

<b>Mail Application To:</b>  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 <a href="http://www.env.nm.gov/aqb">www.env.nm.gov/aqb</a>		<b>For Department use only:</b>  <b>RECEIVED</b>  MAR 21 2024  Air Quality Bureau
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## Universal Air Quality Permit Application

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

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

**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:** ☐ 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.: **3500508427** in the amount of **\$500**  
☒ 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/](http://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/](http://www.env.nm.gov/air-quality/small-biz-eap-2/).)

**Citation:** Please provide the **low level citation** under which this application is being submitted: **20.2.219.D 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: 29885	Updating Permit/NOI #: 4310M5
1	Facility Name: Red Hills Gas Processing Plant	Plant primary SIC Code (4 digits): 1311	
		Plant NAIC code (6 digits): 211120	
a	Facility Street Address (If no facility street address, provide directions from a prominent landmark): 1934 W NM Highway 128, Jal, NM 88252		
2	Plant Operator Company Name: Targa Northern Delaware, LLC	Phone/Fax: (575) 631-7093 / (575) 396-7702	
a	Plant Operator Address: 811 Louisiana St., Ste 2100, Houston, TX 77002		



Targa Resources Partners LP  
811 Louisiana Street  
Suite 2100  
Houston, TX 77002

JPMORGAN CHASE BANK NA  
Chicago, IL

CHECK NO. 3500508427  
CHECK DATE 01/30/2024

70-2322/719  
709373500

\* \* \* Five Hundred Dollars And Zero Cents\*

CHECK AMOUNT

\$500.00

Pay To The Order Of  
STATE OF NEW MEXICO  
GENERAL FUND AIR QUALITY BUREAU  
SANTA FE NM 87505-1816



*Young Kneale*

THIS CHECK CONTAINS MULTIPLE SECURITY FEATURES - SEE BACK FOR DETAILS

⑈3500508427⑈ ⑆071923226⑆ 709373500⑈

PAY TO:

STATE OF NEW MEXICO  
GENERAL FUND AIR QUALITY BUREAU  
SANTA FE NM 87505-1816

Targa Resources Corp.

Page 1 of 1

VENDOR NO.	CHECK DATE	CHECK NO	CHECK TOTAL
1004108	01/30/2024	3500508427	\$500.00

INVOICE  
NUMBER  
CKFQ015024

INVOICE  
DATE  
20240130

Robert Andries

AMOUNT  
PAID  
\$ 500.00

RECEIVED

MAR 18 2024

Air Quality Bureau

Red Hills S16 REV (2024-085)  
Cap Plant NSR (2023-177)



b	Plant Operator's New Mexico Corporate ID or Tax ID: 1948249	
3	Plant Owner(s) name(s): Targa Northern Delaware, LLC	Phone/Fax: (575) 631-7093 / (575) 396-7702
a	Plant Owner(s) Mailing Address(s): 811 Louisiana St., Ste 2100, Houston, TX 77002	
4	Bill To (Company): Targa Northern Delaware, LLC	Phone/Fax: (575) 631-7093 / (575) 396-7702
a	Mailing Address: Mailing Address(s): 201 S 4 <sup>th</sup> Street, Artesia, NM 88210	E-mail: <a href="mailto:Jaylen.fuentes@targaresources.com">Jaylen.fuentes@targaresources.com</a>
5	<input checked="" type="checkbox"/> Preparer: Jaimy Karacaoglu <input checked="" type="checkbox"/> Consultant: Trinity Consultants, Inc.	Phone/Fax: (505) 266-6611
a	Mailing Address: 9400 Holly Ave, Bldg. 3, Ste B, Albuquerque, NM 87122	E-mail: <a href="mailto:Jaimy.karacaoglu@trinityconsultants.com">Jaimy.karacaoglu@trinityconsultants.com</a>
6	Plant Operator Contact: Jaylen Fuentes	Phone/Fax: (575) 915-2201
a	Address: 811 Louisiana St., Ste 2100, Houston, TX 77002	E-mail: <a href="mailto:Jaylen.fuentes@targaresources.com">Jaylen.fuentes@targaresources.com</a>
7	Air Permit Contact: Robert Andries	Title: Sr Environmental Specialist
a	E-mail: <a href="mailto:randries@targaresources.com">randries@targaresources.com</a>	Phone/Fax: (713) 584-1360
b	Mailing Address: 811 Louisiana St., Ste 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? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	1.b If yes to question 1.a, is it currently operating in New Mexico? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
2	If yes to question 1.a, was the existing facility subject to a Notice of Intent (NOI) (20.2.73 NMAC) before submittal of this application? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If yes to question 1.a, was the existing facility subject to a construction permit (20.2.72 NMAC) before submittal of this application? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
3	Is the facility currently shut down? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If yes, give month and year of shut down (MM/YY): N/A
4	Was this facility constructed before 8/31/1972 and continuously operated since 1972? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
5	If Yes to question 3, has this facility been modified (see 20.2.72.7.P NMAC) or the capacity increased since 8/31/1972? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	
6	Does this facility have a Title V operating permit (20.2.70 NMAC)? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If yes, the permit No. is: P-278M1
7	Has this facility been issued a No Permit Required (NPR)? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If yes, the NPR No. is: N/A
8	Has this facility been issued a Notice of Intent (NOI)? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If yes, the NOI No. is: N/A
9	Does this facility have a construction permit (20.2.72/20.2.74 NMAC)? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If yes, the permit No. is: 4310M5
10	Is this facility registered under a General permit (GCP-1, GCP-2, etc.)? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If yes, the register No. is: N/A

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

1	What is the facility's maximum input capacity, specify units (reference here and list capacities in Section 20, if more room is required)			
a	Current	Hourly: 50.417 MMscfh	Daily: 1,210 MMscfd	Annually: 441,650 MMscfy
b	Proposed	Hourly: 50.417 MMscfh	Daily: 1,210 MMscfd	Annually: 441,650 MMscfy
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: 50.417 MMscfh	Daily: 1,210 MMscfd	Annually: 441,650 MMscfy
b	Proposed	Hourly: 50.417 MMscfh	Daily: 1,210 MMscfd	Annually: 441,650 MMscfy

**Section 1-D: Facility Location Information**

1	Latitude (decimal degrees): 32° 12' 38"	Longitude (decimal degrees): 103° 31' 26"	County: Lea	Elevation (ft): 3,582
2	UTM Zone: <input type="checkbox"/> 12 or <input checked="" type="checkbox"/> 13		Datum: <input type="checkbox"/> NAD 83 <input checked="" type="checkbox"/> WGS 84	
a	UTM E (in meters, to nearest 10 meters): 639,100		UTM N (in meters, to nearest 10 meters): 3,564,550	
3	Name and zip code of nearest New Mexico town: Jal, NM 88252			
4	Detailed Driving Instructions from nearest NM town (attach a road map if necessary): East of Carlsbad on Hwy 62/180 to State Road 31 south to Hwy 128. Go east for approximately 27 miles. Plant is on left just before MM 29.			
5	The facility is 24 miles NW of Jal, NM.			
6	Land Status of facility (check one): <input checked="" type="checkbox"/> Private <input type="checkbox"/> Indian/Pueblo <input type="checkbox"/> Government <input type="checkbox"/> BLM <input type="checkbox"/> Forest Service <input type="checkbox"/> Military			
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: Lea County			
8	20.2.72 NMAC applications <b>only</b> : Will the property on which the facility is proposed to be constructed or operated be closer than 50 km (31 miles) to other states, Bernalillo County, or a Class I area (see <a href="http://www.env.nm.gov/air-quality/modeling-publications/">www.env.nm.gov/air-quality/modeling-publications/</a> )? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No (20.2.72.206.A.7 NMAC) If yes, list all with corresponding distances in kilometers: Texas, 43 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): 53.00			
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: > 1600 m			
12	Method(s) used to delineate the Restricted Area: Continuous Fencing  "Restricted Area" is an area to which public entry is effectively precluded. Effective barriers include continuous fencing, continuous walls, or other continuous barriers approved by the Department, such as rugged physical terrain with steep grade that would require special equipment to traverse. If a large property is completely enclosed by fencing, a restricted area within the property may be identified with signage only. Public roads cannot be part of a Restricted Area.			
13	Does the owner/operator intend to operate this source as a portable stationary source as defined in 20.2.72.7.X NMAC? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No A portable stationary source is not a mobile source, such as an automobile, but a source that can be installed permanently at one location or that can be re-installed at various locations, such as a hot mix asphalt plant that is moved to different job sites.			
14	Will this facility operate in conjunction with other air regulated parties on the same property? <input type="checkbox"/> No <input checked="" type="checkbox"/> Yes If yes, what is the name and permit number (if known) of the other facility?			

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

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

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

1	Are there any current Notice of Violations (NOV), compliance orders, or any other compliance or enforcement issues related to this facility? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No If yes, specify: LUC-29885-2201
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a	If yes, NOV date or description of issue: 07/18/2023	NOV Tracking No: LUC_29885-2201
b	Is this application in response to any issue listed in 1-F, 1 or 1a above? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If Yes, provide the 1c & 1d info below:	
c	Document Title: N/A	Requirement # (or page # and paragraph #): N/A
d	Provide the required text to be inserted in this permit: N/A	
2	Is air quality dispersion modeling or modeling waiver being submitted with this application? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
3	Does this facility require an "Air Toxics" permit under 20.2.72.400 NMAC & 20.2.72.502, Tables A and/or B? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
4	Will this facility be a source of federal Hazardous Air Pollutants (HAP)? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
a	If Yes, what type of source? <input checked="" type="checkbox"/> Major ( <input type="checkbox"/> ≥10 tpy of any single HAP OR <input checked="" type="checkbox"/> ≥25 tpy of any combination of HAPS) OR <input type="checkbox"/> Minor ( <input type="checkbox"/> <10 tpy of any single HAP AND <input type="checkbox"/> <25 tpy of any combination of HAPS)	
5	Is any unit exempt under 20.2.72.202.B.3 NMAC? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
a	If yes, include the name of company providing commercial electric power to the facility: Xcel Energy Commercial power is purchased from a commercial utility company, which specifically does not include power generated on site for the sole purpose of the user.	

**Section 1-G: Streamline Application** (This section applies to 20.2.72.300 NMAC Streamline applications only)

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

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

1	Responsible Official (R.O.) (20.2.70.300.D.2 NMAC): Jimmy Oxford	Phone: (940) 220-2493
a	R.O. Title: Vice President Operations	R.O. e-mail: JOxford@targaresources.com
b	R. O. Address: 3100 McKinnon Street, Suite 800, Dallas, TX 75201	
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): Targa Resources, Inc.	
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 Suite 2100, Houston, TX 77002-1400	
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.): Targa Northern Delaware, LLC, Targa Midstream Services, LLC, Versado Gas Processors, LLC	
6	Telephone numbers & names of the owners' agents and site contacts familiar with plant operations: Jaylen Fuentes – (575) 810-6051	
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: Texas 43 km. Local Pollution Control Programs: N/A. Indian Tribes and Pueblos: N/A	

## Section 1-I – Submittal Requirements

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

### Hard Copy Submittal Requirements:

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

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

☐ CD/DVD attached to paper application

☒ Secure electronic transfer.

Air Permit Contact Name: Jaimy Karacaoglu

Email: [Jaimy.karacaoglu@trinityconsultants.com](mailto:Jaimy.karacaoglu@trinityconsultants.com)

Phone number: 410-903-0750

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)]:



9400 Holly Ave NE, Bldg 3, Ste B, Albuquerque, NM 87122 / P 505.266.6611 / [trinityconsultants.com](http://trinityconsultants.com)

March 19, 2023

Permit Programs Manager  
NMED Air Quality Bureau  
525 Camino de los Marquez Suite 1  
Santa Fe, NM 87505-1816

*RE: NSR Significant Revision Permit Application  
Targa Northern Delaware, LLC Red Hills Gas Processing Plant*

Permit Programs Manager:

On behalf of Targa North Delaware, LLC (Targa), we submit this permit application for a significant revision to the Red Hills Gas Processing Plant Construction Permit 4310M5R3 pursuant to 20.2.72.219.D NMAC. The facility is located approximately 24 miles northwest of Jal, Lea County, New Mexico.

In this permit application, Targa seeks to add flaring malfunction emissions for NOx, CO, VOC, and H2S; methanol tanks; exempt gasoline and diesel storage tanks; haul road emissions; and pigging emissions to Construction Permit 4310M5R3. Additionally, Targa seeks to update various permit condition language.

The format and content of this application are consistent with the Air Quality Bureau's current policy regarding NSR applications; it is a complete application package using the most current application formset. Enclosed is a hard copy of the application, including the original certification. Please feel free to contact either me at (505) 266-6611 or by email at [Jaimy.Karacaoglu@trinityconsultants.com](mailto:Jaimy.Karacaoglu@trinityconsultants.com) if you have any questions regarding this application. Alternatively, you may contact Robert Andries, Senior Environmental Specialist for Targa, at (713) 584-1360 or by email at [randries@targaresources.com](mailto:randries@targaresources.com).

Sincerely,  
TRINITY CONSULTANTS

Jaimy Karacaoglu  
Consultant

Trinity Project File 233201.0054

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MAR 21 2024

Air Quality Bureau

ORIGINAL

**HEADQUARTERS**

12700 Park Central Dr, Ste 600, Dallas, TX 75251 / P 800.229.6655 / P 972.661.8100 / F 972.385.9203



**NMED AIR QUALITY BUREAU  
NSR SIGNIFICANT REVISION APPLICATION  
TARGA NORTHERN DELAWARE, LLC  
RED HILLS GAS PROCESSING PLANT**

**Prepared By:**

Robert Andries – Sr. Environmental Specialist

**Targa Northern Delaware, LLC**

811 Louisiana St.  
Suite 2100  
Houston, TX 77002

Jaimy Karacaoglu – Consultant

**TRINITY CONSULTANTS**

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

March 2024

Project 233201.0054

**ORIGINAL**

- 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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Section 9:	Proof of Public Notice
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Section 12:	PSD Applicability Determination for All Sources & Special Requirements for a PSD Application
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Section 15:	Alternative Operating Scenarios
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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 and stack numbering must correspond throughout the application package. If applying for a RICE under 202.75 NMHC, equipment exceptions under 202.75 NMHC do not apply.													
Unit Number <sup>1</sup>	Source Description	Make	Model #	Serial #	Manufacturer's Rated Capacity <sup>3</sup> (Specify Units)	Requested Permitted Capacity <sup>3</sup> (Specify Units)	Date of Manufacture <sup>2</sup>	Controlled by Unit #	Source Classification Code (SCC)	For Each Piece of Equipment, Check One	RICE Ignition Type (CI, SI, 4SLB, 4SRB, 2SLB) <sup>4</sup>	Replacing Unit No.	
							Date of Construction/Reconstruction <sup>2</sup>	Emissions vented to Stack #					
1-EP-1	RH1 HMO Heater	New Point Thermal	DHV 100/50C	311-0014	35.3 MMBtu/hr	35.3 MMBtu/hr	2011	N/A	31000404	<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> New/Additional <input type="checkbox"/> To Be Modified	<input type="checkbox"/> To be Removed <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To be Replaced	N/A	N/A
							2011	1-EP-1					
1-EP-2	RH1 Flare	Callidus	RTA-20 Air-Assisted Tip	F-201113	200 MMscf/d	200 MMscf/d	2012	N/A	31000205	<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> New/Additional <input type="checkbox"/> To Be Modified	<input type="checkbox"/> To be Removed <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To be Replaced	N/A	N/A
							2012	1-EP-2					
1-EP-3	RH1 TEG Regeneration	Tryer Process Equipment	N/A	11-014-300 / 11-014-305	70 MMscf/d	70 MMscf/d	2012	EP-5	31000301	<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> New/Additional <input type="checkbox"/> To Be Modified	<input type="checkbox"/> To be Removed <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To be Replaced	N/A	N/A
							2012	EP-5					
1-EP-4	RH1 Amine Regeneration	Allied Equip. BCKK	N/A	3098 / 6110-070	70 MMscf/d	70 MMscf/d	2012	EP-5	31000305	<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> New/Additional <input type="checkbox"/> To Be Modified	<input type="checkbox"/> To be Removed <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To be Replaced	N/A	N/A
							2012	EP-5					
1.5-EP-1g	RH1 Condensate Stabilization HMO Heater	TBD	TBD	MJ19-423	22.61 MMBtu/hr	22.61 MMBtu/hr	TBD	N/A	31000205	<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> New/Additional <input type="checkbox"/> To Be Modified	<input type="checkbox"/> To be Removed <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To be Replaced	N/A	N/A
							TBD	N/A					
4-EP-1g	RH4 Condensate Heater	TBD	TBD	MJ19-385	4.5 MMBtu/hr	4.5 MMBtu/hr	TBD	N/A	31000404	<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> New/Additional <input type="checkbox"/> To Be Modified	<input type="checkbox"/> To be Removed <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To be Replaced	N/A	N/A
							TBD	4-EP-1g					
2-EP-1a	RH2 Mol Sieve Regen Gas Heater	Hectac	N/A	14-266	5.6 MMBtu/hr	5.6 MMBtu/hr	2017	N/A	31000404	<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> New/Additional <input type="checkbox"/> To Be Modified	<input type="checkbox"/> To be Removed <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To be Replaced	N/A	N/A
							2017	2-EP-1a					
2-EP-1b	RH2 Cryo HMO Heater	Hectac	N/A	14-267	23.65 MMBtu/hr	23.65 MMBtu/hr	2017	N/A	31000404	<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> New/Additional <input type="checkbox"/> To Be Modified	<input type="checkbox"/> To be Removed <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To be Replaced	N/A	N/A
							2017	2-EP-1b					
2-EP-1e	RH2 Direct-Fired TEG Reboiler	Reset Energy	N/A	F-6	3 MMBtu/hr	3 MMBtu/hr	2017	N/A	31000404	<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> New/Additional <input type="checkbox"/> To Be Modified	<input type="checkbox"/> To be Removed <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To be Replaced	N/A	N/A
							2017	2-EP-1e					
2-EP-2a	RH2 Flare	Zecco	N/A	30144	200 MMscf/d	200 MMscf/d	2017	N/A	31000205	<input type="checkbox"/> Existing (unchanged) <input type="checkbox"/> New/Additional <input checked="" type="checkbox"/> To Be Modified	<input type="checkbox"/> To be Removed <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To be Replaced	N/A	N/A
							2017	2-EP-2a					
2-EP-4	RH2 Amine Regeneration	PBP Fabrication Inc	N/A	112 / 115	200 MMscf/d	200 MMscf/d	2017	EP-5	31000305	<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> New/Additional <input type="checkbox"/> To Be Modified	<input type="checkbox"/> To be Removed <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To be Replaced	N/A	N/A
							2017	EP-5					
2-EP-1h	RH2 Amine HMO Heater	HMI	N/A	31484001	55 MMBtu/hr	55 MMBtu/hr	2017	N/A	31000404	<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> New/Additional <input type="checkbox"/> To Be Modified	<input type="checkbox"/> To be Removed <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To be Replaced	N/A	N/A
							2017	2-EP-1h					
2a-EP-1d	RH2 Amine HMO Heater	Devco Process	N/A	31253001	55 MMBtu/hr	55 MMBtu/hr	2017	N/A	31000404	<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> New/Additional <input type="checkbox"/> To Be Modified	<input type="checkbox"/> To be Removed <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To be Replaced	N/A	N/A
							2017	2a-EP-1d					



Unit Number <sup>1</sup>	Source Description	Make	Model #	Serial #	Manufacturer's Rated Capacity <sup>3</sup> (Specify Units)	Requested Permitted Capacity <sup>3</sup> (Specify Units)	Date of Manufacture <sup>2</sup>	Controlled by Unit #	Source Classification Code (SCC)	For Each Piece of Equipment, Check One	RICE Ignition Type (CL, SL, 4SLB, 4SRB, 2SLB) <sup>4</sup>	Replacing Unit No.
							Date of Construction/Reconstruction <sup>2</sup>	Emissions vented to Stack #				
2a-EP-3	RH2 TEG Regeneration	Reset Energy	N/A	123	200 MMscf/d	200 MMscf/d	2017	EP-5	31000301	<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> New/Additional <input type="checkbox"/> To Be Modified <input type="checkbox"/> To be Removed <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To be Replaced	N/A	N/A
							2017	EP-5				
2.5-EP-4	AGI-1 Amine Regeneration	N/A	N/A	226 / 94	60 MMscf/d	60 MMscf/d	2018	AGI 1 & 2.5-EP-5	31000305	<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> New/Additional <input type="checkbox"/> To Be Modified <input type="checkbox"/> To be Removed <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To be Replaced	N/A	N/A
							2018	AGI 1 & 2.5-EP-5				
2.5-EP-1d	AGI-1 HMO Heater	Sigma	N/A	J17133	25 MMBtu/hr	25 MMBtu/hr	2018	N/A	31000404	<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> New/Additional <input type="checkbox"/> To Be Modified <input type="checkbox"/> To be Removed <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To be Replaced	N/A	N/A
							2018	2.5-EP-1d				
2.5-EP-5	AGI-1 Flare	Tulsa Combustion	N/A	170084-07	6.4 MMscf/d	6.4 MMscf/d	2018	N/A	31000205	<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> New/Additional <input type="checkbox"/> To Be Modified <input type="checkbox"/> To be Removed <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To be Replaced	N/A	N/A
							2018	2.5-EP-5				
3-EP-1a	RH3 Mol Sieve Regen Gas Heater	Tulsa Heater	N/A	MJ17-265	7.29 MMBtu/hr	7.29 MMBtu/hr	2018	N/A	31000404	<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> New/Additional <input type="checkbox"/> To Be Modified <input type="checkbox"/> To be Removed <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To be Replaced	N/A	N/A
							2018	3-EP-1a				
3-EP-1b	RH3 Cryo HMO Heater	Tulsa Heater	N/A	MJ17-266	17.55 MMBtu/hr	17.55 MMBtu/hr	2018	N/A	31000404	<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> New/Additional <input type="checkbox"/> To Be Modified <input type="checkbox"/> To be Removed <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To be Replaced	N/A	N/A
							2018	3-EP-1b				
3-EP-1e	RH3 Direct-Fired TEG Reboiler	TBD	TBD	357	3 MMBtu/hr	3 MMBtu/hr	TBD	N/A	31000404	<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> New/Additional <input type="checkbox"/> To Be Modified <input type="checkbox"/> To be Removed <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To be Replaced	N/A	N/A
							TBD	3-EP-1e				
3-EP-2a	RH3 Flare	Zecco	N/A	33985	200 MMscf/d	200 MMscf/d	2018	N/A	31000205	<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> New/Additional <input type="checkbox"/> To Be Modified <input type="checkbox"/> To be Removed <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To be Replaced	N/A	N/A
							2018	3-EP-2a				
3-EP-3	RH3 TEG Regeneration	TBD	TBD	355	200 MMscf/d	200 MMscf/d	2018	EP-6	31000301	<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> New/Additional <input type="checkbox"/> To Be Modified <input type="checkbox"/> To be Removed <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To be Replaced	N/A	N/A
							2018	EP-6				
3-EP-4	Amine Unit Flash Tank & Still Vent Service - 3 Train	TBD	TBD	TBD	200 MMscf/d	200 MMscf/d	TBD	EP-8	31000305	<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> New/Additional <input type="checkbox"/> To Be Modified <input type="checkbox"/> To be Removed <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To be Replaced	N/A	N/A
							TBD	EP-8				
4-EP-1a	RH4 Mol Sieve Regen Gas Heater	TBD	TBD	MJ17-271	7.29 MMBtu/hr	7.29 MMBtu/hr	TBD	N/A	31000404	<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> New/Additional <input type="checkbox"/> To Be Modified <input type="checkbox"/> To be Removed <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To be Replaced	N/A	N/A
							TBD	4-EP-1a				

