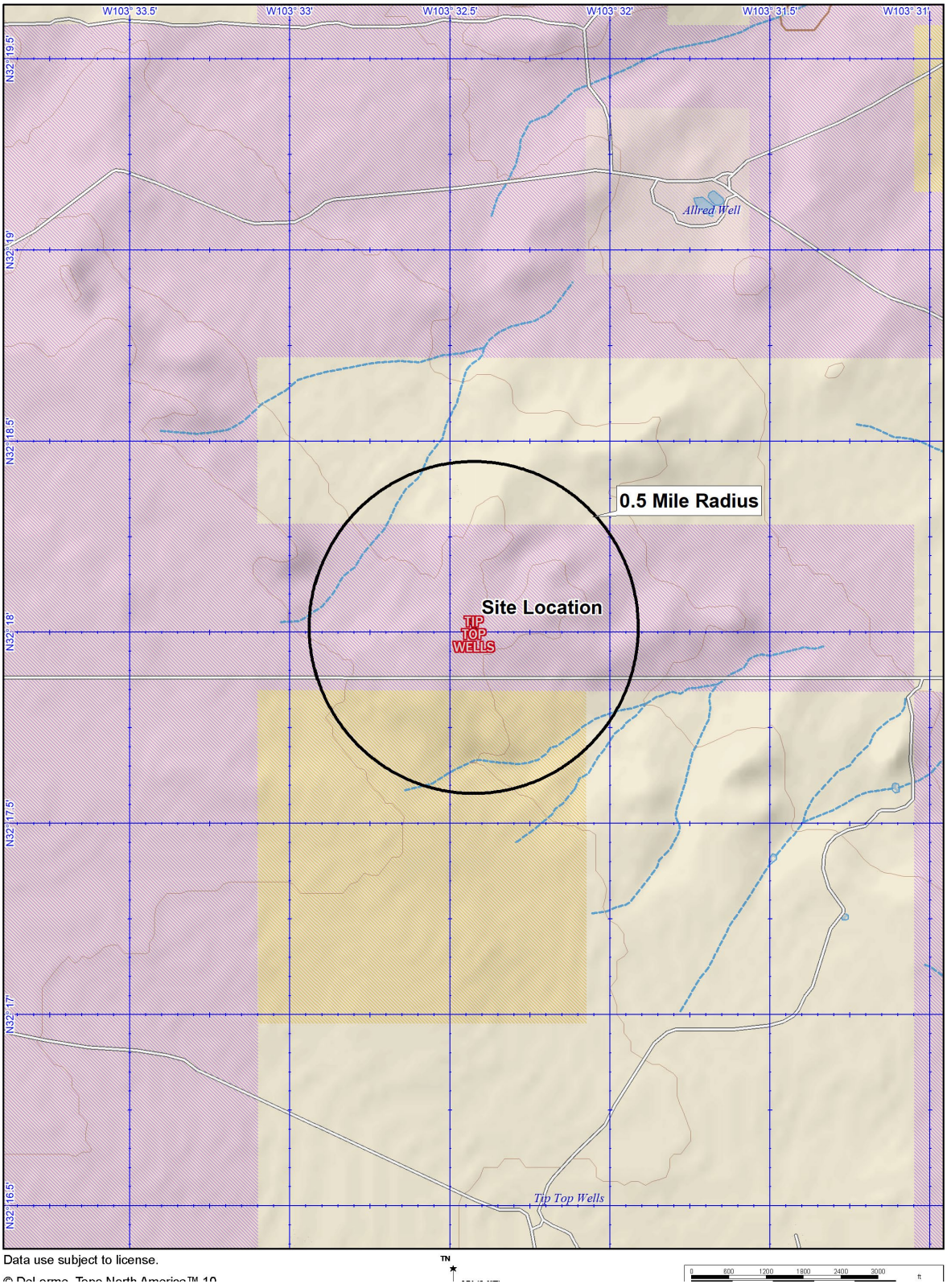

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FIGURE TITLE	AREA MAP
DOCUMENT TITLE	TV PERMIT APPLICATION
CLIENT	TARGA MIDSTEAM SERVICES, LLC
LOCATION	BRININSTOOL COMPRESSOR STATION LEA COUNTY, NEW MEXICO

DATE	10/25/2021
SCALE	AS SHOWN
DESIGNED BY	AD
APPROVED BY	RZ
DRAWN BY	AD
PROJECT NUMBER	
FIGURE NUMBER	**SECTION 8**

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")

☐ **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.