Unit Number <sup>1</sup>	Source Description	Make	Model #	Serial #	Manufact- urer's Rated Capacity <sup>3</sup> (Specify Units)	Requested Permitted Capacity <sup>3</sup> (Specify Units)	Date of Manufacture <sup>2</sup>	Controlled by Unit #	Source Classi- fication Code (SCC)	For Each Piece of Equipment, Check One	RICE Ignition Type (CL, SL, 4SLB, 4SRB, 2SLB) <sup>4</sup>	Replacing Unit No.	
							Date of Construction/ Reconstruction <sup>2</sup>	Emissions vented to Stack #					
4-EP-1b	RH4 Cryo HMO Heater	TBD	TBD	MJ17-272	17.55 MMBtu/hr	17.55 MMBtu/hr	TBD	N/A	31000404	<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> New/Additional <input type="checkbox"/> To Be Modified	<input type="checkbox"/> To be Removed <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To be Replaced	N/A	N/A
							TBD	4-EP-1b					
4-EP-2a	RH4 Flare	TBD	TBD	37803	200 MMscf/d	200 MMscf/d	TBD	N/A	31000205	<input type="checkbox"/> Existing (unchanged) <input type="checkbox"/> New/Additional <input checked="" type="checkbox"/> To Be Modified	<input type="checkbox"/> To be Removed <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To be Replaced	N/A	N/A
							TBD	4-EP-2a					
EP-5	RH2 Thermal Oxidizer	Zecco	N/A	30343	28 MMBtu/hr	28 MMBtu/hr	2012	N/A	31000404	<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> New/Additional <input type="checkbox"/> To Be Modified	<input type="checkbox"/> To be Removed <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To be Replaced	N/A	N/A
							2012	EP-5					
EP-6	Thermal Oxidizer (TO)	TBD	TBD	TBD	28 MMBtu/hr	28 MMBtu/hr	TBD	N/A	31000404	<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> New/Additional <input type="checkbox"/> To Be Modified	<input type="checkbox"/> To be Removed <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To be Replaced	N/A	N/A
							TBD	EP-6					
EP-7	Enclosed Combustion Device (ECD) – Condensate Tank Control	TBD	TBD	TBD	1.55 MMBtu/hr	1.55 MMBtu/hr	TBD	N/A	31000404	<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> New/Additional <input type="checkbox"/> To Be Modified	<input type="checkbox"/> To be Removed <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To be Replaced	N/A	N/A
							TBD	EP-7					
EP-9	Flare - Sour Slop Tank Control	Tulsa Combustion	N/A	PO-170084-07	6 MMBtu/hr	6 MMBtu/hr	TBD	N/A	31000404	<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> New/Additional <input type="checkbox"/> To Be Modified	<input type="checkbox"/> To be Removed <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To be Replaced	N/A	N/A
							TBD	EP-9					
1-T	Condensate Storage Tanks 1-T-1, 1-T- 2,1-T-3, 1-T-4, 1-T- 5, 1-T-6	Palmer Palmer Palmer Palmer Palmer Permian Tank	N/A	ST-26092 ST-26093 ST-26094 ST-26095 ST-26091 F52974	500 bbl each	500 bbl each	2012	EP-7	40400311	<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> New/Additional <input type="checkbox"/> To Be Modified	<input type="checkbox"/> To be Removed <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To be Replaced	N/A	N/A
							2012	EP-7					
2-Load	Sour Slop Tank Loading Emissions	N/A	N/A	N/A	TBD	TBD	TBD	N/A	40400250	<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> New/Additional <input type="checkbox"/> To Be Modified	<input type="checkbox"/> To be Removed <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To be Replaced	N/A	N/A
							TBD	EP-9					
2-T	H2S Sour Slop Tank 2-T-1 & 2-T-2	Tank & Vessel Builders, L.P.	N/A	201749 201750	500 bbl each	500 bbl each	N/A	EP-9	40400311	<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> New/Additional <input type="checkbox"/> To Be Modified	<input type="checkbox"/> To be Removed <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To be Replaced	N/A	N/A
							N/A	EP-9					
FUG <sup>5</sup>	Fugitive Emissions from Cryo Trains 1 to 4; Service Trains 1 to 3; Tanks: 1-T-1 to 1-T-6 & 2-T-1 to 2-T- 2; Loading: 1-Load, 2- Load; FUG-FG	N/A	N/A	N/A	N/A	N/A	N/A	N/A	31088811	<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> New/Additional <input type="checkbox"/> To Be Modified	<input type="checkbox"/> To be Removed <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To be Replaced	N/A	N/A
							N/A	N/A					

Unit Number <sup>1</sup>	Source Description	Make	Model #	Serial #	Manufacturer's Rated Capacity <sup>2</sup> (Specify Units)	Requested Permitted Capacity <sup>3</sup> (Specify Units)	Date of Manufacture <sup>2</sup>	Controlled by Unit #	Source Classification Code (SCC)	For Each Piece of Equipment, Check One	RICE Ignition Type (CI, SL, 4SLB, 4SRB, 2SLB) <sup>4</sup>	Replacing Unit No.
							Date of Construction/Reconstruction <sup>2</sup>	Emissions vented to Stack #				
HAUL	Fugitive Emissions	N/A	N/A	N/A	N/A	N/A	N/A	N/A	31088811	<input type="checkbox"/> Existing (unchanged) <input type="checkbox"/> New/Additional <input type="checkbox"/> To Be Modified <input type="checkbox"/> To be Removed <input type="checkbox"/> Replacement Unit <input checked="" type="checkbox"/> To be Replaced	N/A	N/A
4-EP-1d	Amine Unit Reboiler	TBD	TBD	TBD	55 MMBtu/hr	55 MMBtu/hr	TBD	N/A	31000404	<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> New/Additional <input type="checkbox"/> To Be Modified <input type="checkbox"/> To be Removed <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To be Replaced	N/A	N/A
4-EP-1e	Glycol Dehydrator Reboiler	TBD	TBD	TBD	3 MMBtu/hr	3 MMBtu/hr	TBD	N/A	31000404	<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> New/Additional <input type="checkbox"/> To Be Modified <input type="checkbox"/> To be Removed <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To be Replaced	N/A	N/A
4-EP-1h	Amine Unit Reboiler	TBD	TBD	TBD	55 MMBtu/hr	55 MMBtu/hr	TBD	N/A	31000404	<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> New/Additional <input type="checkbox"/> To Be Modified <input type="checkbox"/> To be Removed <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To be Replaced	N/A	N/A
4-EP-3	Glycol Dehydrator Flash Tank & Still Vent – Service Train 4	TBD	TBD	TBD	200 MMscf/d	200 MMscf/d	TBD	EP-6	31000301	<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> New/Additional <input type="checkbox"/> To Be Modified <input type="checkbox"/> To be Removed <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To be Replaced	N/A	N/A
EP-8	RH4 Thermal Oxidizer	TBD	TBD	37954	28 MMBtu/hr	28 MMBtu/hr	TBD	N/A	31000404	<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> New/Additional <input type="checkbox"/> To Be Modified <input type="checkbox"/> To be Removed <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To be Replaced	N/A	N/A
4-EP-4	RH4 Amine Regeneration	TBD	TBD	105 / 18-C29278-1	200 MMscf/d	200 MMscf/d	TBD	EP-6	31000305	<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> New/Additional <input type="checkbox"/> To Be Modified <input type="checkbox"/> To be Removed <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To be Replaced	N/A	N/A
5-EP-1a	RH5 Amine and TEG HMO Heater	TBD	TBD	MJ19-418	70 MMBtu/hr	70 MMBtu/hr	TBD	N/A	31000404	<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> New/Additional <input type="checkbox"/> To Be Modified <input type="checkbox"/> To be Removed <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To be Replaced	N/A	N/A
5-EP-1b	RH5 Amine and TEG HMO Heater	TBD	TBD	MJ19-419	70 MMBtu/hr	70 MMBtu/hr	TBD	N/A	31000404	<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> New/Additional <input type="checkbox"/> To Be Modified <input type="checkbox"/> To be Removed <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To be Replaced	N/A	N/A
5-EP-1c	RH5 Mol Sieve Regen Gas Heater	TBD	TBD	MJ19-384	7.29 MMBtu/hr	7.29 MMBtu/hr	TBD	N/A	31000404	<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> New/Additional <input type="checkbox"/> To Be Modified <input type="checkbox"/> To be Removed <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To be Replaced	N/A	N/A
5-EP-1d	RH5 Cryo HMO Heater	TBD	TBD	MJ18-370	17.55 MMBtu/hr	17.55 MMBtu/hr	TBD	N/A	31000404	<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> New/Additional <input type="checkbox"/> To Be Modified <input type="checkbox"/> To be Removed <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To be Replaced	N/A	N/A
5-EP-1e	RH5 TEG Regeneration	TBD	TBD	342 / 344	230 MMscf/d	230 MMscf/d	TBD	EP-10	31000301	<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> New/Additional <input type="checkbox"/> To Be Modified <input type="checkbox"/> To be Removed <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To be Replaced	N/A	N/A



Unit Number <sup>1</sup>	Source Description	Make	Model #	Serial #	Manufacturer's Rated Capacity <sup>3</sup> (Specify Units)	Requested Permitted Capacity <sup>3</sup> (Specify Units)	Date of Manufacture <sup>2</sup>	Controlled by Unit #	Source Classification Code (SCC)	For Each Piece of Equipment, Check One	RICE Ignition Type (CI, SI, 4SLB, 4SRB, 2SLB) <sup>4</sup>	Replacing Unit No.
							Date of Construction/Reconstruction <sup>2</sup>	Emissions vented to Stack #				
5-EP-1f	RH5 Amine Regeneration	TBD	TBD	348 / 351	250 MMscf/d	250 MMscf/d	TBD	EP-10	31000305	<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> New/Additional <input type="checkbox"/> To Be Modified <input type="checkbox"/> To be Removed <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To be Replaced	N/A	N/A
							TBD	EP-10				
5-EP-2	RH5 Flare	TBD	TBD	42009	230 MMscf/d	230 MMscf/d	TBD	N/A	31000205	<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> New/Additional <input type="checkbox"/> To Be Modified <input type="checkbox"/> To be Removed <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To be Replaced	N/A	N/A
							TBD	5-EP-2				
6-EP-1a	RH6/7 HMO Heater	TBD	TBD	MJ21-474	70 MMBtu/hr	70 MMBtu/hr	TBD	N/A	31000404	<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> New/Additional <input type="checkbox"/> To Be Modified <input type="checkbox"/> To be Removed <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To be Replaced	N/A	N/A
							TBD	6-EP-1a				
6-EP-1b	RH6/7 HMO Heater	TBD	TBD	TBD	70 MMBtu/hr	70 MMBtu/hr	TBD	N/A	31000404	<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> New/Additional <input type="checkbox"/> To Be Modified <input type="checkbox"/> To be Removed <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To be Replaced	N/A	N/A
							TBD	6-EP-1b				
6-EP-1c	RH6 Mol Sieve Regen Gas Heater	TBD	TBD	MJ21-475	7.29 MMBtu/hr	7.29 MMBtu/hr	TBD	N/A	31000404	<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> New/Additional <input type="checkbox"/> To Be Modified <input type="checkbox"/> To be Removed <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To be Replaced	N/A	N/A
							TBD	6-EP-1c				
6-EP-1d	RH6 Cryo HMO Heater	TBD	TBD	MJ21-476	17.55 MMBtu/hr	17.55 MMBtu/hr	TBD	N/A	31000404	<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> New/Additional <input type="checkbox"/> To Be Modified <input type="checkbox"/> To be Removed <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To be Replaced	N/A	N/A
							TBD	6-EP-1d				
6-EP-1e	RH6 TEG Regeneration	TBD	TBD	1261 / 1259	230 MMscf/d	230 MMscf/d	TBD	EP-10	31000301	<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> New/Additional <input type="checkbox"/> To Be Modified <input type="checkbox"/> To be Removed <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To be Replaced	N/A	N/A
							TBD	EP-10				
6-EP-1f	RH7 Amine Regeneration	TBD	TBD	TBD	250 MMscf/d	250 MMscf/d	TBD	EP-10	31000305	<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> New/Additional <input type="checkbox"/> To Be Modified <input type="checkbox"/> To be Removed <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To be Replaced	N/A	N/A
							TBD	EP-10				
7-EP-1c	RH7 Mol Sieve Regen Gas Heater	TBD	TBD	TBD	7.29 MMBtu/hr	7.29 MMBtu/hr	TBD	N/A	31000404	<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> New/Additional <input type="checkbox"/> To Be Modified <input type="checkbox"/> To be Removed <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To be Replaced	N/A	N/A
							TBD	7-EP-1c				
7-EP-1d	RH7 Cryo HMO Heater	TBD	TBD	TBD	17.55 MMBtu/hr	17.55 MMBtu/hr	TBD	N/A	31000404	<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> New/Additional <input type="checkbox"/> To Be Modified <input type="checkbox"/> To be Removed <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To be Replaced	N/A	N/A
							TBD	7-EP-1d				
7-EP-2	RH7 Flare	TBD	TBD	TBD	230 MMscf/d	230 MMscf/d	TBD	N/A	31000205	<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> New/Additional <input type="checkbox"/> To Be Modified <input type="checkbox"/> To be Removed <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To be Replaced	N/A	N/A
							TBD	7-EP-2				
5.5-EP-1a	AGI-2 HMO Heater	TBD	TBD	MJ22-543	70 MMBtu/hr	70 MMBtu/hr	TBD	N/A	31000404	<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> New/Additional <input type="checkbox"/> To Be Modified <input type="checkbox"/> To be Removed <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To be Replaced	N/A	N/A
							TBD	5.5-EP-1a				

Unit Number <sup>1</sup>	Source Description	Make	Model #	Serial #	Manufacturer's Rated Capacity <sup>3</sup> (Specify Units)	Requested Permitted Capacity <sup>3</sup> (Specify Units)	Date of Manufacture <sup>2</sup>	Controlled by Unit #	Source Classification Code (SCC)	For Each Piece of Equipment, Check One	RICE Ignition Type (CL, SL, 4SLB, 4SRB, 2SLB) <sup>4</sup>	Replacing Unit No.
							Date of Construction/Reconstruction <sup>2</sup>	Emissions vented to Stack #				
5.5-EP-1b	AGI-2 Flare	TBD	TBD	61585	8.2 MMscf/d	8.2 MMscf/d	TBD	N/A	31000205	<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> New/Additional <input type="checkbox"/> To Be Modified <input type="checkbox"/> To be Removed <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To be Replaced	N/A	N/A
							TBD	5.5-EP-1b				
5.5-EP-1c	AGI-2 Amine Regeneration	TBD	TBD	03780 / 03778	60 - 260 MMscf/d	60 MMscf/d	TBD	AGI 2 & 5.5-EP-1b	31000205	<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> New/Additional <input type="checkbox"/> To Be Modified <input type="checkbox"/> To be Removed <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To be Replaced	N/A	N/A
							TBD	AGI 2 & 5.5-EP-1b				
3-T	Condensate Storage Tanks 3-T-1, 3-T-2, 3-T-3, 3-T-4, 3-T-5, 3-T-6	TBD	TBD	172676, 172677, 172681, 172682, 172683, 172684	500 bbl each	500 bbl each	TBD	EP-12	40400311	<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> New/Additional <input type="checkbox"/> To Be Modified <input type="checkbox"/> To be Removed <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To be Replaced	N/A	N/A
							TBD	EP-12				
4-T	Sour Water Tanks 4-T-1, 4-T-2	TBD	TBD	66960, 66961	500 bbl each	500 bbl each	TBD	EP-13	40400311	<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> New/Additional <input type="checkbox"/> To Be Modified <input type="checkbox"/> To be Removed <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To be Replaced	N/A	N/A
							TBD	EP-13				
5-T	Slop Tanks 5-T-1, 5-T-2, 5-T-3, 5-T-4	TBD	TBD	ST1938920, ST1938921, ST1938922, ST1938923	400 bbl each	400 bbl each	TBD	N/A	40400311	<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> New/Additional <input type="checkbox"/> To Be Modified <input type="checkbox"/> To be Removed <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To be Replaced	N/A	N/A
							TBD	N/A				
3-LOAD	Condensate Loading Emissions	N/A	N/A	N/A	TBD	TBD	TBD	EP-12	40400250	<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> New/Additional <input type="checkbox"/> To Be Modified <input type="checkbox"/> To be Removed <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To be Replaced	N/A	N/A
							TBD	EP-12				
4-LOAD	Sour Water Tanks Loading Emissions	N/A	N/A	N/A	TBD	TBD	TBD	N/A	40400250	<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> New/Additional <input type="checkbox"/> To Be Modified <input type="checkbox"/> To be Removed <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To be Replaced	N/A	N/A
							TBD	N/A				
5-LOAD	Slop Tanks Loading Emissions	N/A	N/A	N/A	TBD	TBD	TBD	N/A	40400250	<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> New/Additional <input type="checkbox"/> To Be Modified <input type="checkbox"/> To be Removed <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To be Replaced	N/A	N/A
							TBD	N/A				
EP-10	RH5 Thermal Oxidizer	TBD	TBD	41184	112 MMBtu/hr	112 MMBtu/hr	TBD	N/A	31000404	<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> New/Additional <input type="checkbox"/> To Be Modified <input type="checkbox"/> To be Removed <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To be Replaced	N/A	N/A
							TBD	EP-10				
EP-11	SSM Venting during SSM of Thermal Oxidizer	TBD	TBD	41184	N/A	N/A	TBD	N/A	31000404	<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> New/Additional <input type="checkbox"/> To Be Modified <input type="checkbox"/> To be Removed <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To be Replaced	N/A	N/A
							TBD	EP-11				
EP-12	RH1 Condensate Tank Combustor	TBD	TBD	N/A	2 MMBtu/hr	2 MMBtu/hr	TBD	N/A	31000205	<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> New/Additional <input type="checkbox"/> To Be Modified <input type="checkbox"/> To be Removed <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To be Replaced	N/A	N/A
							TBD	EP-12				

Unit Number <sup>1</sup>	Source Description	Make	Model #	Serial #	Manufacturer's Rated Capacity <sup>3</sup> (Specify Units)	Requested Permitted Capacity <sup>3</sup> (Specify Units)	Date of Manufacture <sup>2</sup>	Controlled by Unit #	Source Classification Code (SCC)	For Each Piece of Equipment, Check One	RICE Ignition Type (CL, SL, 4SLB, 4SRB, 2SLB) <sup>4</sup>	Replacing Unit No.	
							Date of Construction/Reconstruction <sup>2</sup>	Emissions vented to Stack #					
EP-13	AGI-2 Sour Slop Tank Flare	TBD	TBD	22301	2 MMBtu/hr	2 MMBtu/hr	TBD	N/A	31000205	<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> New/Additional <input type="checkbox"/> To Be Modified	<input type="checkbox"/> To be Removed <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To be Replaced	N/A	N/A
2-EP-1t	SSM Venting – Cryo Train 2	TBD	TBD	TBD	N/A	N/A	TBD	N/A	30600402	<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> New/Additional <input type="checkbox"/> To Be Modified	<input type="checkbox"/> To be Removed <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To be Replaced	N/A	N/A
3-EP-1t	SSM Venting – Cryo Train 3	TBD	TBD	TBD	N/A	N/A	TBD	N/A	30600402	<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> New/Additional <input type="checkbox"/> To Be Modified	<input type="checkbox"/> To be Removed <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To be Replaced	N/A	N/A
4-EP-1t	SSM Venting – Cryo Train 4	TBD	TBD	TBD	N/A	N/A	TBD	N/A	30600402	<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> New/Additional <input type="checkbox"/> To Be Modified	<input type="checkbox"/> To be Removed <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To be Replaced	N/A	N/A
5-EP-1t	SSM Venting – Cryo Train 5	TBD	TBD	TBD	N/A	N/A	TBD	N/A	30600402	<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> New/Additional <input type="checkbox"/> To Be Modified	<input type="checkbox"/> To be Removed <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To be Replaced	N/A	N/A
6-EP-1t	SSM Venting – Cryo Train 6	TBD	TBD	TBD	N/A	N/A	TBD	N/A	30600402	<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> New/Additional <input type="checkbox"/> To Be Modified	<input type="checkbox"/> To be Removed <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To be Replaced	N/A	N/A
7-EP-1t	SSM Venting – Cryo Train 7	TBD	TBD	TBD	N/A	N/A	TBD	N/A	30600402	<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> New/Additional <input type="checkbox"/> To Be Modified	<input type="checkbox"/> To be Removed <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To be Replaced	N/A	N/A
SSM	Miscellaneous Venting due to Startup, Shutdown and Maintenance (SSM)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	<input type="checkbox"/> Existing (unchanged) <input type="checkbox"/> New/Additional <input checked="" type="checkbox"/> To Be Modified	<input type="checkbox"/> To be Removed <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To be Replaced	N/A	N/A
FUG-1 <sup>5</sup>	Fugitive Emissions from Cryo Trains 5 to 7; Service Trains 4 to 6; Tanks 3-T-1 to 3-T-6, 4-T-1 to 4-T-2, 5-T-1 to 5-T-4; Loading 3-Load, 4-Load, 5-Load; FUG-FG	N/A	N/A	N/A	N/A	N/A	N/A	N/A	31088811	<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> New/Additional <input type="checkbox"/> To Be Modified	<input type="checkbox"/> To be Removed <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To be Replaced	N/A	N/A
HAUL-1	Fugitive Emissions	N/A	N/A	N/A	N/A	N/A	N/A	N/A	31088811	<input type="checkbox"/> Existing (unchanged) <input type="checkbox"/> New/Additional <input type="checkbox"/> To Be Modified	<input type="checkbox"/> To be Removed <input type="checkbox"/> Replacement Unit <input checked="" type="checkbox"/> To be Replaced	N/A	N/A



Unit Number <sup>1</sup>	Source Description	Make	Model #	Serial #	Manufacturer's Rated Capacity <sup>3</sup> (Specify Units)	Requested Permitted Capacity <sup>3</sup> (Specify Units)	Date of Manufacture <sup>2</sup>	Controlled by Unit #	Source Classification Code (SCC)	For Each Piece of Equipment, Check One	RICE Ignition Type (CL, SL, 4SLB, 4SRB, 2SLB) <sup>4</sup>	Replacing Unit No.
							Date of Construction/ Reconstruction <sup>2</sup>	Emissions vented to Stack #				
FUG-AGI2	Fugitive Emissions from AGI2 Expansion	N/A	N/A	N/A	N/A	N/A	N/A	N/A	31088811	<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> New/Additional <input type="checkbox"/> To Be Modified <input type="checkbox"/> To be Removed <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To be Replaced	N/A	N/A
TK-M	Methanol Storage Tanks	N/A	N/A	N/A	29700 gallons (aggregate)	29700 gallons (aggregate)	N/A	N/A	39090007	<input type="checkbox"/> Existing (unchanged) <input checked="" type="checkbox"/> New/Additional <input type="checkbox"/> To Be Modified <input type="checkbox"/> To be Removed <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To be Replaced	N/A	N/A
HAUL-OR1	Haul Roads	N/A	N/A	N/A	N/A	N/A	N/A	N/A	31088811	<input type="checkbox"/> Existing (unchanged) <input type="checkbox"/> New/Additional <input type="checkbox"/> To Be Modified <input type="checkbox"/> To be Removed <input checked="" type="checkbox"/> Replacement Unit <input type="checkbox"/> To be Replaced	N/A	N/A
Haul-Green	Haul Roads	N/A	N/A	N/A	N/A	N/A	N/A	N/A	31088811	<input type="checkbox"/> Existing (unchanged) <input type="checkbox"/> New/Additional <input type="checkbox"/> To Be Modified <input type="checkbox"/> To be Removed <input checked="" type="checkbox"/> Replacement Unit <input type="checkbox"/> To be Replaced	N/A	N/A
Haul-Red	Haul Roads	N/A	N/A	N/A	N/A	N/A	N/A	N/A	31088811	<input type="checkbox"/> Existing (unchanged) <input type="checkbox"/> New/Additional <input type="checkbox"/> To Be Modified <input type="checkbox"/> To be Removed <input checked="" type="checkbox"/> Replacement Unit <input type="checkbox"/> To be Replaced	N/A	N/A
Haul -Blue	Haul Roads	N/A	N/A	N/A	N/A	N/A	N/A	N/A	31088811	<input type="checkbox"/> Existing (unchanged) <input type="checkbox"/> New/Additional <input type="checkbox"/> To Be Modified <input type="checkbox"/> To be Removed <input checked="" type="checkbox"/> Replacement Unit <input type="checkbox"/> To be Replaced	N/A	N/A
Haul-OR2	Haul Roads	N/A	N/A	N/A	N/A	N/A	N/A	N/A	31088811	<input type="checkbox"/> Existing (unchanged) <input type="checkbox"/> New/Additional <input type="checkbox"/> To Be Modified <input type="checkbox"/> To be Removed <input checked="" type="checkbox"/> Replacement Unit <input type="checkbox"/> To be Replaced	N/A	N/A
Flare-M	Malfunction flaring associated with 1-EP-2, 2-EP-2a, 3-EP-2a, 4-EP-2a, 5-EP-2, 7-EP-2, 2.5-EP-5, and 5.5-EP-1b	N/A	N/A	N/A	N/A	N/A	N/A	N/A	31088811	<input type="checkbox"/> Existing (unchanged) <input checked="" type="checkbox"/> New/Additional <input type="checkbox"/> To Be Modified <input type="checkbox"/> To be Removed <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To be Replaced	N/A	N/A
REC-1	Sour Gas East Receiver	N/A	N/A	N/A	N/A	N/A	N/A	N/A	31088811	<input type="checkbox"/> Existing (unchanged) <input checked="" type="checkbox"/> New/Additional <input type="checkbox"/> To Be Modified <input type="checkbox"/> To be Removed <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To be Replaced	N/A	N/A
REC-2	Sour Gas West Receiver	N/A	N/A	N/A	N/A	N/A	N/A	N/A	31088811	<input type="checkbox"/> Existing (unchanged) <input checked="" type="checkbox"/> New/Additional <input type="checkbox"/> To Be Modified <input type="checkbox"/> To be Removed <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To be Replaced	N/A	N/A
REC-3	Train 1 South Receiver	N/A	N/A	N/A	N/A	N/A	N/A	N/A	31088811	<input type="checkbox"/> Existing (unchanged) <input checked="" type="checkbox"/> New/Additional <input type="checkbox"/> To Be Modified <input type="checkbox"/> To be Removed <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To be Replaced	N/A	N/A

Unit Number <sup>1</sup>	Source Description	Make	Model #	Serial #	Manufacturer's Rated Capacity <sup>3</sup> (Specify Units)	Requested Permitted Capacity <sup>3</sup> (Specify Units)	Date of Manufacture <sup>2</sup>	Controlled by Unit #	Source Classification Code (SCC)	For Each Piece of Equipment, Check One	RICE Ignition Type (CI, SI, 4SLB, 4SRB, 2SLB) <sup>4</sup>	Replacing Unit No.
							Date of Construction/Reconstruction <sup>2</sup>	Emissions vented to Stack #				
REC-4	Train 1 Middle Receiver	N/A	N/A	N/A	N/A	N/A	N/A	N/A	31088811	<input type="checkbox"/> Existing (unchanged) <input type="checkbox"/> To be Removed <input checked="" type="checkbox"/> New/Additional <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Modified <input type="checkbox"/> To be Replaced	N/A	N/A
							N/A	N/A				
REC-5	Train 1 North Launcher	N/A	N/A	N/A	N/A	N/A	N/A	N/A	31088811	<input type="checkbox"/> Existing (unchanged) <input type="checkbox"/> To be Removed <input checked="" type="checkbox"/> New/Additional <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Modified <input type="checkbox"/> To be Replaced	N/A	N/A
							N/A	N/A				
REC-6	North Train - South Receiver	N/A	N/A	N/A	N/A	N/A	N/A	N/A	31088811	<input type="checkbox"/> Existing (unchanged) <input type="checkbox"/> To be Removed <input checked="" type="checkbox"/> New/Additional <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Modified <input type="checkbox"/> To be Replaced	N/A	N/A
							N/A	N/A				
REC-7	North Train - North Receiver	N/A	N/A	N/A	N/A	N/A	N/A	N/A	31088811	<input type="checkbox"/> Existing (unchanged) <input type="checkbox"/> To be Removed <input checked="" type="checkbox"/> New/Additional <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Modified <input type="checkbox"/> To be Replaced	N/A	N/A
							N/A	N/A				

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

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

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

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

<sup>5</sup> Includes emissions from 4310M7 flash gas compressor project, FUG-FG.

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

All 20.2.70 NMAC (Title V) applications must list all Insignificant Activities in this table. All 20.2.72 NMAC applications must list Exempted Equipment in this table. If equipment listed on this table is exempt under 20.2.72.202.B.5, include emissions calculations and emissions totals for 20.2.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\\_po.html](http://www.env.nm.gov/aqb/permit/aqb_po.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 <sup>2</sup>	For Each Piece of Equipment, Check One
			Serial No.	Capacity Units	Insignificant Activity citation (e.g. IA List Item #1.a)	Date of Installation /Construction <sup>2</sup>	
SmT-1	Amine Storage Tank	N/A	N/A	120	20.2.72.202.B.2 NMAC		<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> To be Removed <input type="checkbox"/> New/Additional <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Modified <input type="checkbox"/> To be Replaced
			N/A	bbl			
SmT-2	Lube Oil Storage Tank	N/A	N/A	120	20.2.72.202.B.2 NMAC		<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> To be Removed <input type="checkbox"/> New/Additional <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Modified <input type="checkbox"/> To be Replaced
			N/A	bbl			
SmT-3	Glycol Storage Tank	N/A	N/A	120	20.2.72.202.B.2 NMAC		<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> To be Removed <input type="checkbox"/> New/Additional <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Modified <input type="checkbox"/> To be Replaced
			N/A	bbl			
SmT-4	Oily Wastewater Tank	N/A	N/A	210	20.2.72.202.B.2 NMAC		<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> To be Removed <input type="checkbox"/> New/Additional <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Modified <input type="checkbox"/> To be Replaced
			N/A	bbl			
SmT-5	Oil Storage	N/A	N/A	120	20.2.72.202.B.5 NMAC		<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> To be Removed <input type="checkbox"/> New/Additional <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Modified <input type="checkbox"/> To be Replaced
			N/A	bbl			
1-Gen-1	Emergency Generator	Caterpillar	CG137	TBD	20.2.72.202.B.3 NMAC	24-05-12	<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> To be Removed <input type="checkbox"/> New/Additional <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Modified <input type="checkbox"/> To be Replaced
			WRX00112	TBD			
SmT-6	Wastewater Tank	N/A	N/A	500	20.2.72.202.B.2 NMAC		<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> To be Removed <input type="checkbox"/> New/Additional <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Modified <input type="checkbox"/> To be Replaced
			N/A	bbl			
SmT-7	Wastewater Tank	N/A	N/A	500	20.2.72.202.B.2 NMAC		<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> To be Removed <input type="checkbox"/> New/Additional <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Modified <input type="checkbox"/> To be Replaced
			N/A	bbl			
SmT-8	Wastewater Tank	N/A	N/A	210	20.2.72.202.B.2 NMAC		<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> To be Removed <input type="checkbox"/> New/Additional <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Modified <input type="checkbox"/> To be Replaced
			N/A	bbl			
SmT-9	Amine Storage Tank	N/A	N/A	210	20.2.72.202.B.2 NMAC		<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> To be Removed <input type="checkbox"/> New/Additional <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Modified <input type="checkbox"/> To be Replaced
			N/A	bbl			
SmT-10	Glycol Storage Tank	N/A	N/A	210	20.2.72.202.B.2 NMAC		<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> To be Removed <input type="checkbox"/> New/Additional <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Modified <input type="checkbox"/> To be Replaced
			N/A	bbl			
TK-Gasoline	Gasoline Storage Tank	N/A	N/A	300	20.2.72.202.B.5 NMAC		<input type="checkbox"/> Existing (unchanged) <input type="checkbox"/> To be Removed <input checked="" type="checkbox"/> New/Additional <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Modified <input type="checkbox"/> To be Replaced
			N/A	gallons			
TK-Diesel	Diesel Storage Tank	N/A	N/A	<500	20.2.72.202.B.2 NMAC		<input type="checkbox"/> Existing (unchanged) <input type="checkbox"/> To be Removed <input checked="" type="checkbox"/> New/Additional <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Modified <input type="checkbox"/> To be Replaced
			N/A	bbl			

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

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

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

Control Equipment Unit No.	Control Equipment Description	Date Installed	Controlled Pollutant(s)	Controlling Emissions for Unit Number(s) <sup>1</sup>	Efficiency (% Control by Weight)	Method used to Estimate Efficiency
1-BTEX-1	Condenser	TBD	VOC, HAP	1-EP-3	98%	Condenser Curves
2a-BTEX-1	Condenser	TBD	VOC, HAP	2a-EP-3	98%	Condenser Curves
3-BTEX-1	Condenser	TBD	VOC, HAP	3-EP-3	98%	Condenser Curves
4-BTEX-1	Condenser	TBD	VOC, HAP	4-EP-3	98%	Condenser Curves
5-BTEX-1	Condenser	TBD	VOC, HAP	5-EP-1f	98%	Condenser Curves
6-BTEX-1	Condenser	TBD	VOC, HAP	6-EP-1f	98%	Condenser Curves
EP-5	Thermal Oxidizer	TBD	VOC, HAP	1-EP-3, 1-EP-4, 2-EP-4, 2a-EP-3	98%	Manufacturer
EP-6	Thermal Oxidizer	TBD	VOC, HAP	3-EP-3, 3-EP-4	98%	Manufacturer
EP-7	Condensate Tank Enclosed Combustor	TBD	VOC, HAP	1-T, 1-Load	98%	Manufacturer
EP-8	Thermal Oxidizer	TBD	VOC, HAP	4-EP-3, 4-EP-4	98%	Manufacturer
1-EP-2	Cryo 1 Flare SSM	TBD	VOC, HAP	Facility Wide SSM	98%	Manufacturer
2-EP-2a	Cryo 2 Flare SSM	TBD	VOC, HAP	Facility Wide SSM	98%	Manufacturer
2.5-EP-5	Emergency AGI Flare	TBD	VOC, HAP	2.5-EP-4	98%	Manufacturer
3-EP-2a	Cryo 3 Flare SSM	TBD	VOC, HAP	Facility Wide SSM	98%	Manufacturer
4-EP-2a	Cryo 4 Flare SSM	TBD	VOC, HAP	Facility Wide SSM	98%	Manufacturer
EP-9	Flare	TBD	VOC, HAP, H2S	2-T, 2-Load	95%	NMED Guidance
5-EP-2	Cryo 5 & 6 Flare SSM	TBD	VOC, HAP, H2S	Cryo Train 5 & 6 SSM	98%	Manufacturer
7-EP-2	Cryo 7 Flare SSM	TBD	VOC, HAP, H2S	Cryo Train 7 SSM	98%	Manufacturer
5.5-EP-1b	Emergency AGI 2 Flare SSM	TBD	VOC, HAP, H2S	AGI 2 SSM	98%	Manufacturer
EP-12	Condensate Tank Enclosed Combustor	TBD	VOC, HAP, H2S	3-T-1, 3-T-2, 3-T-3, 3-T-4, 3-T-5, 3-T-6 & 3-LOAD	95%	Manufacturer
EP-10	Thermal Oxidizer	TBD	VOC, HAP, H2S	5-EP-1e, 6-EP-1e, 5-EP-1f, 6-EP-1f	99% VOC, 98% H2S	Manufacturer
EP-13	Sour Water Tanks Flare	TBD	VOC, HAP, H2S	4-T-1, 4-T-2 & 4-LOAD	95%	Manufacturer

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



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

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

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

Unit No.	NOx		CO		VOC		SOx		PM <sup>1</sup>		PM <sup>10</sup>		PM <sub>2.5</sub> <sup>1</sup>		H <sub>2</sub> S		Lead	
	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr
1-EP-1	3.46	15.16	2.91	12.73	0.19	0.83	0.019	0.084	0.26	1.15	0.26	1.15	0.26	1.15	-	-	-	-
1-EP-2 <sup>2</sup>	0.18	0.78	0.81	3.56	-	-	0.0016	0.0072	-	-	-	-	-	-	-	-	-	-
1-EP-3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1-EP-4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1.5-EP-1g	0.90	3.96	0.93	4.06	0.090	0.40	0.012	0.054	0.14	0.59	0.14	0.59	0.14	0.59	-	-	-	-
4-EP-1g	0.22	0.97	0.37	1.62	0.024	0.11	0.022	0.098	0.034	0.15	0.034	0.15	0.025	0.11	-	-	-	-
2-EP-1a	0.27	1.20	0.46	2.02	0.030	0.13	0.028	0.12	0.042	0.18	0.042	0.18	0.031	0.14	-	-	-	-
2-EP-1b	1.16	5.08	1.31	5.75	0.086	0.38	0.12	0.52	0.12	0.52	0.12	0.52	0.13	0.58	-	-	-	-
2-EP-1e	0.29	1.29	0.25	1.08	0.016	0.071	0.0016	0.0072	0.022	0.098	0.022	0.098	0.022	0.098	-	-	-	-
2-EP-2a <sup>2</sup>	0.18	0.78	0.81	3.56	-	-	0.0016	0.0072	-	-	-	-	-	-	-	-	-	-
2-EP-4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2-EP-1h	1.02	4.46	2.07	9.05	0.30	1.30	0.030	0.13	0.41	1.79	0.41	1.79	0.41	1.79	-	-	-	-
2a-EP-1d	1.02	4.46	2.07	9.05	0.30	1.30	0.030	0.13	0.41	1.79	0.41	1.79	0.41	1.79	-	-	-	-
2a-EP-3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2.5-EP-4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2.5-EP-1d	2.45	10.74	2.06	9.02	0.13	0.59	0.014	0.060	0.19	0.82	0.19	0.82	0.19	0.82	-	-	-	-
2.5-EP-5 <sup>3</sup>	16.28	74.21	5.58	2.21	0.014	1155.37	74.54	-	-	-	-	-	-	-	-	-	-	-
3-EP-1a	0.36	1.57	0.46	2.02	0.030	0.13	0.036	0.16	0.042	0.18	0.042	0.18	0.041	0.18	-	-	-	-
3-EP-1b	0.86	3.77	1.31	5.75	0.086	0.38	0.087	0.38	0.12	0.52	0.12	0.52	0.098	0.43	-	-	-	-
3-EP-1d	1.02	4.46	2.07	9.05	0.30	1.30	0.030	0.13	0.41	1.79	0.41	1.79	0.41	1.79	-	-	-	-
3-EP-1e	0.29	1.29	0.25	1.08	0.016	0.071	0.0016	0.01	0.022	0.098	0.022	0.098	0.022	0.098	-	-	-	-
3-EP-1h	1.02	4.46	2.07	9.05	0.30	1.30	0.030	0.13	0.41	1.79	0.41	1.79	0.41	1.79	-	-	-	-
3-EP-2a <sup>2</sup>	0.18	0.78	0.81	3.56	-	-	0.0016	0.007	-	-	-	-	-	-	-	-	-	-
3-EP-3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3-EP-4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4-EP-1a	0.36	1.57	0.46	2.02	0.030	0.13	0.036	0.16	0.042	0.18	0.042	0.18	0.041	0.18	-	-	-	-
4-EP-1b	0.86	3.77	1.31	5.75	0.086	0.38	0.087	0.38	0.12	0.52	0.12	0.52	0.098	0.43	-	-	-	-
4-EP-1d	1.02	4.46	2.07	9.05	0.30	1.30	0.030	0.13	0.41	1.79	0.41	1.79	0.41	1.79	-	-	-	-
4-EP-2a <sup>2</sup>	0.18	0.78	0.81	3.56	-	-	0.0016	0.0072	-	-	-	-	-	-	-	-	-	-
4-EP-3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4-EP-4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Unit No.	NO <sub>x</sub>		CO		VOC		SO <sub>x</sub>		PM <sup>1</sup>		PM10 <sup>1</sup>		PM2.5 <sup>1</sup>		H <sub>2</sub> S		Lead	
	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr
EP-5	No emissions from these units in an uncontrolled scenario.																	
EP-6																		
EP-7																		
EP-9																		
1-T	-	-	-	-	*	46.00	-	-	-	-	-	-	-	-	-	-	-	-
2-T	-	-	-	-	*	529.80	-	-	-	-	-	-	-	-	-	0.26	*	-
1-Load	-	-	-	-	*	129.20	-	-	-	-	-	-	-	-	-	-	-	-
2-Load	-	-	-	-	*	48.20	-	-	-	-	-	-	-	-	0.012	7.49E-03	-	-
FUG <sup>4</sup>	-	-	-	-	*	104.76	-	-	-	-	-	-	-	-	*	4.49E-03	-	-
4-EP-1d	1.02	4.46	2.07	9.05	0.30	1.30	0.030	0.13	0.41	1.79	0.41	1.79	0.41	1.79	-	-	-	-
4-EP-1e	0.29	1.29	0.25	1.08	0.016	0.071	0.0016	0.01	0.022	0.098	0.022	0.098	0.022	0.098	-	-	-	-
4-EP-1h	1.02	4.46	2.07	9.05	0.30	1.30	0.030	0.13	0.41	1.79	0.41	1.79	0.41	1.79	-	-	-	-
EP-8	No emissions from this unit in an uncontrolled scenario.																	
5-EP-1a	3.43	15.03	3.50	15.33	0.38	1.65	0.35	1.53	0.52	2.28	0.52	2.28	0.39	1.71	-	-	-	-
5-EP-1b	3.43	15.03	3.50	15.33	0.38	1.65	0.35	1.53	0.52	2.28	0.52	2.28	0.39	1.71	-	-	-	-
5-EP-1c	0.36	1.57	0.60	2.63	0.039	0.17	0.036	0.16	0.054	0.24	0.054	0.24	0.041	0.18	-	-	-	-
5-EP-1d	0.86	3.77	1.45	6.33	0.095	0.41	0.087	0.38	0.13	0.24	0.13	0.24	0.041	0.43	-	-	-	-
5-EP-1e	-	-	-	-	146.92	643.53	-	-	-	-	-	-	-	-	-	-	-	-
5-EP-1f	-	-	-	-	35.83	156.92	-	-	-	-	-	-	-	-	1.874	8.209	-	-
5-EP-2 <sup>2</sup>	0.34	1.51	0.69	3.01	0.00	0.018	0.012	0.004	-	-	-	-	-	-	1.30E-04	5.69E-04	-	-
6-EP-1a	3.43	15.03	3.50	15.33	0.38	1.65	0.35	1.53	0.52	2.28	0.52	2.28	0.39	1.71	-	-	-	-
6-EP-1b	3.43	15.03	3.50	15.33	0.38	1.65	0.35	1.53	0.52	2.28	0.52	2.28	0.39	1.71	-	-	-	-
6-EP-1c	0.36	1.57	0.60	2.63	0.039	0.17	0.036	0.16	0.054	0.24	0.054	0.24	0.041	0.18	-	-	-	-
6-EP-1d	0.86	3.77	1.45	6.33	0.095	0.41	0.087	0.38	0.13	0.57	0.13	0.57	0.098	0.43	-	-	-	-
6-EP-1e	-	-	-	-	146.92	643.53	-	-	-	-	-	-	-	-	-	-	-	-
6-EP-1f	-	-	-	-	35.83	156.92	-	-	-	-	-	-	-	-	1.87	8.21	-	-
7-EP-1c	0.36	1.57	0.60	2.63	0.039	0.17	0.036	0.16	0.054	0.24	0.054	0.24	0.041	0.18	-	-	-	-
7-EP-1d	0.86	3.77	1.45	6.33	0.095	0.41	0.087	0.38	0.13	0.57	0.13	0.57	0.098	0.43	-	-	-	-
7-EP-2 <sup>2</sup>	0.34	1.51	0.69	3.01	0.004	0.018	0.012	0.004	-	-	-	-	-	-	1.30E-04	5.69E-04	-	-
5.5-EP-1a	3.43	15.03	3.50	15.33	0.38	1.65	0.35	1.53	0.52	2.28	0.52	2.28	0.39	1.71	-	-	-	-
5.5-EP-1b <sup>2</sup>	0.053	0.23	0.11	0.47	0.0021	0.0092	0.0019	0.0083	-	-	-	-	-	-	2.02E-05	8.84E-05	-	-
3-T	-	-	-	-	31.50	137.97	-	-	-	-	-	-	-	-	-	-	-	-
4-T	-	-	-	-	5.96	26.09	-	-	-	-	-	-	-	-	1.47E-03	6.43E-03	-	-
5-T	-	-	-	-	0.33	1.45	-	-	-	-	-	-	-	-	-	-	-	-
3-LOAD	-	-	-	-	71.22	105.14	-	-	-	-	-	-	-	-	-	-	-	-
4-LOAD	-	-	-	-	66.70	4.49	-	-	-	-	-	-	-	-	9.87E-03	6.64E-04	-	-
5-LOAD	-	-	-	-	3.52	0.66	-	-	-	-	-	-	-	-	-	-	-	-

Unit No.	NOx		CO		VOC		SOx		PM <sup>1</sup>		PM10 <sup>1</sup>		PM2.5 <sup>1</sup>		H <sub>2</sub> S		Lead	
	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr
EP-10	No emissions from these units in an uncontrolled scenario.																	
EP-11																		
EP-12																		
EP-13																		
2-EP-1t	-	-	-	-	2.12	0.0085	-	-	-	-	-	-	-	-	0.082	0.00033	-	-
3-EP-1t	-	-	-	-	2.12	0.0085	-	-	-	-	-	-	-	-	0.082	0.00033	-	-
4-EP-1t	-	-	-	-	2.12	0.0085	-	-	-	-	-	-	-	-	0.082	0.00033	-	-
5-EP-1t	-	-	-	-	2.12	0.0085	-	-	-	-	-	-	-	-	0.082	0.00033	-	-
6-EP-1t	-	-	-	-	2.12	0.0085	-	-	-	-	-	-	-	-	0.082	0.00033	-	-
7-EP-1t	-	-	-	-	2.12	0.0085	-	-	-	-	-	-	-	-	0.082	0.00033	-	-
MSS/M	-	-	-	-	0.17	0.73	-	-	-	-	-	-	-	-	-	-	-	-
FUG-1 <sup>4</sup>	-	-	-	-	22.27	97.56	-	-	-	-	-	-	-	-	3.21E-04	1.40E-03	-	-
FUG-AGI2	-	-	-	-	0.61	2.69	-	-	-	-	-	-	-	-	0.092	0.40	-	-
SSM-FGCOMP	-	-	-	-	20.43	0.020	-	-	-	-	-	-	-	-	2.86E-03	2.86E-06	-	-
TK-M	-	-	-	-	0.21	0.91	-	-	-	-	-	-	-	-	-	-	-	-
Haul-ORR	-	-	-	-	-	-	-	-	6.16	21.80	1.57	5.56	0.16	0.56	-	-	-	-
Haul-Green	-	-	-	-	-	-	-	-	2.16	7.66	0.55	1.95	0.055	0.20	-	-	-	-
Haul-Red	-	-	-	-	-	-	-	-	1.15	4.06	0.29	1.04	0.029	0.10	-	-	-	-
Haul-Blue	-	-	-	-	-	-	-	-	1.60	5.66	0.41	1.44	0.041	0.14	-	-	-	-
Haul-OR2	-	-	-	-	-	-	-	-	0.48	1.69	0.12	0.43	0.012	0.043	-	-	-	-
Flare-M	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
REC-1	-	-	-	-	28.86	0.619	-	-	-	-	-	-	-	-	1.20	0.026	-	-
REC-2	-	-	-	-	11.72	0.08	-	-	-	-	-	-	-	-	0.49	3.48E-03	-	-
REC-3	-	-	-	-	11.51	0.082	-	-	-	-	-	-	-	-	1.44E-04	1.03E-06	-	-
REC-4	-	-	-	-	11.51	0.16	-	-	-	-	-	-	-	-	1.44E-04	2.06E-06	-	-
REC-5	-	-	-	-	11.51	0.16	-	-	-	-	-	-	-	-	1.44E-04	2.06E-06	-	-
REC-6	-	-	-	-	98.43	2.11	-	-	-	-	-	-	-	-	1.23E-03	2.65E-05	-	-
REC-7	-	-	-	-	65.62	1.41	-	-	-	-	-	-	-	-	8.23E-04	1.77E-05	-	-
Totals	56.43	177.14	127.30	238.14	1,511.50	5,780.18	1,158.16	86.66	18.33	70.27	9.73	39.82	6.19	27.10	636.34	2,777.79	-	-

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

<sup>2</sup>Represents pilot + purge/sweep gas emissions only

<sup>3</sup>Represents pilot + purge + assist gas emissions only

<sup>4</sup>Includes emissions from 4310M7 flash gas compressor project, FUG-FG.