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.

Section 10

Written Description of the Routine Operations of the Facility

---

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.

The purpose of the Brininstool Compressor Station is to help move natural gas from the gathering system to a gas processing plant. The site operates natural gas-fired engines (units C-01 to C-13) to power reciprocating compressors (units RC-01 to RC-13). The compressors raise the discharge pressure of the gas in the pipeline to overcome the effect of frictional losses in the pipeline upstream of the station or from pressure losses/changes within the facility in order to maintain the required suction pressure at the next downstream facility. The volume of gas flowing and the amount of subsequent frictional losses in the pipeline are dependent on field conditions and downstream plant conditions causing pressure variations.

Prior to compression, the inlet natural gas is passed through inlet scrubbers/3-phase separator units to remove hydrocarbon condensates and water from the incoming gas. Water is stored on-site in a produced water tank (unit TK-6) and hydrocarbon condensates are re-injected into the pipeline for separation at another facility further downstream.

The facility stores water and various products used to maintain the equipment and normal operations. Tanks at the facility include a methanol tank (unit TK-1), a lube oil tank (unit TK-4), an antifreeze tank (unit TK-5), and a water tank (unit TK-7).

No condensate tanks are located at the facility. All condensate is re-injected into the pipeline for separation at another facility further downstream.

Additional emissions result from facility-wide fugitives (unit FUG), venting during Startup, Shutdown, and Maintenance (SSM) (unit Vent SSM), and Malfunction emissions (unit M).

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 not one of the listed 20.2.74.501 Table I – PSD Source Categories.**

Section 13

Determination of State & Federal Air Quality Regulations

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 RELEVENT 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/

To save paper and to standardize the application format, delete this sentence, and begin your submittal for this attachment on this page.

Example of a Table for STATE REGULATIONS:

STATE REGU-LATIONS 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.)
20.2.1 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	Yes	Facility	The air pollutants subject to 20.2.3 NMAC are present at the facility and are thus subject to these requirements.
20.2.7 NMAC	Excess Emissions	Yes	Facility	Per 20.2.7.108(A)(2), this ruling is applicable. The facility will comply with excess emission notifications and corrective action implementations as required.
20.2.23 NMAC	Fugitive Dust Control	No	Facility	The facility is not located in Doña Ana or Luna Counties, and is therefore not subject to 40 CFR §51.930 or 20.2.23 NMAC.
20.2.33 NMAC	Gas Burning Equipment - Nitrogen Dioxide	No	N/A	This facility does not have existing gas burning equipment having a heat input of greater than 1,000,000 million British Thermal Units per year per unit. The facility is not subject to this regulation and does not have emission sources that meet the applicability requirements under 20.2.33.108 NMAC.
20.2.34 NMAC	Oil Burning Equipment: NO_2	No	N/A	This Facility does not have existing oil burning equipment having a heat input of greater than 1,000,000 million British Thermal Units per year per unit. The facility is not subject to this regulation and does not have emission sources that meet the applicability requirements under 20.2.34.108 NMAC.
20.2.35 NMAC	Natural Gas Processing Plant – Sulfur	No	N/A	The purpose of this regulation is to establish sulfur emissions standards for natural gas process plants [20.2.35.6 NMAC]. This facility is not a natural gas processing plant as defined in the regulation [20.2.35.7 NMAC]. As this facility is not defined as a natural gas processing plant under this regulation, the facility is not subject to this regulation.
20.2.37 and 20.2.36 NMAC	Petroleum Processing Facilities and Petroleum Refineries	N/A	N/A	**These regulations were repealed by the Environmental Improvement Board. If you had equipment subject to 20.2.37 NMAC before the repeal, your combustion emission sources are now subject to 20.2.61 NMAC.**
20.2.38 NMAC	Hydrocarbon Storage Facility	No	N/A	The purpose of this regulation is to minimize hydrogen sulfide emissions from hydrocarbon storage facilities. Hydrocarbon condensate liquids are separated from the gas stream at the inlet separator and leave the facility via pipeline; hydrocarbon liquids are not stored at this facility. This regulation does not apply.
20.2.39 NMAC	Sulfur Recovery Plant - Sulfur	No	N/A	This regulation establishes sulfur emission standards for sulfur recovery plants. Since there is not a sulfur recovery plant at this facility, this regulation does not apply to the facility.
20.2.50 NMAC	Oil and Gas Sector – Ozone Precursor Pollutants	Yes	C-01 through C-13, F-01, FUG, Vent SSM	This regulation establishes emission standards for volatile organic compounds (VOC) and oxides of nitrogen (NOx) for oil and gas production, processing, compression, and transmission sources. 20.2.50 NMAC subparts: The facility is subject to this subpart.
20.2.61.109 NMAC	Smoke & Visible Emissions	Yes	C-01 through C-13, F-01	The compressor engines and flare are Stationary Combustion Equipment. Targa will maintain compliance with the regulation by operating the combustion units according to manufacturer's recommendations to ensure complete combustion.
20.2.70 NMAC	Operating Permits	Yes	Facility	This regulation establishes requirements for obtaining an operating permit. Emissions from of CO and NOx are greater than 100 tpy. The facility is subject to this regulation.
20.2.71 NMAC	Operating Permit Fees	Yes	Facility	This regulation established a schedule of operating permit emission fees. The facility is subject to 20.2.70 NMAC and is therefore subject to requirements of this regulation.