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

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

Unit No.	NO <sub>x</sub>		CO		VOC		SO <sub>x</sub>		PM <sup>1</sup>		PM10 <sup>1</sup>		PM2.5 <sup>1</sup>		H <sub>2</sub> S		Lead	
	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr
1-EP-1	3.46	15.16	2.91	12.73	0.19	0.83	0.019	0.084	0.26	1.15	0.26	1.15	0.26	1.15	-	-	-	-
1-EP-2 <sup>1</sup>	0.18	0.78	0.81	3.56	-	-	0.0016	0.0072	-	-	-	-	-	-	1.79E-05	7.82E-05	-	-
1-EP-3 <sup>4</sup>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1-EP-4 <sup>4</sup>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1.5-EP-1g	0.90	3.96	0.93	4.06	0.090	0.40	0.012	0.054	0.14	0.59	0.14	0.59	0.14	0.59	-	-	-	-
4-EP-1g	0.22	0.97	0.37	1.62	0.024	0.11	0.022	0.098	0.034	0.15	0.034	0.15	0.025	0.11	-	-	-	-
2-EP-1a	0.27	1.20	0.46	2.02	0.030	0.13	0.028	0.12	0.042	0.18	0.042	0.18	0.031	0.14	-	-	-	-
2-EP-1b	1.16	5.08	1.31	5.75	0.086	0.38	0.12	0.52	0.12	0.52	0.12	0.52	0.13	0.58	-	-	-	-
2-EP-1e	0.29	1.29	0.25	1.08	0.016	0.071	0.0016	0.0072	0.022	0.098	0.022	0.098	0.022	0.098	-	-	-	-
2-EP-2a <sup>2</sup>	0.18	0.78	0.81	3.56	-	-	0.0016	0.0072	-	-	-	-	-	-	1.79E-05	7.82E-05	-	-
2-EP-4 <sup>4</sup>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2-EP-1h	1.02	4.46	2.07	9.05	0.30	1.30	0.030	0.13	0.41	1.79	0.41	1.79	0.41	1.79	-	-	-	-
2a-EP-1d	1.02	4.46	2.07	9.05	0.30	1.30	0.030	0.13	0.41	1.79	0.41	1.79	0.41	1.79	-	-	-	-
2a-EP-3 <sup>4</sup>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2.5-EP-4 <sup>5</sup>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2.5-EP-1d	2.45	10.74	2.06	9.02	0.13	0.59	0.014	0.060	0.19	0.82	0.19	0.82	0.19	0.82	-	-	-	-
2.5-EP-5 <sup>2</sup>	0.002	0.010	0.010	0.044	-	-	2.20E-04	9.70E-04	-	-	-	-	-	-	-	-	-	-
3-EP-1a	0.36	1.57	0.46	2.02	0.030	0.13	0.036	0.16	0.042	0.18	0.042	0.18	0.041	0.18	-	-	-	-
3-EP-1b	0.86	3.77	1.31	5.75	0.086	0.38	0.087	0.38	0.12	0.52	0.12	0.52	0.098	0.43	-	-	-	-
3-EP-1d	1.02	4.46	2.07	9.05	0.30	1.30	0.030	0.13	0.41	1.79	0.41	1.79	0.41	1.79	-	-	-	-
3-EP-1e	0.29	1.29	0.25	1.08	0.016	0.071	0.0016	0.0072	0.022	0.098	0.022	0.098	0.022	0.098	-	-	-	-
3-EP-1h	1.02	4.46	2.07	9.05	0.30	1.30	0.030	0.13	0.41	1.79	0.41	1.79	0.41	1.79	-	-	-	-
3-EP-2a <sup>2</sup>	0.18	0.78	0.81	3.56	-	-	0.0016	0.0072	-	-	-	-	-	-	1.79E-05	7.82E-05	-	-
3-EP-3 <sup>6</sup>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3-EP-4 <sup>6</sup>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4-EP-1a	0.36	1.57	0.46	2.02	0.030	0.13	0.036	0.16	0.042	0.18	0.042	0.18	0.041	0.18	-	-	-	-
4-EP-1b	0.86	3.77	1.31	5.75	0.086	0.38	0.087	0.38	0.12	0.52	0.12	0.52	0.098	0.43	-	-	-	-
4-EP-2a <sup>2</sup>	0.18	0.78	0.81	3.56	-	-	0.0016	0.0072	-	-	-	-	-	-	1.79E-05	7.82E-05	-	-
4-EP-3 <sup>7</sup>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4-EP-4 <sup>7</sup>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Unit No.	NOx		CO		VOC		SOx		PM <sup>1</sup>		PM10 <sup>1</sup>		PM2.5 <sup>1</sup>		H <sub>2</sub> S		Lead	
	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr
EP-5	5.50	24.09	3.50	15.33	5.92	25.92	13.22	57.91	0.21	0.91	0.21	0.91	0.21	0.91	0.14	0.62	-	-
EP-6	5.50	24.09	3.50	15.33	3.64	15.92	9.47	41.49	0.21	0.91	0.21	0.91	0.21	0.91	0.10	0.44	-	-
EP-7	0.59	2.58	0.49	2.16	0.80	3.50	-	-	0.045	0.20	0.045	0.20	0.045	0.20	-	-	-	-
EP-9	0.36	1.57	1.64	7.17	6.42	28.14	0.12	0.50	-	-	-	-	-	-	-	-	-	-
1-T <sup>8</sup>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2-T <sup>9</sup>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1-Load <sup>8</sup>	-	-	-	-	*	-	-	-	-	-	-	-	-	-	-	-	-	-
2-Load <sup>9</sup>	-	-	-	-	*	14.46	-	-	-	-	-	-	-	-	-	-	-	-
FUG	-	-	-	-	*	104.76	-	-	-	-	-	-	-	-	*	0.0045	-	-
4-EP-1d	1.02	4.46	2.07	9.05	0.30	1.30	0.030	0.13	0.41	1.79	0.41	1.79	0.41	1.79	-	-	-	-
4-EP-1e	0.29	1.29	0.25	1.08	0.016	0.071	0.0016	0.0072	0.022	0.098	0.022	0.098	0.022	0.098	-	-	-	-
4-EP-1h	1.02	4.46	2.07	9.05	0.30	1.30	0.030	0.13	0.41	1.79	0.41	1.79	0.41	1.79	-	-	-	-
EP-8	5.50	24.09	3.50	15.33	3.56	15.57	9.96	43.61	0.21	0.91	0.21	0.91	0.21	0.91	0.11	0.46	-	-
5-EP-1a	3.43	15.03	3.50	15.33	0.38	1.65	0.35	1.53	0.52	2.28	0.52	2.28	0.39	1.71	-	-	-	-
5-EP-1b	3.43	15.03	3.50	15.33	0.38	1.65	0.35	1.53	0.52	2.28	0.52	2.28	0.39	1.71	-	-	-	-
5-EP-1c	0.36	1.57	0.60	2.63	0.039	0.17	0.036	0.16	0.054	0.24	0.054	0.24	0.041	0.18	-	-	-	-
5-EP-1d	0.86	3.77	1.45	6.33	0.095	0.41	0.087	0.38	0.13	0.57	0.13	0.57	0.098	0.43	-	-	-	-
5-EP-1e <sup>10</sup>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5-EP-1f <sup>10</sup>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5-EP-2 <sup>2</sup>	0.34	1.51	0.69	3.01	0.004	0.018	0.012	0.0043	-	-	-	-	-	-	1.30E-04	5.69E-04	-	-
6-EP-1a	3.43	15.03	3.50	15.33	0.38	1.65	0.35	1.53	0.52	2.28	0.52	2.28	0.39	1.71	-	-	-	-
6-EP-1b	3.43	15.03	3.50	15.33	0.38	1.65	0.35	1.53	0.52	2.28	0.52	2.28	0.39	1.71	-	-	-	-
6-EP-1c	0.36	1.57	0.60	2.63	0.039	0.17	0.036	0.16	0.054	0.24	0.054	0.24	0.041	0.18	-	-	-	-
6-EP-1d	0.86	3.77	1.45	6.33	0.095	0.41	0.087	0.38	0.13	0.57	0.13	0.57	0.098	0.43	-	-	-	-
6-EP-1e <sup>10</sup>	-	-	-	-	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-
6-EP-1f <sup>10</sup>	-	-	-	-	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-
7-EP-1c	0.36	1.57	0.60	2.63	0.039	0.17	0.036	0.16	0.054	0.24	0.054	0.24	0.041	0.18	-	-	-	-
7-EP-1d	0.86	3.77	1.45	6.33	0.095	0.41	0.087	0.38	0.13	0.57	0.13	0.57	0.098	0.43	-	-	-	-
7-EP-2 <sup>2</sup>	0.34	1.51	0.69	3.01	0.004	0.018	0.012	0.0043	-	-	-	-	-	-	1.30E-04	5.69E-04	-	-
5.5-EP-1a	3.43	15.03	3.50	15.33	0.38	1.65	0.35	1.53	0.52	2.28	0.52	2.28	0.39	1.71	-	-	-	-
5.5-EP-1b <sup>2</sup>	0.053	0.23	0.11	0.47	0.0021	0.0092	0.0019	0.0083	-	-	-	-	-	-	2.02E-05	8.84E-05	-	-
5.5-EP-1c <sup>11</sup>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3-T <sup>12</sup>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Unit No.	NOx		CO		VOC		SOx		PM <sup>1</sup>		PM10 <sup>1</sup>		PM2.5 <sup>1</sup>		H <sub>2</sub> S		Lead	
	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr
4-T <sup>13</sup>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5-T	-	-	-	-	*	1.45	-	-	-	-	-	-	-	-	-	-	-	-
3-LOAD	-	-	-	-	*	31.54	-	-	-	-	-	-	-	-	-	-	-	-
4-LOAD	-	-	-	-	*	1.35	-	-	-	-	-	-	-	-	9.87E-03	6.64E-04	-	-
5-LOAD	-	-	-	-	*	0.66	-	-	-	-	-	-	-	-	-	-	-	-
EP-10	16.40	69.97	9.98	42.49	3.66	15.68	0.74	30.24	9.40	40.33	9.40	40.33	7.05	30.25	0.080	0.32	-	-
EP-12	0.17	0.20	0.33	0.40	4.07	10.58	1.62E-05	7.10E-05	-	-	-	-	-	-	3.78E-05	8.63E-06	-	-
EP-13	0.15	1.12	0.90	3.94	3.62	0.89	0.080	0.026	-	-	-	-	-	-	2.09E-03	5.68E-04	-	-
FUG-1 <sup>15</sup>	-	-	-	-	22.27	97.56	-	-	-	-	-	-	-	-	3.21E-04	1.40E-03	-	-
FUG-AGI2	-	-	-	-	0.61	2.69	-	-	-	-	-	-	-	-	0.092	0.40	-	-
TK-M	-	-	-	-	0.21	0.91	-	-	-	-	-	-	-	-	-	-	-	-
Haul-ORR	-	-	-	-	-	-	-	-	1.38	4.88	0.35	1.24	0.035	0.12	-	-	-	-
Haul-Green	-	-	-	-	-	-	-	-	0.48	1.72	0.12	0.44	0.012	0.044	-	-	-	-
Haul-Red	-	-	-	-	-	-	-	-	0.26	0.91	0.066	0.23	0.0066	0.023	-	-	-	-
Haul-Blue	-	-	-	-	-	-	-	-	0.36	1.27	0.09	0.32	0.0091	0.032	-	-	-	-
Haul-OR2	-	-	-	-	-	-	-	-	0.11	0.38	0.027	0.096	0.0027	0.010	-	-	-	-
Flare-M	256.05	10.00	1167.30	10.00	859.82	10.00	6.21	10.00	-	-	-	-	-	-	0.067	9.00	-	-
	682.81		3112.79		2292.86		16.57		-	-	-	-	-	-	0.18		-	-
	682.81		3112.79		2292.86		16.57		-	-	-	-	-	-	0.18		-	-
	682.81		3112.79		2292.86		16.57		-	-	-	-	-	-	0.18		-	-
	1658.43		3310.85		2430.99		-		-	-	-	-	-	-	-		-	-
	1658.43		3310.85		2430.99		-		-	-	-	-	-	-	-		-	-
	16.28		74.21		0.21		1155.37		-	-	-	-	-	-	12.26		-	-
	12.41		28.87		9.08		2684.66		-	-	-	-	-	-	28.58		-	-
REC-1	-	-	-	-	28.86	0.62	-	-	-	-	-	-	-	-	1.20	0.026	-	-
REC-2	-	-	-	-	11.72	0.084	-	-	-	-	-	-	-	-	0.49	3.48E-03	-	-
REC-3	-	-	-	-	11.51	0.082	-	-	-	-	-	-	-	-	1.44E-04	1.03E-06	-	-
REC-4	-	-	-	-	11.51	0.16	-	-	-	-	-	-	-	-	1.44E-04	2.06E-06	-	-

Unit No.	NOx		CO		VOC		SOx		PM <sup>1</sup>		PM10 <sup>1</sup>		PM2.5 <sup>1</sup>		H <sub>2</sub> S		Lead	
	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr
REC-5	-	-	-	-	11.51	0.16	-	-	-	-	-	-	-	-	1.44E-04	2.06E-06	-	-
REC-6	-	-	-	-	98.43	2.11	-	-	-	-	-	-	-	-	1.23E-03	2.65E-05	-	-
REC-7	-	-	-	-	65.62	1.41	-	-	-	-	-	-	-	-	8.23E-04	1.77E-05	-	-
<b>Totals</b>	5,724.33	333.62	17,307.39	344.76	12,908.55	407.75	3,932.32	195.90	19.45	82.16	17.52	75.34	13.74	59.48	43.67	11.28	-	-

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

<sup>2</sup> Represents pilot + purge/sweep gas emissions only

<sup>3</sup> Represents pilot + purge + assist gas emissions only

<sup>4</sup> Emissions controlled by unit EP-5

<sup>5</sup> Emissions controlled by AGI well 1 and Flare 2.5-EP-5

<sup>6</sup> Emissions controlled by unit EP-6

<sup>7</sup> Emissions controlled by unit EP-8

<sup>8</sup> Emissions controlled by unit EP-7

<sup>9</sup> Emissions controlled by unit EP-9

<sup>10</sup> Emissions controlled by unit EP-10

<sup>11</sup> Emissions controlled by AGI well 2 and Flare 3.5-EP-1b

<sup>12</sup> Emissions controlled by unit EP-12

<sup>13</sup> Emissions controlled by unit EP-13

<sup>14</sup> Haul Road emissions under 0.5 tpy are exempt under 20.2.72.202.B.5

<sup>15</sup> Includes emissions from 4310M7 flash gas compressor project, FUG-FG.

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

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

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

Unit No.	NOx		CO		VOC		SOx		PM <sup>2</sup>		PM10 <sup>2</sup>		PM2.5 <sup>2</sup>		H <sub>2</sub> S		Lead	
	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr
1-EP-2	256.05	1.54	1167.30	7.00	859.82	5.16	6.21	0.040	-	-	-	-	-	-	0.067	5.00E-04	-	-
2-EP-2a	682.99	4.10	3113.14	18.68	2293.06	13.76	16.57	0.10	-	-	-	-	-	-	0.18	1.16E-03	-	-
3-EP-2a	682.81	4.10	3112.79	18.68	2292.86	13.76	16.57	0.10	-	-	-	-	-	-	0.18	1.16E-03	-	-
4-EP-2a	682.99	4.10	3113.15	18.68	2293.06	13.76	16.57	0.11	-	-	-	-	-	-	0.18	1.16E-03	-	-
2.5-EP-5	16.28	1.21	74.20	5.54	0.21	0.014	1155.40	74.50	-	-	-	-	-	-	12.30	0.790	-	-
5-EP-2	1658.43	9.95	3310.85	19.87	2430.99	14.58	-	-	-	-	-	-	-	-	1.30E-04	5.69E-04	-	-
7-EP-2	1658.43	9.95	3310.85	19.87	2430.99	14.58	0.00E+00	0.00E+00	-	-	-	-	-	-	1.30E-04	5.69E-04	-	-
5.5-EP-1b	12.40	0.40	28.76	1.04	9.08	0.53	2684.66	162.10	-	-	-	-	-	-	28.58	1.72	-	-
EP-11	-	-	-	-	365.50	32.02	-	-	-	-	-	-	-	-	3.75	0.33	-	-
SSM	-	-	-	-	0.17	0.73	-	-	-	-	-	-	-	-	-	-	-	-
2-EP-1t	-	-	-	-	2.12	8.48E-03	-	-	-	-	-	-	-	-	0.082	3.28E-04	-	-
3-EP-1t	-	-	-	-	2.12	8.48E-03	-	-	-	-	-	-	-	-	0.082	3.28E-04	-	-
4-EP-1t	-	-	-	-	2.12	8.48E-03	-	-	-	-	-	-	-	-	0.082	3.28E-04	-	-
5-EP-1t	-	-	-	-	2.12	8.48E-03	-	-	-	-	-	-	-	-	0.082	3.28E-04	-	-
6-EP-1t	-	-	-	-	2.12	8.48E-03	-	-	-	-	-	-	-	-	0.082	3.28E-04	-	-
7-EP-1t	-	-	-	-	2.12	8.48E-03	-	-	-	-	-	-	-	-	0.082	3.28E-04	-	-
SSM-FGCOMP <sup>3</sup>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Totals	5,650.37	35.35	17,231.04	109.36	12,988.47	108.94	3,895.98	236.95	-	-	-	-	-	-	45.73	2.85	-	-

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

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

<sup>3</sup> SSM-FGCOMP controlled by units 4-EP-2a and 2-EP-2a.



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

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

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

Stack No.	Serving Unit Number(s) from Table 2-A	NOx		CO		VOC		SOx		PM		PM10		PM2.5		<input type="checkbox"/> H <sub>2</sub> S or <input type="checkbox"/> Lead	
		lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr
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)			
1-EP-1	1-EP-1	V	N	50.00	624.00	247.87	N/A	N/A	18.18	4.17
1-EP-2	1-EP-2	V	N	75.00	1831.73	106283.64	N/A	N/A	65.62	45.41
1.5-EP-1g	1.5-EP-1g	V	N	37.00	624.00	126.41	N/A	N/A	29.64	2.33
4-EP-1g	4-EP-1g	V	N	13.25	120.00	18.54	N/A	N/A	5.90	2.00
2-EP-1a	2-EP-1a	V	N	15.88	624.00	39.22	N/A	N/A	22.19	1.50
2-EP-1b	2-EP-1b	V	N	22.44	110.00	84.71	N/A	N/A	7.34	3.83
2-EP-1e	2-EP-1e	V	N	22.75	624.00	21.01	N/A	N/A	6.69	2.00
2-EP-2a	2-EP-2a	V	N	75.00	1831.73	275310.95	N/A	N/A	65.62	72.09
2-EP-1h	2-EP-1h	V	N	24.79	424.99	71.97	N/A	N/A	7.48	3.50
2a-EP-1d	2a-EP-1d	V	N	24.79	424.99	71.97	N/A	N/A	7.48	3.50
2.5-EP-1d	2.5-EP-1d	V	N	22.88	624.00	140.44	N/A	N/A	25.14	2.67
2.5-EP-5	2.5-EP-5	V	N	149.00	1831.73	7334.90	N/A	N/A	65.62	11.93
3-EP-1a	3-EP-1a	V	N	22.00	550.00	32.56	N/A	N/A	23.33	1.33
3-EP-1b	3-EP-1b	V	N	25.83	429.00	82.91	N/A	N/A	19.39	2.33
3-EP-1d	3-EP-1d	V	N	14.99	424.99	71.97	N/A	N/A	40.72	1.50
3-EP-1e	3-EP-1e	V	N	20.01	624.00	21.00	N/A	N/A	54.56	0.70
3-EP-1h	3-EP-1h	V	N	14.99	424.99	71.97	N/A	N/A	40.72	1.50
3-EP-2a	3-EP-2a	V	N	75.00	1831.73	275310.95	N/A	N/A	65.62	73.09
4-EP-1a	4-EP-1a	V	N	22.00	377.00	39.22	N/A	N/A	28.09	1.33
4-EP-1b	4-EP-1b	V	N	25.83	429.00	111.65	N/A	N/A	26.11	2.33
4-EP-1d	4-EP-1d	V	N	32.67	425.00	94.00	N/A	N/A	7.48	4.00
4-EP-1e	4-EP-1e	V	N	22.75	624.00	21.00	N/A	N/A	6.68	2.00
4-EP-1h	4-EP-1h	V	N	32.67	424.99	94.00	N/A	N/A	7.48	4.00
4-EP-2a	4-EP-2a	V	N	75.00	1831.73	275310.95	N/A	N/A	65.62	73.09
EP-5	EP-5	V	N	76.00	1500.01	354.93	N/A	N/A	4.52	10.00

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)			
EP-6	EP-6	V	N	50.00	1500.01	354.93	N/A	N/A	9.22	7.00
EP-7	EP-7	V	N	36.00	1400.00	72.53	N/A	N/A	3.25	5.33
EP-8	EP-8	V	N	76.00	1500.01	354.93	N/A	N/A	5.41	9.14
EP-9	EP-9	V	N	20.00	1831.73	146.73	N/A	N/A	65.62	1.69
5-EP-1a	5-EP-1a	V	N	36.00	501.01	701.20	N/A	N/A	55.80	4.00
5-EP-1b	5-EP-1b	V	N	36.00	501.01	701.20	N/A	N/A	55.80	4.00
5-EP-1c	5-EP-1c	V	N	22.00	447.00	68.80	N/A	N/A	49.30	1.33
5-EP-1d	5-EP-1d	V	N	25.83	468.00	168.00	N/A	N/A	39.30	2.33
5-EP-2	5-EP-2	V	N	199.00	1831.73	352130.56	N/A	N/A	65.62	82.66
6-EP-1a	6-EP-1a	V	N	36.00	501.01	701.20	N/A	N/A	55.80	4.00
6-EP-1b	6-EP-1b	V	N	36.00	501.01	701.20	N/A	N/A	55.80	4.00
6-EP-1c	6-EP-1c	V	N	22.00	447.00	68.80	N/A	N/A	49.30	1.33
6-EP-1d	6-EP-1d	V	N	25.83	468.00	168.00	N/A	N/A	39.30	2.33
7-EP-1c	7-EP-1c	V	N	22.00	447.00	68.80	N/A	N/A	49.30	1.33
7-EP-1d	7-EP-1d	V	N	25.83	468.00	168.00	N/A	N/A	39.30	2.33
7-EP-2	7-EP-2	V	N	199.00	1831.73	352130.56	N/A	N/A	65.62	82.66
EP-12	EP-12	V	N	40.00	1400.00	2898.86	N/A	N/A	65.62	7.50
5.5-EP-1a	5.5-EP-1a	V	N	36.00	479.00	679.84	N/A	N/A	54.10	4.00
5.5-EP-1b	5.5-EP-1b	V	N	300.00	1831.73	56232.49	N/A	N/A	65.62	37.42
5-T-1	5-T-1	V	N	20.00	80.01	0.0016	N/A	N/A	0.033	0.25
5-T-2	5-T-2	V	N	20.00	80.01	0.0016	N/A	N/A	0.033	0.25
5-T-3	5-T-3	V	N	20.00	80.01	0.0016	N/A	N/A	0.033	0.25
5-T-4	5-T-4	V	N	20.00	80.01	0.0016	N/A	N/A	0.033	0.25
EP-10	EP-10	V	N	70.00	1800.00	341.99	N/A	N/A	385.71	1.06
EP-11	EP-11	V	N	60.00	1600.00	224.56	N/A	N/A	102.93	1.67
EP-13	EP-13	V	N	20.00	1831.73	0.12	N/A	N/A	65.62	0.05
4-T-1	4-T-2	V	N	40.00	110.89	0.0016	N/A	N/A	0.03	0.25

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)			
4-T-2	LOAD-4	V	N	40.00	110.89	0.0016	N/A	N/A	0.03	0.25
LOAD-4	LOAD-4	V	N	10.00	110.89	0.21	N/A	N/A	4.37	0.25
LOAD-2	LOAD-2	V	N	10.00	110.89	0.21	N/A	N/A	4.37	0.25
7EP1TA	7EP1TA	V	N	30.00	100.00	0.78	N/A	N/A	15.96	0.25
6EP1TA	6EP1TA	V	N	30.00	100.00	0.78	N/A	N/A	15.96	0.25
4EP1TA	4EP1TA	V	N	30.00	100.00	0.78	N/A	N/A	15.96	0.25
5EP1TA	5EP1TA	V	N	30.00	100.00	0.78	N/A	N/A	15.96	0.25
3EP1TA	3EP1TA	V	N	30.00	100.00	0.78	N/A	N/A	15.96	0.25
2EP1TA	2EP1TA	V	N	30.00	100.00	0.78	N/A	N/A	15.96	0.25
7EP1TB	7EP1TB	V	N	30.00	100.00	0.78	N/A	N/A	15.96	0.25
6EP1TB	6EP1TB	V	N	30.00	100.00	0.78	N/A	N/A	15.96	0.25
4EP1TB	4EP1TB	V	N	30.00	100.00	0.78	N/A	N/A	15.96	0.25
5EP1TB	5EP1TB	V	N	30.00	100.00	0.78	N/A	N/A	15.96	0.25
3EP1TB	3EP1TB	V	N	30.00	100.00	0.78	N/A	N/A	15.96	0.25
2EP1TB	2EP1TB	V	N	30.00	100.00	0.78	N/A	N/A	15.96	0.25
7EP1TC	7EP1TC	V	N	30.00	100.00	0.78	N/A	N/A	15.96	0.25
6EP1TC	6EP1TC	V	N	30.00	100.00	0.78	N/A	N/A	15.96	0.25
4EP1TC	4EP1TC	V	N	30.00	100.00	0.78	N/A	N/A	15.96	0.25
5EP1TC	5EP1TC	V	N	30.00	100.00	0.78	N/A	N/A	15.96	0.25
3EP1TC	3EP1TC	V	N	30.00	100.00	0.78	N/A	N/A	15.96	0.25
2EP1TC	2EP1TC	V	N	30.00	100.00	0.78	N/A	N/A	15.96	0.25
7EP1TD	7EP1TD	V	N	30.00	100.00	0.78	N/A	N/A	15.96	0.25
6EP1TD	6EP1TD	V	N	30.00	100.00	0.78	N/A	N/A	15.96	0.25
4EP1TD	4EP1TD	V	N	30.00	100.00	0.78	N/A	N/A	15.96	0.25
5EP1TD	5EP1TD	V	N	30.00	100.00	0.78	N/A	N/A	15.96	0.25
3EP1TD	3EP1TD	V	N	30.00	100.00	0.78	N/A	N/A	15.96	0.25
2EP1TD	2EP1TD	V	N	30.00	100.00	0.78	N/A	N/A	15.96	0.25