STATE REGU-LATIONS 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.)
20.2.72 NMAC	Construction Permits	Yes	Facility	The objective of this part is to establish the requirements for obtaining a construction permit. The facility is subject as emissions are greater than 10 lb/hr and 25 tpy of regulated air contaminants for which there are National or New Mexico Ambient Air Quality Standards.
20.2.73 NMAC	NOI & Emissions Inventory Requirements	Yes	Facility	The regulation establishes emission inventory emission. The facility meets the applicability requirements of 20.2.73.300.A.1 NMAC.
20.2.74 NMAC	Permits – Prevention of Significant Deterioration (PSD)	No	Facility	The site is not a PSD major source.
20.2.75 NMAC	Construction Permit Fees	Yes	Facility	This regulation establishes a schedule of construction permit emission fees. The facility is subject to 20.2.72 NMAC and is therefore subject to requirements of this regulation.
20.2.77 NMAC	New Source Performance	Yes	FUG, C-06, C-07, C-11, C-12, C-13, RC-07, GEN	The purpose of this regulation is to establish state authority to implement new source performance standards for stationary sources in New Mexico subject to 40 CFR Part 60. This regulation applies as 40 CFR 60 Subpart JJJJ applies to C-06, C-07, C-11 to C-13, and GEN, and NSPS OOOOa applies to FUG and RC-07. NSPS OOOOa, NSPS JJJJ nor NSPS OOOO will not apply to reciprocating compressor associated with engines C-06 as it was manufactured prior to the applicability dates of this regulation. For units RC-11 to RC-13, NSPS OOOO/OOOOa applicability will be completed once the units are installed.
20.2.78 NMAC	Emission Standards for HAPS	No	N/A	This facility emits hazardous air pollutants which are not subject to the requirements of 40 CFR Part 61.
20.2.79 NMAC	Permits – Nonattainment Areas	No	Facility	The Facility is not located in a nonattainment area.
20.2.80 NMAC	Stack Heights	No		This regulation established requirements for the evaluation of stack heights and other dispersion techniques. The stacks at the facility will follow good engineering practices. This regulation does not apply as all stacks at the facility will follow good engineering practice.
20.2.82 NMAC	MACT Standards for source categories of HAPS	Yes	C-01 through C-13	The compressor engines (Unit ID C-01 to C-13) are subject to 40 CFR 63 Subpart ZZZZ.