**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		Benzene		Toluene		Ethylbenzene		n-Hexane		2,2,4-Trimethylpentane		Styrene		Xylene		Provide Pollutant Name Here HAP or TAP	
				☑ HAP or □ TAP	☑ HAP or □ TAP	☑ HAP or □ TAP	☑ HAP or □ TAP	☑ HAP or □ TAP	☑ HAP or □ TAP	☑ HAP or □ TAP	☑ HAP or □ TAP	☑ HAP or □ TAP	☑ 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
1-EP-1	1-EP-1	0.51	2.23	0.026	0.12	0.036	0.16	0.075	0.33	0.050	0.22	0.10	0.44	0.073	0.32	0.047	0.20		
1-EP-2	1-EP-2	46.23	0.28	3.09	0.02	1.60	0.01	0.16	0.0009	40.61	0.24	-	-	-	-	0.77	0.005		
1-EP-3	1-EP-3	Emissions from 1-EP-3 are controlled by the thermal oxidizer, unit EP-5. Controlled emissions are represented under unit EP-5.																	
1-EP-4	1-EP-4	Emissions from 1-EP-4 are controlled by the thermal oxidizer, unit EP-5. Controlled emissions are represented under unit EP-5.																	
1.5-EP-1g	1.5-EP-1g	0.26	1.14	0.0135	0.059	0.018	0.080	0.038	0.17	0.025	0.1109	0.051	0.22	0.037	0.16	0.024	0.104		
4-EP-1g	4-EP-1g	0.01	0.04	0.0000	0.000	0.000	0.000	-	-	0.009	0.0385	-	-	-	-	-	-		
2-EP-1a	2-EP-1a	0.08	0.35	0.0042	0.018	0.0057	0.025	0.012	0.052	0.0079	0.035	0.016	0.070	0.012	0.051	0.007397	0.032		
2-EP-1b	2-EP-1b	0.23	1.01	0.012	0.052	0.016	0.071	0.034	0.15	0.022	0.098	0.045	0.20	0.033	0.15	0.021	0.092		
2-EP-1e	2-EP-1e	0.043	0.19	0.0022	0.0098	0.0031	0.013	0.0063	0.028	0.0042	0.019	0.0085	0.037	0.0062	0.027	0.0040	0.017		
2-EP-2a	2-EP-2a	123.27	0.74	8.25	0.049	4.26	0.026	0.42	0.0025	108.3	0.65	-	-	-	-	2.06	0.012		
2-EP-4	2-EP-4	Emissions from 2-EP-4 are controlled by unit EP-5. Controlled emissions are represented under unit EP-5.																	
2-EP-1h	2-EP-1h	0.79	3.47	0.041	0.18	0.056	0.24	0.12	0.51	0.077	0.34	0.16	0.68	0.11	0.50	0.073	0.32		
2a-EP-1d	2a-EP-1d	0.79	3.47	0.041	0.18	0.056	0.24	0.12	0.51	0.077	0.34	0.16	0.68	0.11	0.50	0.073	0.32		
2a-EP-3	2a-EP-3	Emissions from 2a-EP-3 are controlled by unit EP-5. Controlled emissions are represented under unit EP-5.																	
2.5-E-4	2.5-EP-4	Emissions from unit 2.5-EP-4 are controlled by the Acid Gas Injection Well (AGI). During AGI compressor downtime the controlled emissions are represented under the Emergency AGI Flare, unit 2.5-EP-5.																	
2.5-EP-1d	2.5-EP-1d	0.29	1.26	0.015	0.066	0.020	0.089	0.042	0.19	0.028	0.12	0.057	0.25	0.042	0.18	0.026	0.12		
2.5-EP-5	2.5-EP-5	0.005	0.0003	-	-	-	-	-	-	0.0053	0.00034	-	-	-	-	-	-		
3-EP-1a	3-EP-1a	0.08	0.35	0.0042	0.018	0.0057	0.025	0.012	0.052	0.0079	0.035	0.016	0.070	0.012	0.051	0.007397	0.032		
3-EP-1b	3-EP-1b	0.23	1.01	0.012	0.052	0.016	0.071	0.034	0.15	0.022	0.098	0.045	0.20	0.033	0.15	0.021	0.092		
3-EP-1d	3-EP-1d	0.79	3.47	0.041	0.18	0.056	0.24	0.12	0.51	0.077	0.34	0.16	0.68	0.11	0.50	0.073	0.32		
3-EP-1e	3-EP-1e	0.04	0.19	0.0022	0.0098	0.0031	0.013	0.0063	0.028	0.0042	0.019	0.0085	0.037	0.0062	0.027	0.0040	0.017		
3-EP-1h	3-EP-1h	0.79	3.47	0.041	0.18	0.056	0.24	0.12	0.51	0.077	0.34	0.16	0.68	0.11	0.50	0.073	0.32		
3-EP-2a	3-EP-2a	123.27	0.74	8.25	0.049	4.26	0.026	0.42	0.0025	108.3	0.65	-	-	-	-	2.06	0.012		
3-EP-3	3-EP-3	Emissions from unit 3-EP-3 are routed to the thermal oxidizer unit EP-6. Controlled emissions are represented under unit EP-6.																	
3-EP-4	3-EP-4	Emissions from unit 3-EP-4 are routed to the thermal oxidizer unit EP-6. Controlled emissions are represented under unit EP-6.																	
4-EP-1a	4-EP-1a	0.08	0.35	0.0042	0.018	0.0057	0.025	0.012	0.052	0.0079	0.035	0.016	0.070	0.012	0.051	0.007397	0.032		
4-EP-1b	4-EP-1b	0.23	1.01	0.012	0.052	0.016	0.071	0.034	0.15	0.022	0.098	0.045	0.20	0.033	0.15	0.021	0.092		
4-EP-1d	4-EP-1d	0.79	3.47	0.041	0.18	0.056	0.24	0.12	0.51	0.077	0.34	0.16	0.68	0.11	0.50	0.073	0.32		

Stack No.	Unit No.(s)	Total HAPs		Benzene <input checked="" type="checkbox"/> HAP or <input type="checkbox"/> TAP		Toluene <input checked="" type="checkbox"/> HAP or <input type="checkbox"/> TAP		Ethylbenzene <input checked="" type="checkbox"/> HAP or <input type="checkbox"/> TAP		n-Hexane <input checked="" type="checkbox"/> HAP or <input type="checkbox"/> TAP		2,2,4-Trimethylpentane <input checked="" type="checkbox"/> HAP or <input type="checkbox"/> TAP		Styrene <input checked="" type="checkbox"/> HAP or <input type="checkbox"/> TAP		Xylene <input checked="" type="checkbox"/> HAP or <input type="checkbox"/> TAP		Provide Pollutant Name Here HAP or <input type="checkbox"/> TAP	
		lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr
4-EP-1e	4-EP-1e	0.043	0.19	0.0022	0.0098	0.0031	0.013	0.0063	0.028	0.0042	0.019	0.0085	0.037	0.0062	0.027	0.0040	0.017		
4-EP-1h	4-EP-1h	0.79	3.47	0.041	0.18	0.056	0.24	0.12	0.51	0.077	0.34	0.16	0.68	0.11	0.50	0.073	0.32		
4-EP-2a	4-EP-2a	123.3	0.74	8.20	0.049	4.30	0.026	0.42	0.0025	108.3	0.65	-	-	-	-	2.10	0.012		
4-EP-3	4-EP-3	Emissions from unit 4-EP-3 are routed to the thermal oxidizer unit EP-8. Controlled emissions are represented under unit EP-8.																	
4-EP-4	4-EP-4	Emissions from unit 4-EP-4 are routed to the thermal oxidizer unit EP-8. Controlled emissions are represented under unit EP-8.																	
EP-5	EP-5	2.64	11.58	1.43	6.26	0.56	2.46	0.025	0.11	0.34	1.48	-	-	-	-	0.14	0.61		
EP-6	EP-6	1.82	7.95	1.04	4.55	0.41	1.79	0.018	0.080	0.24	1.06	-	-	-	-	0.11	0.48		
EP-7	EP-7	0.01	0.026	0.005	0.020	0.00087	0.0038	0.000032	0.00014	-	-	0.0011	0.0046	-	-	0.0001	0.0006		
EP-8	EP-8	1.77	7.74	1.01	4.43	0.39	1.73	0.018	0.077	0.24	1.05	-	-	-	-	0.10	0.46		
EP-9	EP-9	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-	-	0.00	0.00	-	-	0.00	0.00		
1-T	1-T	Emissions from units 1-T-1 to 1-T-6 are routed to the enclosed combustion device, unit EP-7. Controlled emissions are represented under unit EP-7.																	
2-T	2-T	Emissions from units 2-T are routed to the sour slop tank control flare unit EP-9. Controlled emissions are represented under unit EP-9.																	
1-Load	1-Load	Emissions from unit 1-Load are routed to the enclosed combustion device, unit EP-7. Controlled emissions are represented under unit EP-7.																	
FUG	FUG	-	7.27	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5-EP-1a	5-EP-1a	0.13	0.58	1.54E-04	6.76E-04	2.50E-04	1.10E-03	-	-	0.13	0.58	-	-	-	-	-	-	-	-
5-EP-1b	5-EP-1b	0.12	0.54	1.44E-04	6.31E-04	2.33E-04	1.02E-03	-	-	0.12	0.54	-	-	-	-	-	-	-	-
5-EP-1c	5-EP-1c	0.013	0.057	1.50E-05	6.57E-05	2.43E-05	1.06E-04	-	-	0.013	0.056	-	-	-	-	-	-	-	-
5-EP-1d	5-EP-1d	0.031	0.14	3.61E-05	1.58E-04	5.85E-05	2.56E-04	-	-	0.031	0.14	-	-	-	-	-	-	-	-
5-EP-1e	5-EP-1e	Emissions from unit 5-EP-1e are routed to the thermal oxidizer unit EP-10. Controlled emissions are represented under unit EP-10.																	
5-EP-1f	5-EP-1f	Emissions from unit 5-EP-1f are routed to the thermal oxidizer unit EP-10. Controlled emissions are represented under unit EP-10.																	
5-EP-2	5-EP-2	144.28	0.87	3.60	0.022	0.89	0.0053	0.035	2.12E-04	139.59	0.84	0.86	0.0052	-	-	0.16	0.0010		
6-EP-1a	6-EP-1a	0.12	0.54	1.44E-04	6.31E-04	2.33E-04	1.02E-03	-	-	0.12	0.54	-	-	-	-	-	-	-	-
6-EP-1b	6-EP-1b	0.12	0.54	1.44E-04	6.31E-04	2.33E-04	1.02E-03	-	-	0.12	0.54	-	-	-	-	-	-	-	-
6-EP-1c	6-EP-1c	0.013	0.057	1.50E-05	6.57E-05	2.43E-05	1.06E-04	-	-	0.013	0.056	-	-	-	-	-	-	-	-
6-EP-1d	6-EP-1d	0.031	0.14	3.61E-05	1.58E-04	5.85E-05	2.56E-04	-	-	0.031	0.14	-	-	-	-	-	-	-	-
6-EP-1e	6-EP-1e	Emissions from unit 6-EP-1e are routed to the thermal oxidizer unit EP-10. Controlled emissions are represented under unit EP-10.																	
6-EP-1f	6-EP-1f	Emissions from unit 6-EP-1f are routed to the thermal oxidizer unit EP-10. Controlled emissions are represented under unit EP-10.																	
7-EP-1c	7-EP-1c	0.013	0.057	1.50E-05	6.57E-05	2.43E-05	1.06E-04	-	-	0.013	0.056	-	-	-	-	-	-	-	-
7-EP-1d	7-EP-1d	0.031	0.14	3.61E-05	1.58E-04	5.85E-05	2.56E-04	-	-	0.031	0.14	-	-	-	-	-	-	-	-
7-EP-2	7-EP-2	144.28	0.87	3.60	2.16E-02	8.91E-01	5.34E-03	0.035	2.12E-04	139.59	0.84	0.86	0.0052	-	-	0.16	0.0010		
5.5-EP-1a	5.5-EP-1a	0.12	0.54	1.44E-04	6.31E-04	2.33E-04	1.02E-03	-	-	0.12	0.54	-	-	-	-	-	-	-	-
5.5-EP-1b	5.5-EP-1b	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-	-	0.00	0.00		
3-T	3-T	Emissions from tanks 3-T-1 to 3-T-6 are routed to the enclosed combustor unit EP-12. Controlled emissions are represented under unit EP-12.																	
4-T	4-T	Emissions from tanks 4-T-1 to 4-T-2 are routed to the flare unit EP-13. Controlled emissions are represented under unit EP-13.																	
5-T	5-T	0.032	0.14	0.032	0.14	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3-LOAD	3-LOAD	0.32	0.47	0.32	0.47	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4-LOAD	4-LOAD	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Stack No.	Unit No.(s)	Total HAPs		Benzene		Toluene		Ethylbenzene		n-Hexane		2,2,4-Trimethylpentane		Styrene		Xylene		Provide Pollutant Name Here	
				☑ HAP or ☐ TAP	☑ HAP or ☐ TAP	☑ HAP or ☐ TAP	☑ HAP or ☐ TAP	☑ HAP or ☐ TAP	☑ HAP or ☐ TAP	☑ HAP or ☐ TAP	☑ HAP or ☐ TAP	☑ HAP or ☐ TAP	☑ 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
5-LOAD	5-LOAD	0.26	0.050	0.26	0.050	-	-	-	-	-	-	-	-	-	-	-	-		
EP-10	EP-10	1.66	7.13	0.75	3.22	0.24	1.05	0.0099	0.043	0.60	2.58	0.0058	0.025	-	-	0.048	0.21		
EP-11	EP-11	165.47	14.41	75.07	6.54	24.40	2.12	0.99	0.086	60.17	5.24	2.89E-03	2.52E-04	-	-	4.83	0.42		
EP-12	EP-12	0.027	0.11	0.024	0.10	-	-	3.17E-04	1.39E-03	0.00	0.00	1.91E-03	8.38E-03	-	-	0.0015	0.0066		
EP-13	EP-13	0.018	0.0015	-	-	-	-	-	-	0.018	0.0015	-	-	-	-	-	-		
2-EP-1t	2-EP-1t	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
3-EP-1t	3-EP-1t	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
4-EP-1t	4-EP-1t	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
5-EP-1t	5-EP-1t	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
6-EP-1t	6-EP-1t	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
7-EP-1t	7-EP-1t	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
FUG-1	FUG-1	0.86	3.75	0.83	3.62	-	-	-	-	0.021	0.093	-	-	-	-	-	-		
FUG-AGI2	FUG-AGI2	0.061	0.27	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
TK-M	TK-M	0.21	0.91	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Haul-ORR	Haul-ORR	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Haul-Green	Haul-Green	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Haul-Red	Haul-Red	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Haul-Blue	Haul-Blue	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Haul-OR2	Haul-OR2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Flare-M	Flare-M	*	10.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
REC-1	REC-1	0.43	9.25E-03	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
REC-2	REC-2	0.18	1.25E-03	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
REC-3	REC-3	0.28	2.04E-03	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
REC-4	REC-4	0.28	4.08E-03	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
REC-5	REC-5	0.28	4.08E-03	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
REC-6	REC-6	2.44	5.23E-02	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
REC-7	REC-7	1.62	3.48E-02	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Totals:		892.95	109.62	116.11	31.17	42.68	11.36	3.57	4.82	707.75	21.67	3.09	5.98	0.98	4.34	13.18	4.99		

**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
1-EP-1	Natural Gas	Pipeline Quality Natural Gas	1050 btu/scf	33,619 scf/hr	294.5 MMscf/yr	N/A	N/A
1-EP-2	Natural Gas	Pipeline Quality Natural Gas	1050 btu/scf	2,500 scf/hr	21.9 MMscf/yr	N/A	N/A
1.5-EP-1g	Natural Gas	Pipeline Quality Natural Gas	1050 btu/scf	11,428.6 scf/hr	100.1 MMscf/yr	N/A	N/A
4-EP-1g	Natural Gas	Pipeline Quality Natural Gas	1050 btu/scf	11,428.6 scf/hr	100.1 MMscf/yr	N/A	N/A
2-EP-1a	Natural Gas	Pipeline Quality Natural Gas	1050 btu/scf	5,333.3 scf/hr	46.7 MMscf/yr	N/A	N/A
2-EP-1b	Natural Gas	Pipeline Quality Natural Gas	1050 btu/scf	15,190.5 scf/hr	133.1 MMscf/yr	N/A	N/A
2-EP-1e	Natural Gas	Pipeline Quality Natural Gas	1050 btu/scf	2,381 scf/hr	20.9 MMscf/yr	N/A	N/A
2-EP-1h	Natural Gas	Pipeline Quality Natural Gas	1050 btu/scf	52,381 scf/hr	458.9 MMscf/yr	N/A	N/A
2-EP-2a	Natural Gas	Pipeline Quality Natural Gas	1050 btu/scf	2,500 scf/hr	21.9 MMscf/yr	N/A	N/A
2a-EP-1d	Natural Gas	Pipeline Quality Natural Gas	1050 btu/scf	52,381 scf/hr	458.9 MMscf/yr	N/A	N/A
2.5-EP-1d	Natural Gas	Pipeline Quality Natural Gas	1050 btu/scf	19,047.6 scf/hr	166.9 MMscf/yr	N/A	N/A
2.5-EP-5	Natural Gas	Pipeline Quality Natural Gas	925 btu/scf	222,852.4 scf/hr	1952.2 MMscf/yr	N/A	N/A
3-EP-1a	Natural Gas	Pipeline Quality Natural Gas	1050 btu/scf	5,333.3 scf/hr	46.7 MMscf/yr	N/A	N/A
3-EP-1b	Natural Gas	Pipeline Quality Natural Gas	1050 btu/scf	15,190.5 scf/hr	133.1 MMscf/yr	N/A	N/A
3-EP-1d	Natural Gas	Pipeline Quality Natural Gas	1050 btu/scf	52,381 scf/hr	458.9 MMscf/yr	N/A	N/A
3-EP-1e	Natural Gas	Pipeline Quality Natural Gas	1050 btu/scf	2,381 scf/hr	20.9 MMscf/yr	N/A	N/A
3-EP-1h	Natural Gas	Pipeline Quality Natural Gas	1050 btu/scf	52,381 scf/hr	458.9 MMscf/yr	N/A	N/A
3-EP-2a	Natural Gas	Pipeline Quality Natural Gas	1050 btu/scf	2,500 scf/hr	21.9 MMscf/yr	N/A	N/A
4-EP-1a	Natural Gas	Pipeline Quality Natural Gas	1050 btu/scf	5,333.3 scf/hr	46.7 MMscf/yr	N/A	N/A
4-EP-1b	Natural Gas	Pipeline Quality Natural Gas	1050 btu/scf	15,190.5 scf/hr	133.1 MMscf/yr	N/A	N/A

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
4-EP-1d	Natural Gas	Pipeline Quality Natural Gas	1050 btu/scf	52,381 scf/hr	458.9 MMscf/yr	N/A	N/A
4-EP-1e	Natural Gas	Pipeline Quality Natural Gas	1050 btu/scf	2,381 scf/hr	20.9 MMscf/yr	N/A	N/A
4-EP-1h	Natural Gas	Pipeline Quality Natural Gas	1050 btu/scf	52,381 scf/hr	458.9 MMscf/yr	N/A	N/A
4-EP-2a	Natural Gas	Pipeline Quality Natural Gas	1050 btu/scf	2,500 scf/hr	21.9 MMscf/yr	N/A	N/A
EP-5	Natural Gas	Pipeline Quality Natural Gas	1050 btu/scf	26,666.7 scf/hr	233.6 MMscf/yr	N/A	N/A
EP-6	Natural Gas	Pipeline Quality Natural Gas	1050 btu/scf	26,666.7 scf/hr	233.6 MMscf/yr	N/A	N/A
EP-7	Natural Gas	Pipeline Quality Natural Gas	1050 btu/scf	462.2 scf/hr	4.0 MMscf/yr	N/A	N/A
EP-8	Natural Gas	Pipeline Quality Natural Gas	1050 btu/scf	26,666.7 scf/hr	233.6 MMscf/yr	N/A	N/A
EP-9	Natural Gas	Pipeline Quality Natural Gas	1050 btu/scf	12 scf/hr	0.105 MMscf/yr	N/A	N/A
5-EP-1a	Natural Gas	Pipeline Quality Natural Gas	1020 btu/scf	68,627 scf/hr	601.2 MMscf/yr	N/A	N/A
5-EP-1b	Natural Gas	Pipeline Quality Natural Gas	1020 btu/scf	68,627 scf/hr	601.2 MMscf/yr	N/A	N/A
6-EP-1a	Natural Gas	Pipeline Quality Natural Gas	1020 btu/scf	68,627 scf/hr	601.2 MMscf/yr	N/A	N/A
6-EP-1b	Natural Gas	Pipeline Quality Natural Gas	1020 btu/scf	68,627 scf/hr	601.2 MMscf/yr	N/A	N/A
5-EP-1c	Natural Gas	Pipeline Quality Natural Gas	1020 btu/scf	7,147 scf/hr	62.6 MMscf/yr	N/A	N/A
5-EP-1d	Natural Gas	Pipeline Quality Natural Gas	1020 btu/scf	17,206 scf/hr	150.7 MMscf/yr	N/A	N/A
6-EP-1c	Natural Gas	Pipeline Quality Natural Gas	1020 btu/scf	7,147 scf/hr	62.6 MMscf/yr	N/A	N/A
6-EP-1d	Natural Gas	Pipeline Quality Natural Gas	1020 btu/scf	17,206 scf/hr	150.7 MMscf/yr	N/A	N/A
7-EP-1c	Natural Gas	Pipeline Quality Natural Gas	1020 btu/scf	7,147 scf/hr	62.6 MMscf/yr	N/A	N/A
7-EP-1d	Natural Gas	Pipeline Quality Natural Gas	1020 btu/scf	17,206 scf/hr	150.7 MMscf/yr	N/A	N/A
5.5-EP-1a	Natural Gas	Pipeline Quality Natural Gas	1020 btu/scf	68,627 scf/hr	601.2 MMscf/yr	N/A	N/A
EP-10	Natural Gas	Pipeline Quality Natural Gas	1020 btu/scf	109,804 scf/hr	961.9 MMscf/yr	N/A	N/A
5-EP-2	Natural Gas	Pipeline Quality Natural Gas	1020 btu/scf	2445 scf/hr	21.4 MMscf/yr	N/A	N/A

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
7-EP-2	Natural Gas	Pipeline Quality Natural Gas	1020 btu/scf	2445 scf/hr	21.4 MMscf/hr	N/A	N/A
5.5-EP-1b	Natural Gas	Pipeline Quality Natural Gas	1020 btu/scf	380 scf/hr	3.3 MMscf/hr	N/A	N/A
EP-12	Natural Gas	Pipeline Quality Natural Gas	1020 btu/scf	65 scf/hr	0.6 MMscf/hr	N/A	N/A
EP-13	Natural Gas	Pipeline Quality Natural Gas	1020 btu/scf	65 scf/hr	0.6 MMscf/hr	N/A	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)
1-T-1	40400311	Condensate	Mixed Hydrocarbons	5.4	85.2	120.4	13.1	120.4	13.1
1-T-2	40400311	Condensate	Mixed Hydrocarbons	5.4	85.2	120.4	13.1	120.4	13.1
1-T-3	40400311	Condensate	Mixed Hydrocarbons	5.4	85.2	120.4	13.1	120.4	13.1
1-T-4	40400311	Condensate	Mixed Hydrocarbons	5.4	85.2	120.4	13.1	120.4	13.1
1-T-5	40400311	Condensate	Mixed Hydrocarbons	5.4	85.2	120.4	13.1	120.4	13.1
1-T-6	40400311	Condensate	Mixed Hydrocarbons	5.4	85.2	120.4	13.1	120.4	13.1
2-T-1	40400311	Condensate	Water	8.3	22.3	119.9	14.6	119.9	14.6
2-T-2	40400311	Condensate	Water	8.3	22.3	119.9	14.6	119.9	14.6
3-T-1	40400311	Condensate	Mixed Hydrocarbons	5.39087	75.03	111.21	9.06	111.21	9.06
3-T-2	40400311	Condensate	Mixed Hydrocarbons	5.39087	75.03	111.21	9.06	111.21	9.06
3-T-3	40400311	Condensate	Mixed Hydrocarbons	5.39087	75.03	111.21	9.06	111.21	9.06
3-T-4	40400311	Condensate	Mixed Hydrocarbons	5.39087	75.03	111.21	9.06	111.21	9.06
3-T-5	40400311	Condensate	Mixed Hydrocarbons	5.39087	75.03	111.21	9.06	111.21	9.06
3-T-6	40400311	Condensate	Mixed Hydrocarbons	5.39087	75.03	111.21	9.06	111.21	9.06
4-T-1	40400311	Sour Water	Water	8.3	40	110.89	16.49	110.89	16.49
4-T-2	40400311	Sour Water	Water	8.3	40	110.89	16.49	110.89	16.49
5-T-1	40400311	Slop	Hydrocarbon Contacted Wastewater	8.3	19.56	111.62	15.39	111.62	15.39
5-T-2	40400311	Slop	Hydrocarbon Contacted Wastewater	8.3	19.56	111.62	15.39	111.62	15.39
5-T-3	40400311	Slop	Hydrocarbon Contacted Wastewater	8.3	19.56	111.62	15.39	111.62	15.39
5-T-4	40400311	Slop	Hydrocarbon Contacted Wastewater	8.3	19.56	111.62	15.39	111.62	15.39
TK-M	39090007	Methanol	Methanol	6.6	32.04	Ambient	Ambient	Ambient	Ambient

**Table 2-L: Tank Data**

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

Tank No.	Date Installed	Materials Stored	Seal Type (refer to Table 2-LR below)	Roof Type (refer to Table 2-LR below)	Capacity		Diameter (M)	Vapor Space (M)	Color (from Table VI-C)		Paint Condition (from Table VI-C)	Annual Throughput (gal/yr)	Turn-overs (per year)
					(bbl)	(M <sup>3</sup> )			Roof	Shell			
1-T-1		Condensate			500	79.5	4.72		OT - Tan	OT - Tan	Good	5,110,000	243.3
1-T-2		Condensate			500	79.5	4.72		OT - Tan	OT - Tan	Good	5,110,000	243.3
1-T-3		Condensate			500	79.5	4.72		OT - Tan	OT - Tan	Good	5,110,000	243.3
1-T-4		Condensate			500	79.5	4.72		OT - Tan	OT - Tan	Good	5,110,000	243.3
1-T-5		Condensate			500	79.5	4.72		OT - Tan	OT - Tan	Good	5,110,000	243.3
1-T-6		Condensate			500	79.5	4.72		OT - Tan	OT - Tan	Good	5,110,000	243.3
2-T-1		Sour Water			500	79.5	4.72		OT - Tan	OT - Tan	Good	9,198,000	438.0
2-T-2		Sour Water			500	79.5	4.72		OT - Tan	OT - Tan	Good	9,198,000	438.0
3-T-1		Condensate			500	79.5	4.72		OT - Tan	OT - Tan	Good	8,217,300	364.0
3-T-2		Condensate			500	79.5	4.72		OT - Tan	OT - Tan	Good	8,217,300	364.0
3-T-3		Condensate			500	79.5	4.72		OT - Tan	OT - Tan	Good	8,217,300	364.0
3-T-4		Condensate			500	79.5	4.72		OT - Tan	OT - Tan	Good	8,217,300	364.0
3-T-5		Condensate			500	79.5	4.72		OT - Tan	OT - Tan	Good	8,217,300	364.0
3-T-6		Condensate			500	79.5	4.72		OT - Tan	OT - Tan	Good	8,217,300	364.0
4-T-1		Sour Water			500	79.5	4.72		OT - Tan	OT - Tan	Good	670,950	30.0
4-T-2		Sour Water			500	79.5	4.72		OT - Tan	OT - Tan	Good	670,950	30.0
5-T-1		Slop			400	39.4	3.66		OT - Tan	OT - Tan	Good	933,912	55.0
5-T-2		Slop			400	39.4	3.66		OT - Tan	OT - Tan	Good	933,912	55.0
5-T-3		Slop			400	39.4	3.66		OT - Tan	OT - Tan	Good	933,912	55.0
5-T-4		Slop			400	39.4	3.66		OT - Tan	OT - Tan	Good	933,912	55.0
TK-M		Methanol			various	various	various		various	various	various	54,000	various

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

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

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

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

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

**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
Not applicable. There is no CEM equipment used 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
Not applicable. There is no PEM equipment used at this facility.								