Example of a Table for Applicable FEDERAL REGULATIONS (Note: This is not an exhaustive list):

FEDERAL REGU-LATIONS 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. The facility meets all applicable national ambient air quality standards for NOx, CO, SO_2, H_2S, PM_{10}, and $PM_{2.5}$ under this regulation.
NSPS 40 CFR 60, Subpart A	General Provisions	Yes	FUG, C-06, C-07,	The purpose of this regulation is to establish state authority to implement new source performance standards for stationary sources in New Mexico subject to 40 CFR Part 60. This regulation applies as 40 CFR 60 Subpart JJJJ applies to C-06,

FEDERAL REGU-LATIONS CITATION	Title	Applies? Enter Yes or No	Unit(s) or Facility	JUSTIFICATION:
			C-11, C-12, C-13, RC-07, GEN	C-07, and GEN, and may potentially apply to engines C-10 to C-13 and NSPS OOOOa applies to FUG and RC-07
NSPS 40 CFR60.40a, Subpart Da	Subpart Da, Performance Standards for **Electric Utility Steam Generating Units**	No	N/A	This regulation establishes standards for performance for electric utility steam generating units. This regulation does not apply because the facility does not operate any electric utility steam generating units.
NSPS 40 CFR60.40b Subpart Db	**Electric Utility Steam Generating Units**	No	N/A	This regulation established standards for performance for industrial-commercial-institutional steam generating units. This regulation does not apply because the facility does not operate any industrial-commercial-institutional steam generating units with heat inputs greater than 100 MMBtu/hr.
40 CFR 60.40c, Subpart Dc	Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units	No	N/A	There are no sources subject to this regulation.
NSPS 40 CFR 60, Subpart Ka	Standards of Performance for **Storage Vessels for Petroleum Liquids** for which Construction, Reconstruction, or Modification Commenced After May 18, 1978, and **Prior** 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. Petroleum liquids at this facility are sent to the pipeline and are not stored. This regulation does not apply.
NSPS 40 CFR 60, Subpart Kb	Standards of Performance for **Volatile Organic Liquid Storage Vessels** (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced **After** July 23, 1984	No	N/A	This regulation establishes performance standards for volatile organic liquid storage vessels (including petroleum liquid storage vessels) for which construction, reconstruction, or modification commenced after July 23, 1984. The capacities of all storage tanks at the facility are less than 75 m3 and are not subject to this regulation.
NSPS 40 CFR 60.330 Subpart GG	**Stationary Gas Turbines**	No	N/A	This regulation establishes standards of performance for stationary gas turbines. The facility does not operate stationary gas turbines and is therefore not subject to this regulation.
NSPS 40 CFR 60, Subpart KKK	Leaks of VOC from **Onshore Gas Plants**	No	N/A	This regulation establishes standards of performance for equipment leaks of VOC from onshore natural gas processing plants for which construction, reconstruction, or modification commenced after January 20, 1984, and on or before August 23, 2011. The facility is not a natural gas processing plant as defined in this regulation [40 CFR Part 60.631]. This regulation does not apply because this facility does

FEDERAL REGU-LATIONS CITATION	Title	Applies? Enter Yes or No	Unit(s) or Facility	JUSTIFICATION:
				not meet the definition of a natural gas processing plant as stated in the regulation.
NSPS 40 CFR Part 60 Subpart LLL	Standards of Performance for **Onshore Natural Gas Processing**: SO_2 Emissions	No	N/A	This regulation establishes standards pf performance for SO2 emissions form onshore natural gas processing for which construction, reconstruction, or medication commenced after January 20, 1984 and on or before August 23, 2011. The facility is not considered a natural gas processing plant and will have commenced construction after August 23, 2011. The facility is not subject to this regulation.
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 rule applies to "affected" facilities that are constructed, modified, or reconstructed after August 23, 2011. The facility does not operate natural gas wells, centrifugal compressors, or sweetening units. The facility does not extract natural gas liquids or fractionate natural gas liquids to natural gas products and, therefore, is not considered a natural gas processing plant. Applicability to facility operations is as follows: Pursuant to 40 CFR §60.5365(e), a storage vessel is an affected facility if it is located in the oil and natural gas production segment and has the potential to emit 6 tpy or more VOC emissions. The produced water storage tank (Unit TK-6) emits less than 6 tons per year of VOCs and, therefore is not an affected source subject to NSPS OOOO. The units RC-01 to RC-10 reciprocating compressors were constructed prior to August 23, 2011 and are therefore not subject to this regulation (40 CFR §60.5365). For units RC-11 to RC-13, NSPS OOOO applicability will be completed once the units are installed. Targa will complete a regulatory applicability determination and follow all applicable requirements. The pneumatic controllers do not meet the definition of an affected facility under §60.5365(d)(1)-(3), as they are not considered continuous bleed.
NSPS 40 CFR Part 60 Subpart OOOOa	Standards of Performance for Crude Oil and Natural Gas Facilities for which Construction, Modification or Reconstruction Commenced After September 18, 2015	Yes	FUG, RC-07	This regulation establishes standards of performance for crude oil and natural gas facilities for which construction, modification, or reconstruction commenced after September 18, 2015. The reciprocating compressors associated with C-01 to C-06 and C-08 to C-10 (Units with engines RC-01 to RC-06 and RC-08 to RC-10) at the facility each have a manufacture date prior to September 18, 2015. These units were relocated from other sites and relocation is not considered a modification per 60.14(e)(6). Therefore, these compressors are not subject to §60.5365a(c). The reciprocating compressor associated with engines C-07 (Unit RC-07) has a manufacture date after September 18, 2015 and is subject to §60.5365a(c). For units RC-11 to RC-13, NSPS OOOOa applicability will be completed once the units are installed. Targa will complete a regulatory applicability determination and follow all applicable requirements. The collection of fugitive emissions components at a compressor station are an. affected facility. A modification to a compressor station occurs when: • An additional compressor is installed at a compressor station; or • One or more compressors at a compressor station is replaced by one or more compressors of greater total horsepower than the compressor(s) being replaced. • Since the construction of the Brininstool Compressor Station started after the September 18, 2015 applicability date, the fugitive emission components are subject to NSPS OOOOa (per 60.5365a(i)). The facility will follow all applicable standards.
NSPS 40	Standards of	No	N/A	This regulation establishes standards of performance for stationary compression