**Table 2-P: Greenhouse Gas Emissions**

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

		CO <sub>2</sub> ton/yr	N <sub>2</sub> O ton/yr	CH <sub>4</sub> ton/yr	SF <sub>6</sub> ton/yr	PFC/HFC ton/yr <sup>2</sup>					Total GHG Mass Basis ton/yr <sup>4</sup>	Total CO <sub>2</sub> e ton/yr <sup>5</sup>
Unit No.	GWPs <sup>1</sup>	1	298	25	22,800	footnote 3						
1-EP-1	mass GHG	18086.10	0.03	0.34							18,086.47	
	CO <sub>2</sub> e	18086.10	10.16	8.52								18,104.78
1-EP-2	mass GHG	2770.60	0.00	10.88							2,781.49	
	CO <sub>2</sub> e	2770.60	1.48	272.00								3,044.09
1.5-EP-1g	mass GHG	9222.40	0.02	0.17							9,222.59	
	CO <sub>2</sub> e	9222.40	5.18	4.35								9,231.92
4-EP-1g	mass GHG	9222.40	0.02	0.17							9,222.59	
	CO <sub>2</sub> e	9222.40	5.18	4.35								9,231.92
2-EP-1a	mass GHG	2869.20	0.01	0.05							2,869.26	
	CO <sub>2</sub> e	2869.20	1.61	1.35								2,872.16
2-EP-1b	mass GHG	8172.10	0.02	0.15							8,172.27	
	CO <sub>2</sub> e	8172.10	4.59	3.85								8,180.54
2-EP-1e	mass GHG	1537.10	0.00	0.03							1,537.13	
	CO <sub>2</sub> e	1537.10	0.86	0.72								1,538.69
2-EP-2a	mass GHG	7388.45	0.01	29.01							7,417.47	
	CO <sub>2</sub> e	7388.30	4.13	725.35								8,117.78
2-EP-1h	mass GHG	28179.50	0.05	0.53							28,180.08	
	CO <sub>2</sub> e	28179.50	15.83	13.28								28,208.60
2a-EP-1d	mass GHG	28179.50	0.05	0.53							28,180.08	
	CO <sub>2</sub> e	28179.50	15.83	13.28								28,208.60
2.5-EP-1d	mass GHG	10247.10	0.02	0.19							10,247.31	
	CO <sub>2</sub> e	10247.10	5.76	4.83								10,257.68
2.5-EP-5	mass GHG	19331.90	0.00	1.89							19,333.79	
	CO <sub>2</sub> e	19331.90	0.02	47.18								19,379.10
3-EP-1a	mass GHG	2869.20	0.01	0.05							2,869.26	
	CO <sub>2</sub> e	2869.20	1.61	1.35								2,872.16
3-EP-1b	mass GHG	8172.10	0.02	0.15							8,172.27	
	CO <sub>2</sub> e	8172.10	4.59	3.85								8,180.54
3-EP-1d	mass GHG	28179.50	0.05	0.53							28,180.08	
	CO <sub>2</sub> e	28179.50	15.83	13.28								28,208.60
3-EP-1e	mass GHG	1537.10	0.00	0.03							1,537.13	
	CO <sub>2</sub> e	1537.10	0.86	0.72								1,538.69
3-EP-1h	mass GHG	28179.50	0.05	0.53							28,180.08	
	CO <sub>2</sub> e	28179.50	15.83	13.28								28,208.60



		CO <sub>2</sub> ton/yr	N <sub>2</sub> O ton/yr	CH <sub>4</sub> ton/yr	SF <sub>6</sub> ton/yr	PFC/HFC ton/yr <sup>2</sup>					Total GHG Mass Basis ton/yr <sup>4</sup>	Total CO <sub>2</sub> e ton/yr <sup>5</sup>
Unit No.	GWP <sub>s</sub> <sup>1</sup>	1	298	25	22,800	footnote 3						
3-EP-2a	mass GHG	7388.30	0.01	29.01							7,417.33	
	CO <sub>2</sub> e	7388.30	3.96	725.34								8,117.60
4-EP-1a	mass GHG	2869.20	0.01	0.05							2,869.26	
	CO <sub>2</sub> e	2869.20	1.61	1.35								2,872.16
4-EP-1b	mass GHG	8172.10	0.013	0.15							8,172.27	
	CO <sub>2</sub> e	8172.10	4.59	3.85								8,180.54
4-EP-1d	mass GHG	28179.50	0.05	0.53							28,180.08	
	CO <sub>2</sub> e	28179.50	15.83	13.28								28,208.60
4-EP-1e	mass GHG	1537.10	0.00	0.03							1,537.13	
	CO <sub>2</sub> e	1537.10	0.86	0.72								1,538.69
4-EP-1h	mass GHG	28179.50	0.05	0.53							28,180.08	
	CO <sub>2</sub> e	28179.50	15.83	13.28								28,208.60
4-EP-2a	mass GHG	7388.46	0.01	29.01							7,417.48	
	CO <sub>2</sub> e	7388.46	3.96	725.35								8,117.77
EP-5	mass GHG	14345.95	0.03	0.27							14,346.24	
	CO <sub>2</sub> e	14345.95	8.06	6.76								14,360.76
EP-6	mass GHG	14345.95	0.03	0.27							14,346.24	
	CO <sub>2</sub> e	14345.95	8.06	6.76								14,360.76
EP-7	mass GHG	796.69	0.00	0.02							796.70	
	CO <sub>2</sub> e	796.69	0.45	0.38								797.51
EP-8	mass GHG	14345.95	0.03	0.27							14,346.24	
	CO <sub>2</sub> e	14345.95	8.06	6.76								14,360.76
EP-9	mass GHG	2700.62	0.01	0.05							2,700.67	
	CO <sub>2</sub> e	2700.62	1.52	1.27								2,703.40
FUG	mass GHG	7.86	0.00	35.68							43.54	
	CO <sub>2</sub> e	7.63	0.00	891.93								899.56
5-EP-1a	mass GHG	32727.80	0.06	0.62							32,728.48	
	CO <sub>2</sub> e	32727.80	18.48	15.50								32,761.78
5-EP-1b	mass GHG	32727.80	0.06	0.62							32,728.48	
	CO <sub>2</sub> e	32727.80	18.48	15.50								32,761.78
5-EP-1c	mass GHG	3408.40	0.01	0.06							3,408.47	
	CO <sub>2</sub> e	3408.40	1.79	1.50								3,411.69
5-EP-1d	mass GHG	8205.30	0.02	0.15							8,205.47	
	CO <sub>2</sub> e	8205.30	4.47	3.75								8,213.52
5-EP-1e	mass GHG	1839.60	0.00	23.77							1,863.37	
	CO <sub>2</sub> e	1839.60	0.89	594.25								2,434.74
5-EP-1f	mass GHG	5276.29	0.00	0.00							5,276.29	
	CO <sub>2</sub> e	5276.29	0.00	0.00								5,276.29
5-EP-2	mass GHG	7952.60	0.01	34.64							7,987.26	
	CO <sub>2</sub> e	7952.60	4.34	866.01								8,822.95

		CO <sub>2</sub> ton/yr	N <sub>2</sub> O ton/yr	CH <sub>4</sub> ton/yr	SF <sub>6</sub> ton/yr	PFC/HFC ton/yr <sup>2</sup>						Total GHG Mass Basis ton/yr <sup>4</sup>	Total CO <sub>2</sub> e ton/yr <sup>5</sup>
Unit No.	GWPs <sup>1</sup>	1	298	25	22,800	footnote 3							
6-EP-1a	mass GHG	32727.80	0.06	0.62								32,728.48	
	CO <sub>2</sub> e	32727.80	18.48	15.50									32,761.78
6-EP-1b	mass GHG	32727.80	0.06	0.62								32,728.48	
	CO <sub>2</sub> e	32727.80	18.48	15.50									32,761.78
6-EP-1c	mass GHG	3408.40	0.01	0.06								3,408.47	
	CO <sub>2</sub> e	3408.40	1.79	1.50									3,411.69
6-EP-1d	mass GHG	8205.30	0.02	0.15								8,205.47	
	CO <sub>2</sub> e	8205.30	4.47	3.75									8,213.52
6-EP-1e	mass GHG	1839.60	0.00	23.77								1,863.37	
	CO <sub>2</sub> e	1839.60	0.89	594.25									2,434.74
6-EP-1f	mass GHG	5276.29	0.00	0.00								5,276.29	
	CO <sub>2</sub> e	5276.29	0.00	0.00									5,276.29
7-EP-1c	mass GHG	3408.40	0.01	0.06								3,408.47	
	CO <sub>2</sub> e	3408.40	1.79	1.50									3,411.69
7-EP-1d	mass GHG	8205.30	0.02	0.15								8,205.47	
	CO <sub>2</sub> e	8205.30	4.47	3.75									8,213.52
7-EP-2	mass GHG	7952.60	0.01	34.64								7,987.25	
	CO <sub>2</sub> e	7952.60	4.17	866.00									8,822.77
5.5-EP-1a	mass GHG	32727.80	0.06	0.62								32,728.48	
	CO <sub>2</sub> e	32727.80	18.48	15.50									32,761.78
5.5-EP-1b	mass GHG	911.70	0.00	1.21								912.91	
	CO <sub>2</sub> e	911.70	0.00	30.25									941.95
EP-10	mass GHG	52058.20	0.10	0.98								52,059.28	
	CO <sub>2</sub> e	52058.20	29.20	24.50									52,111.90
EP-11	mass GHG	9158.89	0.00	6.55								9,165.44	
	CO <sub>2</sub> e	9158.89	0.00	163.73									9,322.62
EP-12	mass GHG	360.30	0.00	0.51								360.81	
	CO <sub>2</sub> e	360.30	0.30	12.75									373.35
EP-13	mass GHG	932.30	0.00	2.92								935.22	
	CO <sub>2</sub> e	932.30	0.60	73.00									1,003.90
2-EP-1t	mass GHG	0.00	0.00	4.37								4.38	
	CO <sub>2</sub> e	0.00	0.00	109.36									109.36
3-EP-1t	mass GHG	0.00	0.00	4.37								4.38	
	CO <sub>2</sub> e	0.00	0.00	109.36									109.36
4-EP-1t	mass GHG	0.00	0.00	4.37								4.38	
	CO <sub>2</sub> e	0.00	0.00	109.36									109.36
5-EP-1t	mass GHG	0.00	0.00	4.37								4.38	
	CO <sub>2</sub> e	0.00	0.00	109.36									109.36
6-EP-1t	mass GHG	0.00	0.00	4.37								4.38	
	CO <sub>2</sub> e	0.00	0.00	109.36									109.36

		CO <sub>2</sub> ton/yr	N <sub>2</sub> O ton/yr	CH <sub>4</sub> ton/yr	SF <sub>6</sub> ton/yr	PFC/HFC ton/yr <sup>2</sup>					Total GHG Mass Basis ton/yr <sup>4</sup>	Total CO <sub>2</sub> e ton/yr <sup>5</sup>
Unit No.	GWPs <sup>1</sup>	1	298	25	22,800	footnote 3						
7-EP-1r	mass GHG	0.00	0.00	4.37							4.38	
	CO <sub>2</sub> e	0.00	0.00	109.36								109.36
FUG-1	mass GHG	4462.83	0.00	20850.53							25,313.36	
	CO <sub>2</sub> e	4462.83	0.00	521263.18								525,726.01
FUG-AG12	mass GHG	0.27	0.00	1.34							1.61	
	CO <sub>2</sub> e	0.27	0.00	33.59								33.86
TK-M	mass GHG	0.00	0.00	0.00							0.00	
	CO <sub>2</sub> e	0.00	0.00	0.00								0.00
HAUL-OR1	mass GHG	0.00	0.00	0.00							0.00	
	CO <sub>2</sub> e	0.00	0.00	0.00								0.00
Haul-Green	mass GHG	0.00	0.00	0.00							0.00	
	CO <sub>2</sub> e	0.00	0.00	0.00								0.00
Haul-Red	mass GHG	0.00	0.00	0.00							0.00	
	CO <sub>2</sub> e	0.00	0.00	0.00								0.00
Haul-Blue	mass GHG	0.00	0.00	0.00							0.00	
	CO <sub>2</sub> e	0.00	0.00	0.00								0.00
Haul-OR2	mass GHG	0.00	0.00	0.00							0.00	
	CO <sub>2</sub> e	0.00	0.00	0.00								0.00
Flare-M	mass GHG										0.00	
	CO <sub>2</sub> e											0.00
REC-1	mass GHG	0.35	0.00	1.79							2.14	
	CO <sub>2</sub> e	0.35	0.00	44.72								45.07
REC-2	mass GHG	0.05	0.00	0.24							0.29	
	CO <sub>2</sub> e	857.41	0.00	2.06								859.48
REC-3	mass GHG	0.02	0.00	0.19							0.21	
	CO <sub>2</sub> e	66.40	0.00	50.95								117.36
REC-4	mass GHG	0.05	0.00	0.37							0.42	
	CO <sub>2</sub> e	442.08	0.00	1.63								443.71
REC-5	mass GHG	0.05	0.00	0.37							0.42	
	CO <sub>2</sub> e	442.08	0.00	1.63								443.71
REC-6	mass GHG	0.61	0.00	4.80							5.42	
	CO <sub>2</sub> e	1763.90	0.00	6.50								1,770.40
REC-7	mass GHG	0.41	0.00	3.20							3.61	
	CO <sub>2</sub> e	3349.31	0.00	12.33								3,361.65
Total	mass GHG										662,055.57	
	CO <sub>2</sub> e											1,170,035.27

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

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

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

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

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

# Section 3

## Application Summary

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

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

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

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Targa Northern Delaware, LLC (Targa) owns and operates the Red Hills Gas Processing Plant (Red Hills) in Lea County, NM. The Red Hills Gas Processing Plant dehydrates and removes CO<sub>2</sub> and natural gas liquids from field gas for transportation via a sales pipeline. With this application, Targa Northern Delaware, LLC is seeking to add flaring malfunction emissions for NO<sub>x</sub>, CO, VOC, and H<sub>2</sub>S; methanol tanks; exempt gasoline and diesel storage tanks; haul road emissions; and pigging emissions to Construction Permit 4310M5R3. Additionally, Targa seeks to update various permit condition language. Pursuant to 20.2.72.219.D NMAC, this application is being submitted as a Significant Revision to the Construction Permit.

The New Mexico Environment Department, Air Quality Bureau's *Implementation Guidance for Permitting SSM Emissions and Excess Emissions* (version 7 June 2012), item 2.d) states "Emissions that result from upsets and malfunctions may be permitted up to 10 tons per year per pollutant per facility, provided they are included in applicable air dispersion modeling and demonstrate compliance with State and Federal ambient air quality standards (20.2.72.203.A(4) NMAC). Unpermitted emissions from upsets/malfunctions must be reported according to 20.2.7 NMAC." Pursuant to this guidance, Targa seeks to add malfunction emissions for NO<sub>x</sub>, CO, VOC, and SO<sub>2</sub> at 10 tons per year for each pollutant and at 9 tons per year for H<sub>2</sub>S.

SSM emissions for individual emission units at the Red Hills Gas Processing Plant were incorporated in previous permit modifications, including SSM flaring at the maximum hourly capacity of each flare. These individual unit emissions remain unchanged in this permit application. SSM/M emission were previously permitted for VOC only. This application seeks to incorporate Malfunction emissions for the aforementioned pollutants.

Modeling was performed for the units Targa is requesting Malfunction emissions for in this application with a previously submitted application (4310M5, 2019). As the maximum capacity of each flare was modeled, it is assumed that, since SSM and malfunction activities cannot occur simultaneously, the previous modeling would satisfy the requirement to demonstrate compliance with the NAAQS and NMAAQs.

A combined limit that would apply to 1-EP-2, 2-EP-2a, 3-EP-2a, 4-EP-2a, 5-EP-2, 7-EP-2, 2.5-EP-5, and 5.5-EP-1b is requested for NO<sub>x</sub>, CO, VOC, and SO<sub>2</sub> at 10 tons per year for each pollutant and at 9 tons per year for H<sub>2</sub>S. As the nature of malfunction emissions can be unpredictable, Targa is requesting that the combined limit be usable by each flare identified. Hourly emission calculations for each flare are provided with this application.

Red Hills Gas Processing Plant is currently undergoing an audit under *Appendix D: Voluntary Environmental Disclosure* policy. The following items, although related to the units involved with this project, are not being updated with this application. The information regarding the compliance status for each applicable permit requirement has been disclosed to the NMED's Compliance and Enforcement Division and a schedule has been implemented for compliance demonstration.

**Existing Permitted Fugitive Emissions (FUG and FUG-1):** The existing fugitive emissions permitted in NSR 4310-M5 reflect VOC emissions totaling 27.31 tpy (FUG) and 26.15 tpy (FUG-1). This does not conform with the fugitive emissions represented in Title V P-278, which reflected VOC emissions totaling 103.61 tpy (FUG) and 96.41 tpy VOC. The existing emissions represented herein for both FUG and FUG-1 have been updated to align with the most recent permitting action but are not considered part of this permitting action.

**Acid Gas Fugitive Components for Train 2.5 & 5.5:** The site currently does not have any fugitives in acid gas service permitted. All other fugitive emissions that should have previously been permitted will be authorized in a subsequent application.

**Flare Stack Height:** The flare that was installed (unit 5.5-EP-1b) is 145 feet tall, instead of 300 feet as represented in previous modeling. The flare height will be corrected in modeling to be submitted with a subsequent application.

**Assist Gas Flaring Requirements:** The flare (unit 5.5-EP-1b) requires 122.64 hours of assist gas flaring to operate at a high enough BTU for combustion but is only authorized for 61.32 hours of assist gas flaring. This will be corrected in a subsequent application.

**Facility Boundary:** The modeling completed for a previous permit application had an incorrect representation for the facility's boundary. Combustion emission sources are located closer to the fence line than represented in the most recent modeling submitted to the NMED. This will be corrected in a subsequent application. Because the largest flare off-site impacts are in the extended modeling field, the updated property line is not expected to have a substantial impact on off-property concentrations resulting from the Malfunction emissions requested in this application.

**Flare Effective Diameter:** The effective diameters for the facility flares were based on the flare maximum design capacity as provided by the manufacturer, rather than the facility-specific operating conditions determined in the calculations, thereby representing a larger effective diameter than would be seen with the facility-specific operating conditions. This will be corrected in a subsequent application. Because the largest flare off-site impacts are in the extended modeling field, the updated effective diameter is not expected to have a substantial impact on off-property concentrations resulting from the Malfunction emissions requested in this application.

**Heater and Reboiler Emissions:** The previous permitting of most heaters and reboilers at this facility was based on the heat release value of each unit, rather than the heat input, resulting in lower emissions from all criteria pollutants. The emissions from all heaters and reboilers will be updated in a subsequent application.

**Haul Road Emissions:** The routes permitted with previous permitting actions utilized a route that is not physically accessible due to the fencing around the facility and strict check-in requirements for all vehicles. The updated haul routes are being represented in this application. Targa requests that modeling not be required for this application since comprehensive modeling will be submitted as part of the forthcoming audit true-up application. Targa is implementing a strict speed limit on all on-site roads in conjunction with base coarse application in order to reduce emissions. Targa Northern Delaware, LLC is requesting a modeling waiver for H<sub>2</sub>S, PM<sub>2.5</sub>, and PM<sub>10</sub> based on previously submitted modeling. A ratio based on the proposed emission rate and the previously modeled emission rate, as shown in Table 4, was used to scale each pollutant and averaging period's modeled percent of standard or increment.

# Section 4

## Process Flow Sheet

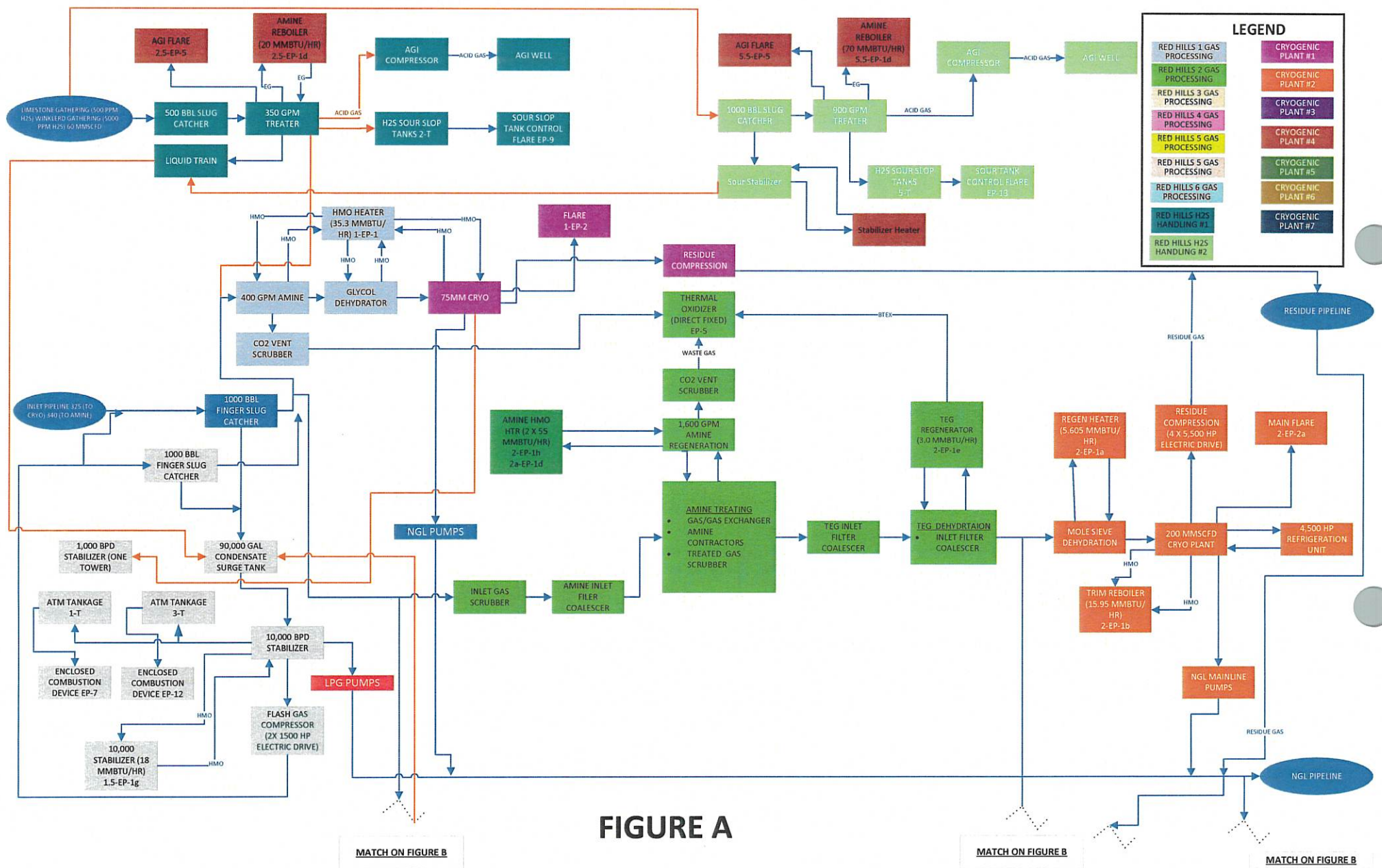
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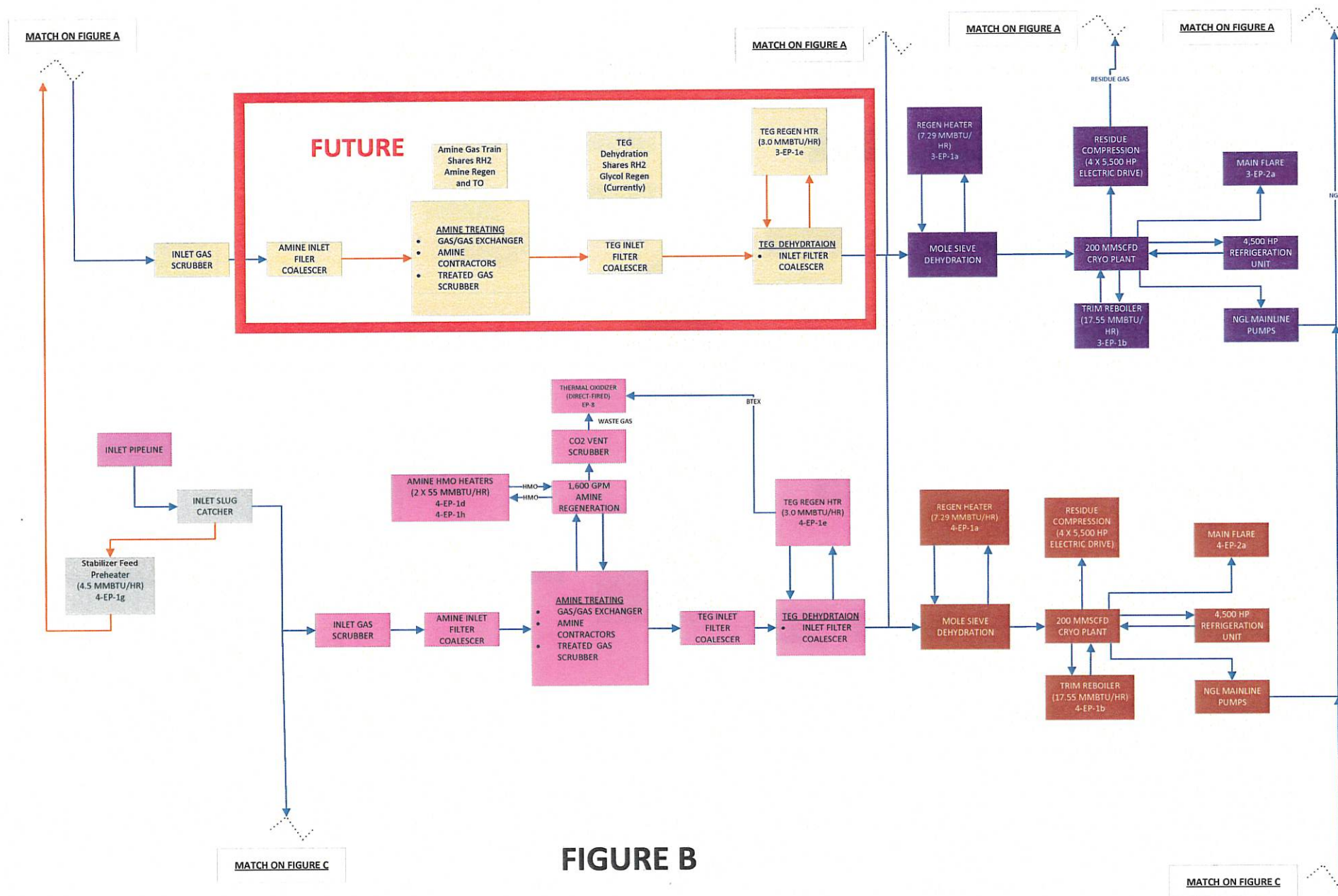
A process flow sheet and/or block diagram indicating the individual equipment, all emission points and types of control applied to those points. The unit numbering system should be consistent throughout this application.