FEDERAL REGU-LATIONS CITATION	Title	Applies? Enter Yes or No	Unit(s) or Facility	JUSTIFICATION:
CFR 60 Subpart IIII	performance for Stationary Compression Ignition Internal Combustion Engines			ignition internal combustion engines. This facility does not have compression ignition internal combustion engines. This regulation does not apply.
NSPS 40 CFR Part 60 Subpart JJJJ	Standards of Performance for Stationary Spark Ignition Internal Combustion Engines	Yes	C-06, C-07, C-11, C-12, C-13, GEN	This regulation establishes standards of performance for stationary spark ignition internal combustion engines. This regulation applies to engines which are manufactured on or after July 1, 2007 for engines with a maximum engine power greater than or equal to 500 hp. Engines C-01 to C-05 and C-08 to C-10 were manufactured prior to July 1, 2007 and are not subject. Engines C-06, C-07, and GEN are subject to this regulation. Engines C-11, C-12 and C-13 are expected to have manufacture dates of July 1, 2010 or later, and are expected to be subject to this regulation.
NSPS 40 CFR 60 Subpart TTTT	Standards of Performance for Greenhouse Gas Emissions for Electric Generating Units	No	N/A	There will be no electric generating units at the site.
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 is not a municipal solid waste landfill.
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.
NESHAP 40 CFR 61 Subpart A	General Provisions	Yes	N/A	This part applies to the owner or operator of any stationary source for which a standard is prescribed under this part.
NESHAP 40 CFR 61 Subpart E	National Emission Standards for **Mercury**	No	N/A	The provisions of this subpart are applicable to those 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 his facility does not process mercury therefore this regulation does not apply.
NESHAP 40 CFR 61 Subpart V	National Emission Standards for **Equipment Leaks** (Fugitive Emission Sources)	No	N/A	The provisions of this subpart apply to each of the following sources that are intended to operate in volatile hazardous air pollutant (VHAP) service: pumps, compressors, pressure relief devices, sampling connection systems, open-ended valves or lines, valves, connectors, surge control vessels, bottoms receivers, and control devices or systems required by this subpart. VHAP service means a piece of equipment either contains or contacts a fluid (liquid or gas) that is at least 10 percent by weight of VHAP. VHAP means a substance regulated under this subpart for which a standard for equipment leaks of the substance has been promulgated. Benzene is a VHAP (See 40 CFR 61 Subpart J). The regulated activities subject to this regulation do not take place at this facility. The facility is not subject to this regulation.
MACT 40 CFR 63, Subpart A	General Provisions	Yes	C-01 through C-13	The compressor engines (Unit ID C-01 – C-13) are subject to 40 CFR 63 Subpart ZZZZ.

FEDERAL REGU-LATIONS CITATION	Title	Applies? Enter Yes or No	Unit(s) or Facility	JUSTIFICATION:
MACT 40 CFR 63.760 Subpart HH	**Oil and Natural Gas Production Facilities**	No	N/A	This regulation establishes national emission standards for hazardous air pollutants from oil and na1un1J gas production facilities. This facility is an area source of HAPs, but does not have an affected source. Therefore, this regulation does not apply.
MACT 40 CFR 63 Subpart HHH		No	N/A	This subpart applies to owners and operators of natural gas transmission and storage facilities that transport or store natural gas prior to entering the pipeline to a local distribution company or to a final end user (if there is no local distribution company), and that are major sources of hazardous air pollutants (HAP) emissions as defined in §63.1271. This facility is not a natural gas transmission and storage facility as defined in this subpart. This regulation does not apply.
MACT 40 CFR 63 Subpart DDDDD	National Emission Standards for Hazardous Air Pollutants for Major Industrial, Commercial, and Institutional Boilers & Process Heaters	No	N/A	This subpart established national emission limitation and work practice standards for hazardous air pollutants (HAP) emitted from industrial, commercial, and institutional boilers and process heaters located at major sources of HAP. This facility is not a major source of HAP and does not contain affected source. This regulation does not apply.
MACT 40 CFR 63 Subpart UUUUU	National Emission Standards for Hazardous Air Pollutants Coal & Oil Fire Electric Utility Steam Generating Unit	No	N/A	This subpart establishes national emission limitations and work practice standards for hazardous air pollutants (HAP) emitted from coal- and oil-fired electric utility steam generating units (EGUs) as defined in §63.10042 of this subpart. This facility does not contain the affected source. This regulation does not apply.
MACT 40 CFR 63 Subpart ZZZZ	National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (**RICE MACT**)	Yes	C-01 through C-13	This regulation defines national emissions standards for HAPs for stationary Reciprocating Internal Combustion Engines. Engines C-01 to C-05, C-09 and C-10 are non-remote existing stationary 4 stroke rich burn engines located at an area source of HAP emissions as the engines commenced construct before June 12, 2006. The engines must comply with requirements in Table 2d, 4 and 5 per §63.6603(a). Engines C-06, C-08, and C-11 to C-13 are non-remote engines which commenced construction after June 12, 2006, and thus are considered new engines. Per §63.6590(c)(I), any new or reconstructed RICE located at an area source must meet the requirements of Subpart ZZZZ by meeting the requirements of 40 CFR 60 Subpart JJJJ, and no additional requirements apply to these engines under Subpart ZZZZ.
40 CFR 64	**Compliance Assurance Monitoring**	No	N/A	This regulation defines compliance assurance monitoring. C-1 to C-10, C-12 and C-13 have pre-control emissions of NOx and CO greater than 100 tpy and post-control emissions less than 100 tpy. The controls on the engines are required by NSPS JJJJ and/or ZZZZ. This regulation does not apply.
40 CFR 68	**Chemical Accident Prevention**	No	N/A	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	**Acid Rain**	No	N/A	The site does not generate commercial electric power or electric power for sale.

FEDERAL REGU-LATIONS CITATION	Title	Applies? Enter Yes or No	Unit(s) or Facility	JUSTIFICATION:
Title IV – Acid Rain 40 CFR 73	**Sulfur Dioxide** Allowance Emissions	No	N/A	The site does not generate commercial electric power or electric power for sale.
Title IV-Acid Rain 40 CFR 75	**Continuous Emissions Monitoring**	No	N/A	The site does not generate commercial electric power or electric power for sale.
Title IV – Acid Rain 40 CFR 76	**Acid Rain** Nitrogen Oxides **Emission Reduction Program**	No	N/A	The site does not generate commercial electric power or electric power for sale.
Title VI – 40 CFR 82	Protection of **Stratospheric Ozone**	No	N/A	This regulation establishes a regulation for protection of the stratospheric ozone. The regulation is not applicable because the facility does not "service", "maintain" or "repair" class I or class II appliances nor "disposes" of the appliances [40 CFR Part 82.1(a)].

Section 14

Operational Plan to Mitigate Emissions

(Submitting under 20.2.70, 20.2.72, 20.2.74 NMAC)

☐ **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.