---

A process flow diagram is attached to this application.







MATCH ON FIGURE B

MATCH ON FIGURE B

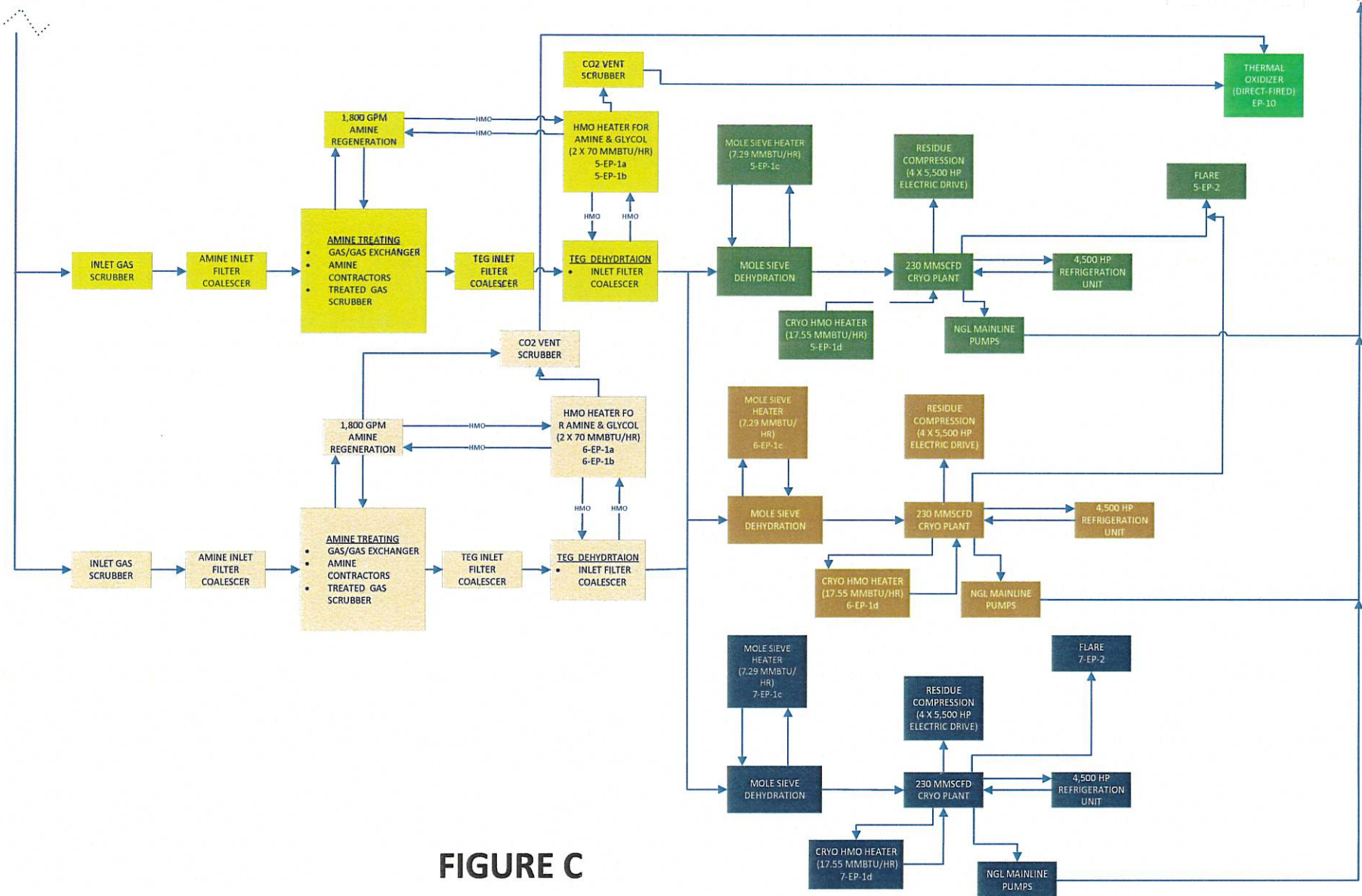


FIGURE C

## Section 5

### Plot Plan Drawn to Scale

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

---

A plot plan is attached to this application.





# Section 6

## All Calculations

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

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

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

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

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

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

### Significant Figures:

- A. All emissions standards are deemed to have at least two significant figures, but not more than three significant figures.
- B. At least 5 significant figures shall be retained in all intermediate calculations.
- C. In calculating emissions to determine compliance with an emission standard, the following rounding off procedures shall be used:

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



**Control Devices:** In accordance with 20.2.72.203.A(3) and (8) NMAC, 20.2.70.300.D(5)(b) and (e) NMAC, and 20.2.73.200.B(7) NMAC, the permittee shall report all control devices and list each pollutant controlled by the control device regardless if the applicant takes credit for the reduction in emissions. The applicant can indicate in this section of the application if they chose to not take credit for the reduction in emission rates. For notices of intent submitted under 20.2.73 NMAC, only uncontrolled emission rates can be considered to determine applicability unless the state or federal Acts require the control. This information is necessary to determine if federally enforceable conditions are necessary for the control device, and/or if the control device produces its own regulated pollutants or increases emission rates of other pollutants.

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#### **Methanol Tanks**

The methanol tanks (unit MT-1) at Red Hills include 32 tanks, ranging in size from 350 gallons to 2000 gallons, with a total site-wide storage capacity of 26,700 gallons and a maximum usage rate of 150 gallons per day. VOC and HAP emissions were determined using BR&E ProMax and an assumed 100% methanol content. The throughput for each tank was weighted based on the tanks respective size.

#### **Gasoline Tank (exempt pursuant 20.2.72.202.B(5) NMAC)**

The emissions from the approximately 300-gallon gasoline tank were determined using Tanks 4.0.9d, conservatively assuming one full turnover per day and a gasoline RVP of 9.

#### **Malfunction**

A combined limit that would apply to 1-EP-2, 2-EP-2a, 3-EP-2a, 4-EP-2a, 5-EP-2, 7-EP-2, 2.5-EP-5, and 5.5-EP-1b is requested for NO<sub>x</sub>, CO, VOC, and SO<sub>2</sub> at 10 tons per year for each pollutant and at 9 tons per year for H<sub>2</sub>S. As the nature of malfunction emissions can be unpredictable, Targa is requesting that the combined limit be usable by each flare identified. Hourly emission calculations for each flare are provided with this application.

#### **Pig Launching and Receiving**

Pig launching and receiving activities were determined using a mass balance approach based on the volume of gas vented with each pig launched or received and a representative gas analysis for each pig launcher or receiver.

#### **Haul Roads**

Emissions are calculated using Equation 2 of AP-42 Section 13.2.2. Targa employs the use of an average speed limit on the facility haul roads as a fugitive dust control measure. The Western Regional Air Partnership (WRAP) Fugitive Dust Handbook, published September 7, 2006, lists a PM<sub>10</sub> control efficiency of 44% on unpaved haul roads when limiting vehicle speed to 25 miles per hour. The facility will not exceed the currently posted speed limit of 15 miles per hour. It is assumed due to the nature of the control that this efficiency would also apply to TSP and PM<sub>2.5</sub>. Targa also employs the application of base coarse on the facility haul roads as a fugitive dust control measure.

The combination of control efficiencies due to base coarse application (A) and average speed limit (B) is calculated using the following methodology:

$$Control_{AB} = Control_A + (1 - Control_A) \times Control_B$$

State environmental agencies which have approved this method of combining dust control efficiencies include, but are not limited to, New Mexico, Montana, Colorado, and Indiana.

## 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<sub>2</sub>), nitrous oxide (N<sub>2</sub>O), methane (CH<sub>4</sub>), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF<sub>6</sub>).

#### Calculating GHG Emissions:

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

#### Sources for Calculating GHG Emissions:

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

#### Global Warming Potentials (GWP):

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

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

#### Metric to Short Ton Conversion:

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

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



## Tanger Northern's Delmarva LLC - Red Hike Case Processing About

**Ernst & Young**

<sup>1</sup> Thompson Northern Densmore, LLC is requesting a combined air quality limit for  $\text{NO}_x$ ,  $\text{CO}$ ,  $\text{VOC}$ ,  $\text{SO}_x$ , and Total HAP and a combined groundwater protection limit.



# TARGA

*Targa Northern Delaware LLC - Red Hills Gas Processing Plant*

## **Methanol Storage Tanks**

Unit:	MT-1
Source Description:	Facility-Wide Methanol Tanks
Annual Operating Hours:	8760
Number of Tanks:	32
Capacity of Tanks:	350, 500, 1000, 1500, and 2000 gallons
Monthly Throughput:	4,500.00

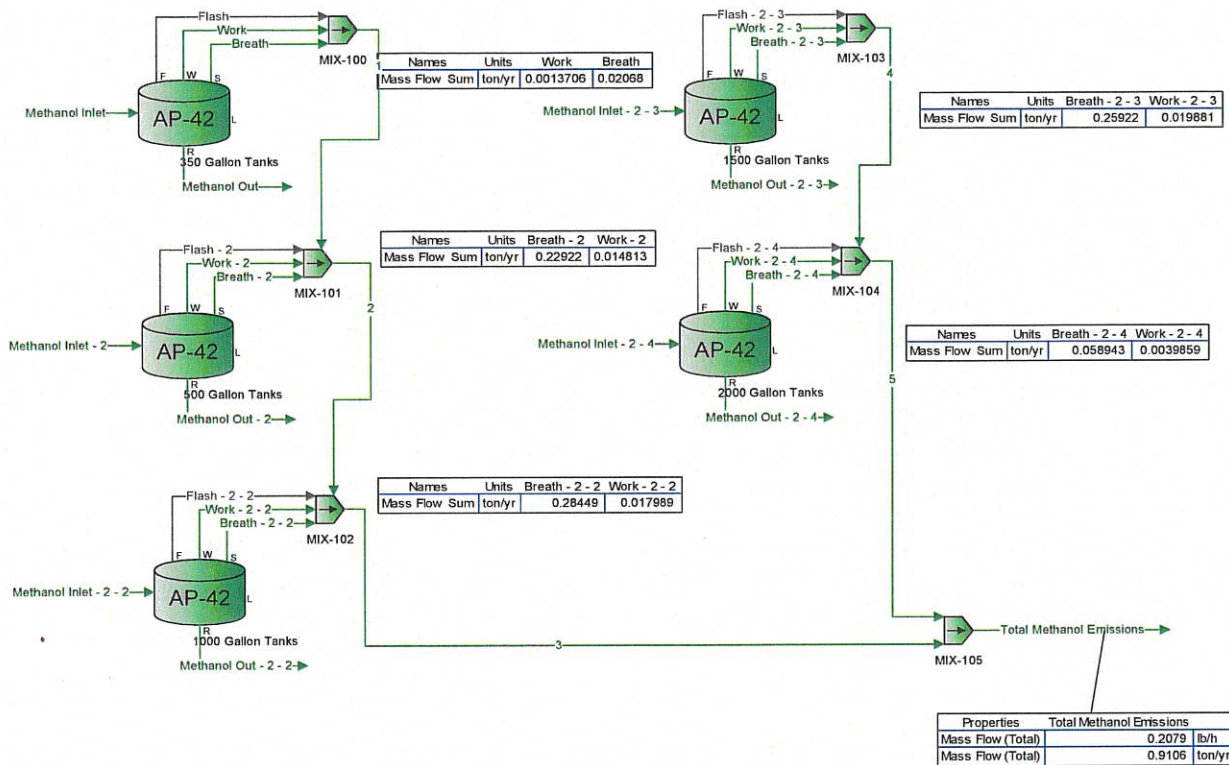
Methanol Storage Tank Emissions <sup>1,2</sup>		
	Total Hourly (lb/hr)	Average Annual Emissions (tpy)
Methanol	0.21	0.91
<b>VOC</b>	<b>0.21</b>	<b>0.91</b>
<b>HAPs</b>	<b>0.21</b>	<b>0.91</b>

<sup>2</sup> Emissions are calculated using BR&E ProMax.

Red Hills 1 Tanks			AGI Tanks			Red Hills 2 and 3 Tanks			Red Hills 4 Tanks			Red Hills 5 Tanks			Red Hills 6 Tanks			AGI 2 Tanks		
Label	Size		Label	Size		Label	Size		Label	Size		Label	Size		Label	Size		Label	Size	
Mechanical Tank 1	500		Mechanical Tank 9	2000		Mechanical Tank 15	1500		Mechanical Tank 25	1500		Mechanical Tank 28	1500		Mechanical Tank 31	500		Mechanical Tank 33	1500	
Mechanical Tank 2	500		Mechanical Tank 10	1000		Mechanical Tank 17	1500		Mechanical Tank 27	1000		Mechanical Tank 30	500		Mechanical Tank 32	1500		Mechanical Tank 34	1500	
Mechanical Tank 3	500		Mechanical Tank 11	500		Mechanical Tank 18	500													
Mechanical Tank 4	500		Mechanical Tank 12	1000		Mechanical Tank 19	1000													
Mechanical Tank 5	500		Mechanical Tank 13	1000		Mechanical Tank 20	1000													
Mechanical Tank 6	500		Mechanical Tank 14	500		Mechanical Tank 21	1000													
Mechanical Tank 7	500		Mechanical Tank 15	500		Mechanical Tank 22	1000													
Mechanical Tank 8	500					Mechanical Tank 23	1000													
						Mechanical Tank 24	500													
						Mechanical Tank 25	500													

Counts	Capacity	Weighted Throughput (lb/day)	Cubic Ft	Height	Width
350 Gallon	2	700	4.71	0.112223	3.52
500 Gallon	15	7500	50.51	1.272501	66.93
1000 Gallon	9	9000	60.61	1.449001	133.89
1500 Gallon	7	10500	70.71	1.665502	200.53
2000 Gallon	1	2000	14.17	0.320857	267.38

Total Capacity: 25700 gallons  
Maximum Usage: 200 gallons/day  
\*\*\*Maximum usage includes a 10% safety factor



Pig Receivers			
Location	Unit ID for Permit	scf/Event	# of Events/Year
Sour Gas East Receiver	REC-1	640	171.6
Sour Gas West Receiver	REC-2	260	57.2
Train 1 South Receiver	REC-3	200	57.2
Train 1 Middle Receiver	REC-4	200	114.4
Train 1 North Launcher	REC-5	200	114.4
North Train - South Receiver	REC-6	1710	171.6
North Train - North Receiver	REC-7	1140	171.6



## Planned MSS Emissions

A) Enter information into the yellow boxes.

B) VOC and H<sub>2</sub>S control efficiencies may be entered (if applicable).

C) The vapor VOC, benzene, and H<sub>2</sub>S weight percents may be entered. The weight percents from the Analyses tab are displayed below.

D) Use the box provided below for entering any notes necessary (such as the source/justification for any calculation inputs).

E) Make sure to answer the control device question.

F) Make sure to select the correct VOC Type and Emission Type from the pull down menus below.

Emission Unit	REC-1
Identifier	MSS Pigging

Describe this MSS event in detail, include specifically what is being done and how it is being done.	Emissions from routine pigging activities.	
--	--	--

Actual Volume of the Vented Unit (scf - standard cubic feet)	640.00	Ideal Gas Constant, [(ft <sup>3</sup> *psia)/(R*lb-mol)]
Actual Volume of the Vented Unit (acf - actual cubic feet)	676.52	
Pressure of Gas Inside the Unit Before Venting (psig)	0	10.73159
Atmospheric Pressure (psia)	14.7	
Pressure of Gas Inside the Unit Before Venting (psia)	14.7	
Temperature of Gas Inside the Unit Before Venting (°F)	90.00	
Temperature of Gas Inside the Unit Before Venting (°R)	549.67	
Duration of Each Event (hours/event)	0.25	
Frequency of Events (events/year)	171.6	
Venting Gas Molecular Weight (lb/lb-mol)	22.70	
VOC wt %	18.85	
benzene wt%	0.032	
H <sub>2</sub> S wt%	0.783	
HAPs wt %	0.282	
CO <sub>2</sub> wt%	10.662	
CH <sub>4</sub> wt%	54.476	
Are planned MSS vapors (A) uncontrolled; (B) controlled by a flare, vapor combustor, thermal oxidizer, or vapor recovery unit (VRU); or (C) controlled by another type of control device?	(A) uncontrolled	
VOC Control Efficiency (%)	0	
H <sub>2</sub> S Control Efficiency (%)	0	

Vapors Captured by Control Device		
You need to input these values into the appropriate control device emission calculation tab.		
	Hourly Emissions (lb/hr)	Annual Emissions (tpy)
VOC Results:	0.00E+00	0.00E+00
Benzene Results:	0.00E+00	0.00E+00
H <sub>2</sub> S Results:	0.00E+00	0.00E+00
HAPs Results:	0.00E+00	0.00E+00
CO <sub>2</sub> Results:	0.00E+00	0.00E+00
CH <sub>4</sub> Results:	0.00E+00	0.00E+00

Maximum Gas Molecular Weight and Weight Percents Representative Analyses	
Molecular Weight	22.70
VOC wt %	18.85
Benzene wt %	0.032
H <sub>2</sub> S wt %	0.783
HAPs wt%	0.2818
CO <sub>2</sub> wt%	10.6618
CH <sub>4</sub> wt%	54.4759

Planned MSS Emissions		
	Hourly Emissions (lb/hr)	Annual Emissions (tpy)
VOC Results:	28.86	0.62
Benzene Results:	0.05	<0.01
H <sub>2</sub> S Results:	1.20	0.03
HAPs Results:	0.43	0.0093
CO2 Results:	16.32	0.3501
CH4 Results:	83.39	1.7887

VOC Type: (pick from list)
Natural Gas VOC

Emission Type: (pick from list)
High Pressure Periodic

#### Calculations / Equations used

Calculation is based on Ideal gas law:  $P(V) = n(R)(T)$

$$\text{VOC result} = \frac{((\$ \$ \$ \text{Pressure of Gas Inside the Unit Before Venting}) * (\text{Actual Volume of the Vented Unit})) / (\text{Frequency of events}) * (\text{Molecular Weight}) * \text{VOC wt\%}}{(\text{Ideal Gas Constant}) * (\text{Temperature of Gas Inside the Unit Before Venting})}$$

\$\$\$ Equation may slightly vary depending on whether or not the emissions are controlled. See notes under venting emission calculation for more explanation.

## Planned MSS Emissions

A) Enter information into the yellow boxes.

B) VOC and H<sub>2</sub>S control efficiencies may be entered (if applicable).

C) The vapor VOC, benzene, and H<sub>2</sub>S weight percents may be entered. The weight percents from the Analyses tab are displayed below.

D) Use the box provided below for entering any notes necessary (such as the source/justification for any calculation inputs).

E) Make sure to answer the control device question.

F) Make sure to select the correct *VOC Type* and *Emission Type* from the pull down menus below.

Emission Unit	REC-2
Identifier	MSS Piggling

Describe this MSS event in detail, include specifically what is being done and how it is being done.	Emissions from routine piggling activities.
--	---

Actual Volume of the Vented Unit (scf - standard cubic feet)	260.00
Actual Volume of the Vented Unit (acf - actual cubic feet)	274.84
Pressure of Gas Inside the Unit Before Venting (psig)	0
Atmospheric Pressure (psia)	14.7
Pressure of Gas Inside the Unit Before Venting (psia)	14.7
Temperature of Gas Inside the Unit Before Venting (°F)	90.00
Temperature of Gas Inside the Unit Before Venting (°R)	549.67
Duration of Each Event (hours/event)	0.25
Frequency of Events (events/year)	57.2
Venting Gas Molecular Weight (lb/lb-mol)	22.70
VOC wt %	18.85
benzene wt%	0.032
H <sub>2</sub> S wt%	0.783
HAPs wt %	0.282
CO <sub>2</sub> wt%	10.662
CH <sub>4</sub> wt%	54.476
Are planned MSS vapors (A) uncontrolled; (B) controlled by a flare, vapor combustor, thermal oxidizer, or vapor recovery unit (VRU); or (C) controlled by another type of control device?	(A) uncontrolled
VOC Control Efficiency (%)	0
H <sub>2</sub> S Control Efficiency (%)	0

Ideal Gas Constant, [(ft<sup>3</sup>\*psia)/(R\*lb-mol)]

10.73159

Maximum Gas Molecular Weight and Weight Percents Representative Analyses

Molecular Weight	22.70
VOC wt %	18.85
Benzene wt %	0.032
H <sub>2</sub> S wt %	0.783
HAPs wt%	0.2818
CO <sub>2</sub> wt%	10.6618
CH <sub>4</sub> wt%	54.4759

Vapors Captured by Control Device		
You need to input these values into the appropriate control device emission calculation tab.		
	Hourly Emissions (lb/hr)	Annual Emissions (tpy)
VOC Results:	0.00E+00	0.00E+00
Benzene Results:	0.00E+00	0.00E+00
H <sub>2</sub> S Results:	0.00E+00	0.00E+00
HAPs Results:	0.00E+00	0.00E+00
CO <sub>2</sub> Results:	0.00E+00	0.00E+00
CH <sub>4</sub> Results:	0.00E+00	0.00E+00

Planned MSS Emissions		
	Hourly Emissions (lb/hr)	Annual Emissions (tpy)
VOC Results:	11.72	0.08
Benzene Results:	0.02	<0.01
H <sub>2</sub> S Results:	0.49	<0.01
HAPs Results:	0.18	0.0013
CO2 Results:	6.63	0.0474
CH4 Results:	33.88	0.2422

VOC Type: (pick from list)
Natural Gas VOC

Emission Type: (pick from list)
High Pressure Periodic

#### Calculations / Equations used

Calculation is based on Ideal gas law:  $P(V) = n(R)(T)$

$$\text{VOC result} = \frac{(\text{Pressure of Gas Inside the Unit Before Venting}) * (\text{Actual Volume of the Vented Unit}) / (\text{Frequency of events}) * (\text{Molecular Weight}) * \text{VOC wt\%}}{(\text{Ideal Gas Constant}) * (\text{Temperature of Gas Inside the Unit Before Venting})}$$

\$\$\$ Equation may slightly vary depending on whether or not the emissions are controlled. See notes under venting emission calculation for more explanation.

## Planned MSS Emissions

A) Enter information into the yellow boxes.

B) VOC and H<sub>2</sub>S control efficiencies may be entered (if applicable).

C) The vapor VOC, benzene, and H<sub>2</sub>S weight percents may be entered. The weight percents from the Analyses tab are displayed below.

D) Use the box provided below for entering any notes necessary (such as the source/justification for any calculation inputs).

E) Make sure to answer the control device question.

F) Make sure to select the correct *VOC Type* and *Emission Type* from the pull down menus below.