SSM activities are performed at the site to ensure the site continued to operate in a manner that is safe, efficient, and environmentally sound. Startup and shutdown procedures are performed according to guidelines which dictate proper procedural sequence to minimize emissions from the facility during such activities.

Equipment located at the plant is equipped with various safety devices that aid in preventing excess emissions to the atmosphere in the event of an operational emergency. In the event of a malfunction, startup, shutdown, or scheduled maintenance in which emission rates from the facility exceed permitted allowables. Targa will notify the AQB in accordance with 20.2.7 NMAC and equipment responsible for the exceedance will be repaired as soon as possible.

Section 15

Alternative Operating Scenarios

(Submitting under 20.2.70, 20.2.72, 20.2.74 NMAC)

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. 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.

This application does not include alternative operating scenarios.

Section 16

Air Dispersion Modeling

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) 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. **Note:** 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. Permit No. 6317M3 – included full modeling and was issued in 2022	X
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.	

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)

To show compliance with existing NSR permits conditions, you must submit a compliance test history. The table below provides an example.

To save paper and to standardize the application format, delete this sentence and the samples in the Compliance Test History Table, and begin your submittal for this attachment on this page.

Compliance Test History Table (Modify this sample table to suit your facility)

Unit No.	Test Description	Test Date
C-01	Tested in accordance with EPA test methods for NOx and CO as required by NSR permit 6317-M1R3 and/or GCP-OG Permit No. 6317-M2.	2/13/19, 5/13/19, 7/29/19, 2/23/21
C-02	Tested in accordance with EPA test methods for NOx and CO as required by NSR permit 6317-M1R3 and/or GCP-OG Permit No. 6317-M2	2/12/19, 5/13/19, 7/29/19, 1/19/21
C-03	Tested in accordance with EPA test methods for NOx and CO as required by NSR permit 6317-M1R3 and/or GCP-OG Permit No. 6317-M2	2/12/19, 5/14/19, 7/29/19, 12/3/20
C-04	Tested in accordance with EPA test methods for NOx and CO as required by NSR permit 6317-M1R3 and/or GCP-OG Permit No. 6317-M2	2/14/19, 5/14/19, 7/29/19, 5/27/21
C-05	Tested in accordance with EPA test methods for NOx and CO as required by NSR permit 6317-M1R3 and/or GCP-OG Permit No. 6317-M2.	2/12/19, 5/16/19, 7/16/19, 7/23/21
C-06	Tested in accordance with EPA test methods for NOx and CO as required by NSR permit 6317-M1R3 and/or GCP-OG Permit No. 6317-M2	2/11/19, 5/14/19, 7/29/19, 8/23/21
C-07	Tested in accordance with EPA test methods for NOx and CO as required by NSR permit 6317-M1R3 and/or GCP-OG Permit No. 6317-M2	2/13/19, 5/15/19, 9/17/19, 5/27/21
C-08	Tested in accordance with EPA test methods for NOx and CO as required by NSR permit 6317-M1R3 and/or GCP-OG Permit No. 6317-M2	2/21/19, 5/14/19, 7/29/19, 5/24/21
C-09	Tested in accordance with EPA test methods for NOx and CO as required by GCP-OG Permit No. 6317-M2.	2/21/19, 5/14/19, 7/29/19, 1/19/21
C-10	Tested in accordance with EPA test methods for NOx and CO as required by GCP-OG Permit No. 6317-M2.	2/21/19, 5/14/19, 7/29/19, 1/19/21

Section 20

Other Relevant Information

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.

No other relevant information is included in this section.

Section 22: Certification

Company Name: Targa Midstream Services LLC

I, Jimmy E Oxford, 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 30th day of March, 2023 upon my oath or affirmation, before a notary of the State of Texas.

*Signature — Date: 3/30/23

Jimmy E. Oxford
Printed Name

VP- Operations
Title

Scribed and sworn before me on this 30th day of March, 2023.

My authorization as a notary of the State of Texas expires on the 26th day of October, 2025.

Mary Theresa Endsley
Notary's Signature — Date: 3-30-2023

Mary Theresa Endsley
Notary's Printed Name

MARY THERESA ENDSLEY
Notary ID #125462685
My Commission Expires
October 26, 2025

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