Emission Unit	REC-3
Identifier	MSS Pigging

Describe this MSS event in detail, include specifically what is being done and how it is being done.	Emissions from routine pigging activities.		
--	--	--	--

Actual Volume of the Vented Unit (scf - standard cubic feet)	200.00	Ideal Gas Constant, [(ft <sup>3</sup> *psia)/(R*lb-mol)]
Actual Volume of the Vented Unit (acf - actual cubic feet)	211.41	
Pressure of Gas Inside the Unit Before Venting (psig)	0	10.73159
Atmospheric Pressure (psia)	14.7	
Pressure of Gas Inside the Unit Before Venting (psia)	14.7	
Temperature of Gas Inside the Unit Before Venting (°F)	90.00	
Temperature of Gas Inside the Unit Before Venting (°R)	549.67	
Duration of Each Event (hours/event)	0.25	Maximum Gas Molecular Weight and Weight Percents Representative Analyses
Frequency of Events (events/year)	57.2	
Venting Gas Molecular Weight (lb/lb-mol)	22.84	
VOC wt %	23.92	
benzene wt%	0.080	
H <sub>2</sub> S wt%	0.000	
HAPs wt %	0.592	
CO <sub>2</sub> wt%	6.964	
CH <sub>4</sub> wt%	54.431	
Are planned MSS vapors (A) uncontrolled; (B) controlled by a flare, vapor combustor, thermal oxidizer, or vapor recovery unit (VRU); or (C) controlled by another type of control device?	(A) uncontrolled	
VOC Control Efficiency (%)	0	
H <sub>2</sub> S Control Efficiency (%)	0	

Vapors Captured by Control Device		
You need to input these values into the appropriate control device emission calculation tab.		
	Hourly Emissions (lb/hr)	Annual Emissions (tpy)
VOC Results:	0.00E+00	0.00E+00
Benzene Results:	0.00E+00	0.00E+00
H <sub>2</sub> S Results:	0.00E+00	0.00E+00
HAPs Results:	0.00E+00	0.00E+00
CO <sub>2</sub> Results:	0.00E+00	0.00E+00
CH <sub>4</sub> Results:	0.00E+00	0.00E+00

Planned MSS Emissions		
	Hourly Emissions (lb/hr)	Annual Emissions (tpy)
VOC Results:	11.51	0.08
Benzene Results:	0.04	<0.01
H <sub>2</sub> S Results:	<0.01	<0.01
HAPs Results:	0.28	0.0020
CO <sub>2</sub> Results:	3.35	0.0240
CH <sub>4</sub> Results:	26.20	0.1873

VOC Type: (pick from list)
Natural Gas VOC

Emission Type: (pick from list)
High Pressure Periodic

#### Calculations / Equations used

Calculation is based on Ideal gas law:  $P(V) = n(R)(T)$

$$\text{VOC result} = \frac{(\text{Pressure of Gas Inside the Unit Before Venting}) * (\text{Actual Volume of the Vented Unit}) / (\text{Frequency of events}) * (\text{Molecular Weight}) * \text{VOC wt\%}}{(\text{Ideal Gas Constant}) * (\text{Temperature of Gas Inside the Unit Before Venting})}$$

\$\$\$ Equation may slightly vary depending on whether or not the emissions are controlled. See notes under venting emission calculation for more explanation.

## Planned MSS Emissions

A) Enter information into the yellow boxes.

B) VOC and H<sub>2</sub>S control efficiencies may be entered (if applicable).

C) The vapor VOC, benzene, and H<sub>2</sub>S weight percents may be entered. The weight percents from the Analyses tab are displayed below.

D) Use the box provided below for entering any notes necessary (such as the source/justification for any calculation inputs).

E) Make sure to answer the control device question.

F) Make sure to select the correct *VOC Type* and *Emission Type* from the pull down menus below.

Emission Unit	REC-4
Identifier	MSS Pigging

Describe this MSS event in detail, include specifically what is being done and how it is being done.	Emissions from routine pigging activities.	
--	--	--

Actual Volume of the Vented Unit (scf - standard cubic feet)	200.00	Ideal Gas Constant, [(ft <sup>3</sup> *psia)/(R*lb-mol)]
Actual Volume of the Vented Unit (acf - actual cubic feet)	211.41	
Pressure of Gas Inside the Unit Before Venting (psig)	0	10.73159
Atmospheric Pressure (psia)	14.7	
Pressure of Gas Inside the Unit Before Venting (psia)	14.7	
Temperature of Gas Inside the Unit Before Venting (°F)	90.00	
Temperature of Gas Inside the Unit Before Venting (°R)	549.67	
Duration of Each Event (hours/event)	0.25	
Frequency of Events (events/year)	114.4	
Venting Gas Molecular Weight (lb/lb-mol)	22.84	
VOC wt %	23.92	
benzene wt%	0.080	
H <sub>2</sub> S wt%	0.000	
HAPs wt %	0.592	
CO <sub>2</sub> wt%	6.964	
CH <sub>4</sub> wt%	54.431	
Are planned MSS vapors (A) uncontrolled; (B) controlled by a flare, vapor combustor, thermal oxidizer, or vapor recovery unit (VRU); or (C) controlled by another type of control device?	(A) uncontrolled	
VOC Control Efficiency (%)	0	
H <sub>2</sub> S Control Efficiency (%)	0	

Vapors Captured by Control Device		
You need to input these values into the appropriate control device emission calculation tab.		
	Hourly Emissions (lb/hr)	Annual Emissions (tpy)
VOC Results:	0.00E+00	0.00E+00
Benzene Results:	0.00E+00	0.00E+00
H <sub>2</sub> S Results:	0.00E+00	0.00E+00
HAPs Results:	0.00E+00	0.00E+00
CO <sub>2</sub> Results:	0.00E+00	0.00E+00
CH <sub>4</sub> Results:	0.00E+00	0.00E+00

Maximum Gas Molecular Weight and Weight Percents Representative Analyses	
Molecular Weight	22.84
VOC wt %	23.92
Benzene wt %	0.080
H <sub>2</sub> S wt %	0.000
HAPs wt%	0.5921
CO <sub>2</sub> wt%	6.9644
CH <sub>4</sub> wt%	54.4308



Planned MSS Emissions		
	Hourly Emissions (lb/hr)	Annual Emissions (tpy)
VOC Results:	11.51	0.16
Benzene Results:	0.04	<0.01
H <sub>2</sub> S Results:	<0.01	<0.01
HAPs Results:	0.28	0.0041
CO2 Results:	3.35	0.0479
CH4 Results:	26.20	0.3746

VOC Type: (pick from list)
Natural Gas VOC

Emission Type: (pick from list)
High Pressure Periodic

#### Calculations / Equations used

Calculation is based on Ideal gas law:  $P(V) = n(R)(T)$

$$\text{VOC result} = \frac{((\$ \$ \$ \text{Pressure of Gas Inside the Unit Before Venting}) * (\text{Actual Volume of the Vented Unit})) / (\text{Frequency of events}) * (\text{Molecular Weight}) * \text{VOC wt\%}}{(\text{Ideal Gas Constant}) * (\text{Temperature of Gas Inside the Unit Before Venting})}$$

\$\$\$ Equation may slightly vary depending on whether or not the emissions are controlled. See notes under venting emission calculation for more explanation.

## Planned MSS Emissions

A) Enter information into the yellow boxes.

B) VOC and H<sub>2</sub>S control efficiencies may be entered (if applicable).

C) The vapor VOC, benzene, and H<sub>2</sub>S weight percents may be entered. The weight percents from the Analyses tab are displayed below.

D) Use the box provided below for entering any notes necessary (such as the source/justification for any calculation inputs).

E) Make sure to answer the control device question.

F) Make sure to select the correct *VOC Type* and *Emission Type* from the pull down menus below.

Emission Unit	REC-5
Identifier	MSS Piggling

Describe this MSS event in detail, include specifically what is being done and how it is being done.	Emissions from routine piggling activities.
--	---

Actual Volume of the Vented Unit (scf - standard cubic feet)	200.00
Actual Volume of the Vented Unit (acf - actual cubic feet)	211.41
Pressure of Gas Inside the Unit Before Venting (psig)	0
Atmospheric Pressure (psia)	14.7
Pressure of Gas Inside the Unit Before Venting (psia)	14.7
Temperature of Gas Inside the Unit Before Venting (°F)	90.00
Temperature of Gas Inside the Unit Before Venting (°R)	549.67
Duration of Each Event (hours/event)	0.25
Frequency of Events (events/year)	114.4
Venting Gas Molecular Weight (lb/lb-mol)	22.84
VOC wt %	23.92
benzene wt%	0.080
H <sub>2</sub> S wt%	0.000
HAPs wt %	0.592
CO <sub>2</sub> wt%	6.964
CH <sub>4</sub> wt%	54.431
Are planned MSS vapors (A) uncontrolled; (B) controlled by a flare, vapor combustor, thermal oxidizer, or vapor recovery unit (VRU); or (C) controlled by another type of control device?	(A) uncontrolled
VOC Control Efficiency (%)	0
H <sub>2</sub> S Control Efficiency (%)	0

Ideal Gas Constant, [(ft<sup>3</sup>\*psia)/(R\*lb-mol)]

10.73159

Maximum Gas Molecular Weight and Weight Percents Representative Analyses

Molecular Weight	22.84
VOC wt %	23.92
Benzene wt %	0.080
H <sub>2</sub> S wt %	0.000
HAPs wt%	0.5921
CO <sub>2</sub> wt%	6.9644
CH <sub>4</sub> wt%	54.4308

Vapors Captured by Control Device		
You need to input these values into the appropriate control device emission calculation tab.		
	Hourly Emissions (lb/hr)	Annual Emissions (tpy)
VOC Results:	0.00E+00	0.00E+00
Benzene Results:	0.00E+00	0.00E+00
H <sub>2</sub> S Results:	0.00E+00	0.00E+00
HAPs Results:	0.00E+00	0.00E+00
CO <sub>2</sub> Results:	0.00E+00	0.00E+00
CH <sub>4</sub> Results:	0.00E+00	0.00E+00

Planned MSS Emissions		
	Hourly Emissions (lb/hr)	Annual Emissions (tpy)
VOC Results:	11.51	0.16
Benzene Results:	0.04	<0.01
H <sub>2</sub> S Results:	<0.01	<0.01
HAPs Results:	0.28	0.0041
CO <sub>2</sub> Results:	3.35	0.0479
CH <sub>4</sub> Results:	26.20	0.3746

VOC Type: (pick from list)
Natural Gas VOC

Emission Type: (pick from list)
High Pressure Periodic

#### Calculations / Equations used

Calculation is based on Ideal gas law:  $P(V) = n(R)(T)$

$$\text{VOC result} = \frac{((\text{Pressure of Gas Inside the Unit Before Venting}) * (\text{Actual Volume of the Vented Unit})) / (\text{Frequency of events}) * (\text{Molecular Weight}) * \text{VOC wt\%}}{(\text{Ideal Gas Constant}) * (\text{Temperature of Gas Inside the Unit Before Venting})}$$

\$\$\$ Equation may slightly vary depending on whether or not the emissions are controlled. See notes under venting emission calculation for more explanation.

## Planned MSS Emissions

A) Enter information into the yellow boxes.

B) VOC and H<sub>2</sub>S control efficiencies may be entered (if applicable).

C) The vapor VOC, benzene, and H<sub>2</sub>S weight percents may be entered. The weight percents from the Analyses tab are displayed below.

D) Use the box provided below for entering any notes necessary (such as the source/justification for any calculation inputs).

E) Make sure to answer the control device question.

F) Make sure to select the correct *VOC Type* and *Emission Type* from the pull down menus below.

Emission Unit	REC-6
Identifier	MSS Piggling

Describe this MSS event in detail, include specifically what is being done and how it is being done.	Emissions from routine piggling activities.
--	---

Actual Volume of the Vented Unit (scf - standard cubic feet)	1,710.00
Actual Volume of the Vented Unit (acf - actual cubic feet)	1807.57
Pressure of Gas Inside the Unit Before Venting (psig)	0
Atmospheric Pressure (psia)	14.7
Pressure of Gas Inside the Unit Before Venting (psia)	14.7
Temperature of Gas Inside the Unit Before Venting (°F)	90.00
Temperature of Gas Inside the Unit Before Venting (°R)	549.67
Duration of Each Event (hours/event)	0.25
Frequency of Events (events/year)	171.6
Venting Gas Molecular Weight (lb/lb-mol)	22.84
VOC wt %	23.92
benzene wt%	0.080
H <sub>2</sub> S wt%	0.000
HAPs wt %	0.592
CO <sub>2</sub> wt%	6.964
CH <sub>4</sub> wt%	54.431
Are planned MSS vapors (A) uncontrolled; (B) controlled by a flare, vapor combustor, thermal oxidizer, or vapor recovery unit (VRU); or (C) controlled by another type of control device?	(A) uncontrolled
VOC Control Efficiency (%)	0
H <sub>2</sub> S Control Efficiency (%)	0

Ideal Gas Constant, [(ft<sup>3</sup>\*psia)/(R\*lb-mol)]

10.73159

Maximum Gas Molecular Weight and Weight Percents Representative Analyses

Molecular Weight	22.84
VOC wt %	23.92
Benzene wt %	0.080
H <sub>2</sub> S wt %	0.000
HAPs wt%	0.5921
CO <sub>2</sub> wt%	6.9644
CH <sub>4</sub> wt%	54.4308

Vapors Captured by Control Device		
You need to input these values into the appropriate control device emission calculation tab.		
	Hourly Emissions (lb/hr)	Annual Emissions (tpy)
VOC Results:	0.00E+00	0.00E+00
Benzene Results:	0.00E+00	0.00E+00
H <sub>2</sub> S Results:	0.00E+00	0.00E+00
HAPs Results:	0.00E+00	0.00E+00
CO <sub>2</sub> Results:	0.00E+00	0.00E+00
CH <sub>4</sub> Results:	0.00E+00	0.00E+00

Planned MSS Emissions		
	Hourly Emissions (lb/hr)	Annual Emissions (tpy)
VOC Results:	98.43	2.11
Benzene Results:	0.33	<0.01
H <sub>2</sub> S Results:	<0.01	<0.01
HAPs Results:	2.44	0.0523
CO2 Results:	28.66	0.6148
CH4 Results:	224.00	4.8048

VOC Type: (pick from list)
Natural Gas VOC

Emission Type: (pick from list)
High Pressure Periodic

#### Calculations / Equations used

Calculation is based on Ideal gas law:  $P(V) = n(R)(T)$

$$\text{VOC result} = \frac{((\$ \$ \$ \$ \text{Pressure of Gas Inside the Unit Before Venting}) * (\text{Actual Volume of the Vented Unit})) / (\text{Frequency of events}) * (\text{Molecular Weight}) * \text{VOC wt\%}}{(\text{Ideal Gas Constant}) * (\text{Temperature of Gas Inside the Unit Before Venting})}$$

\$\$\$ Equation may slightly vary depending on whether or not the emissions are controlled. See notes under venting emission calculation for more explanation.

## Planned MSS Emissions

A) Enter Information into the yellow boxes.

B) VOC and H<sub>2</sub>S control efficiencies may be entered (if applicable).

C) The vapor VOC, benzene, and H<sub>2</sub>S weight percents may be entered. The weight percents from the Analyses tab are displayed below.

D) Use the box provided below for entering any notes necessary (such as the source/justification for any calculation inputs).

E) Make sure to answer the control device question.

F) Make sure to select the correct VOC Type and Emission Type from the pull down menus below.

Emission Unit	REC-7
Identifier	MSS Pigging

Describe this MSS event in detail, include specifically what is being done and how it is being done.	Emissions from routine pigging activities.
--	--

Actual Volume of the Vented Unit (scf - standard cubic feet)	1,140.00
Actual Volume of the Vented Unit (acf - actual cubic feet)	1205.05
Pressure of Gas Inside the Unit Before Venting (psig)	0
Atmospheric Pressure (psia)	14.7
Pressure of Gas Inside the Unit Before Venting (psia)	14.7
Temperature of Gas Inside the Unit Before Venting (°F)	90.00
Temperature of Gas Inside the Unit Before Venting (°R)	549.67
Duration of Each Event (hours/event)	0.25
Frequency of Events (events/year)	171.6
Venting Gas Molecular Weight (lb/lb-mol)	22.84
VOC wt %	23.92
benzene wt%	0.080
H <sub>2</sub> S wt%	0.000
HAPs wt%	0.592
CO <sub>2</sub> wt%	6.964
CH <sub>4</sub> wt%	54.431
Are planned MSS vapors (A) uncontrolled; (B) controlled by a flare, vapor combustor, thermal oxidizer, or vapor recovery unit (VRU); or (C) controlled by another type of control device?	(A) uncontrolled
VOC Control Efficiency (%)	0
H <sub>2</sub> S Control Efficiency (%)	0

Ideal Gas Constant, [(ft<sup>3</sup>\*psia)/(R\*lb-mol)]

10.73159

Maximum Gas Molecular Weight and Weight Percents Representative Analyses

Molecular Weight	22.84
VOC wt %	23.92
Benzene wt %	0.080
H <sub>2</sub> S wt %	0.000
HAPs wt%	0.5921
CO <sub>2</sub> wt%	6.9644
CH <sub>4</sub> wt%	54.4308

Vapors Captured by Control Device		
You need to input these values into the appropriate control device emission calculation tab.		
	Hourly Emissions (lb/hr)	Annual Emissions (tpy)
VOC Results:	0.00E+00	0.00E+00
Benzene Results:	0.00E+00	0.00E+00
H <sub>2</sub> S Results:	0.00E+00	0.00E+00
HAPs Results:	0.00E+00	0.00E+00
CO <sub>2</sub> Results:	0.00E+00	0.00E+00
CH <sub>4</sub> Results:	0.00E+00	0.00E+00

Planned MSS Emissions		
	Hourly Emissions (lb/hr)	Annual Emissions (tpy)
VOC Results:	65.62	1.41
Benzene Results:	0.22	<0.01
H <sub>2</sub> S Results:	<0.01	<0.01
HAPs Results:	1.62	0.0348
CO <sub>2</sub> Results:	19.11	0.4098
CH <sub>4</sub> Results:	149.33	3.2032

VOC Type: (pick from list)
Natural Gas VOC

Emission Type: (pick from list)
High Pressure Periodic

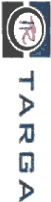
#### Calculations / Equations used

Calculation is based on Ideal gas law:  $P(V) = n(R)(T)$

$$\text{VOC result} = \frac{((\text{Pressure of Gas Inside the Unit Before Venting}) * (\text{Actual Volume of the Vented Unit})) / (\text{Frequency of events}) * (\text{Molecular Weight}) * \text{VOC wt\%}}{(\text{Ideal Gas Constant}) * (\text{Temperature of Gas Inside the Unit Before Venting})}$$

\$\$\$ Equation may slightly vary depending on whether or not the emissions are controlled. See notes under venting emission calculation for more explanation.





Targa Northern Delaware LLC - Red Mills Gas Processing Plant  
Sour Water Haul Roads (2-1) - Orange Haul Route

Site Name	Value	Unit
Description	8,750	hr
Annual Operating Hours:		
Daily Operating Hours:	24	hr

Parameter	Value	Unit
Empty Vehicle Weight <sup>1</sup>	16	ton
Load Size	31.44	ton
Loaded Vehicle Weight <sup>2</sup>	47.44	ton
Mean Vehicle Weight <sup>3</sup>	31.72	ton
Mean Vehicle Weight <sup>3</sup>	31.72	ton
Vehicles per Day	2.43	VPD
Vehicles per Hour	2.43	VPH
Scored Length <sup>4</sup>	1.46	mile
Scored Length <sup>4</sup>	2	mi
Effective Segment Length <sup>5</sup>	2.98	mile
Trips per Hour <sup>6</sup>	4	-
Wet Days <sup>7</sup>	70	day
Surface Silt Content <sup>8</sup>	4.8	%
Control Efficiency <sup>9</sup>	78%	%

<sup>1</sup> Empty vehicle weight includes driver and accessories and full fuel tank.  
<sup>2</sup> Includes cargo, transported materials, etc. (-6-21 kN) / 7,8002 gal/m<sup>3</sup> \*7560 gal/truck/2000kton)  
<sup>3</sup> Loaded vehicle weight = Empty + Load Size  
<sup>4</sup> Mean Vehicle weight = (Loaded Weight + Empty Weight) / 2  
<sup>5</sup> Vehicles per day = Condensate and produced water throughput / 7560 gal truck  
<sup>6</sup> Effective segment length = Trips per segment \* segment length  
<sup>7</sup> Trips per hour = Vehicles per day \* Segments per trip \* Hours of operation per Day  
<sup>8</sup> Wet days is the H<sub>2</sub>O default allowed by H<sub>2</sub>O without additional justification  
<sup>9</sup> Surface silt content based on AP-42 Section 13.2.2.2, Table 13.2.2-1

Upstream Road Emission Factors																		
Route	Silt Content <sup>1</sup>	W <sup>2</sup>	P <sup>3</sup>	Calculation Parameters <sup>4</sup>						Hourly Emission Factors <sup>5</sup>			Annual Emission Factors <sup>6</sup>					
				a			b			E <sup>7</sup>			E <sup>8</sup>					
				TSP	PM <sub>10</sub>	PM <sub>2.5</sub>	TSP	PM <sub>10</sub>	PM <sub>2.5</sub>	TSP	PM <sub>10</sub>	PM <sub>2.5</sub>	TSP	PM <sub>10</sub>	PM <sub>2.5</sub>			
4.8	Mean Vehicle Weight tons	Wet Days	dry	lb/VMT	lb/VMT	lb/VMT	lb/VMT	lb/VMT	lb/VMT	lb/VMT	lb/VMT	lb/VMT	lb/VMT	lb/VMT	lb/VMT	lb/VMT		
31.72		70		4.9	1.5	0.15	0.7	0.9	0.9	0.45	0.45	0.45	7.46	1.90	0.19	6.03	1.54	0.15

<sup>1</sup> Contents are from AP-42 Table 13.2.2-2b Section 13.2.2.2 and emission factors are calculated using equation 1a.

Upstream Road Emissions											
Route	Annual Segment Operation Length	Trips per Segment	Number of Trucks per Year	Effective Segment Length	Average VMT/yr <sup>4</sup>	Uncontrolled Emissions			Controlled Emissions <sup>8</sup>		
						TSP	PM <sub>10</sub>	PM <sub>2.5</sub>	TSP	PM <sub>10</sub>	PM <sub>2.5</sub>
Sour Water Trucks	6,780	1.49	2	242.46	2.98	6.16	21.85	1.67	1.38	4.88	1.34
						lb/yr	lb/yr	lb/yr	lb/yr	lb/yr	lb/yr
						6.16	21.85	1.67	1.38	4.88	1.34
						lb/yr	lb/yr	lb/yr	lb/yr	lb/yr	lb/yr

<sup>1</sup> Surface silt = % of 75 micron diameter and smaller particles  
<sup>2</sup>  $W = 8 \times (0.12)^2 \times \pi \times (VMT)^2 \times 0.06$  (Eq. 13.2.2-4) (Emission 1a, November 2006)  
<sup>3</sup>  $P = 8 \times (0.12)^2 \times \pi \times (VMT)^2 \times 0.06$  (Eq. 13.2.2-4) (Emission 1a, November 2006)  
<sup>4</sup>  $VMT = 8 \times (0.12)^2 \times \pi \times (VMT)^2 \times 0.06$  (Eq. 13.2.2-4) (Emission 1a, November 2006)  
<sup>5</sup>  $E = 8 \times (0.12)^2 \times \pi \times (VMT)^2 \times 0.06$  (Eq. 13.2.2-4) (Emission 1a, November 2006)  
<sup>6</sup>  $E = 8 \times (0.12)^2 \times \pi \times (VMT)^2 \times 0.06$  (Eq. 13.2.2-4) (Emission 1a, November 2006)  
<sup>7</sup>  $E = 8 \times (0.12)^2 \times \pi \times (VMT)^2 \times 0.06$  (Eq. 13.2.2-4) (Emission 1a, November 2006)  
<sup>8</sup>  $E = 8 \times (0.12)^2 \times \pi \times (VMT)^2 \times 0.06$  (Eq. 13.2.2-4) (Emission 1a, November 2006)  
<sup>9</sup>  $E = 8 \times (0.12)^2 \times \pi \times (VMT)^2 \times 0.06$  (Eq. 13.2.2-4) (Emission 1a, November 2006)



Targa Northern Delaware LLC - Red Hills Gas Processing Plant

## Contact Water Haul Roads (6-T) - Green Haul Route

### Site-Wide

Description	Value	Unit
Annual Operating Hours:	8,760	hr
Daily Operating Hours:	24	hr

### Unpaved Haul Road

Parameter	Value	Unit
Empty Vehicle Weight <sup>1</sup>	16	ton
Load Size <sup>2</sup>	31.43	ton
Loaded Vehicle Weight <sup>3</sup>	47.43	ton
Mean Vehicle Weight <sup>4</sup>	31.72	ton
Vehicles Per Day <sup>5</sup>	2	VPD
Vehicles Per Year	853	VPY
Segment Length	1.49	mile
Trips per Segment	2	-
Effective Segment Length <sup>6</sup>	2.98	mile
Trips per Hour <sup>7</sup>	1	-
Wet Days <sup>8</sup>	70	day
Surface Silt Content <sup>9</sup>	4.8	%
Control Efficiency	78%	%

<sup>1</sup> Empty vehicle weight includes driver and occupants and full fuel load.

<sup>2</sup> Include cargo, transported materials, etc. (~55.65 lb/ft<sup>3</sup> / 7,48052 gal/ft<sup>3</sup> \* 7560 gal truck/ 2000lb/ton)

<sup>3</sup> Loaded vehicle weight = Empty + Load Size

<sup>4</sup> Mean Vehicle weight = (Loaded Weight + Empty Weight) / 2

<sup>5</sup> Vehicles per day = Condensate and produced water throughput / 7560 gal truck

<sup>6</sup> Effective segment length = trips per segment \* segment length

<sup>7</sup> Trips per hour = Vehicles per day \* Segments per trip \* Hours of Operation per Day

<sup>8</sup> Wet days is the NM default allowed by NMED without additional justification

<sup>9</sup> Surface silt content based on AP-42 Section 13.2.2.2, Table 13.2.2-1

### Unpaved Road Emission Factors

Route	Calculation Parameters <sup>1</sup>											Hourly Emission Factors			Annual Emission Factors			
	s	W	P	k			a			b			E <sup>2</sup>			E <sub>adj</sub> <sup>3</sup>		
	Silt Content <sub>1</sub>	Mean Vehicle Weight <sub>2</sub> tons	Wet Days	TSP	PM <sub>10</sub>	PM <sub>2.5</sub>	TSP	PM <sub>10</sub>	PM <sub>2.5</sub>	TSP	PM <sub>10</sub>	PM <sub>2.5</sub>	TSP	PM <sub>10</sub>	PM <sub>2.5</sub>	TSP	PM <sub>10</sub>	PM <sub>2.5</sub>
	%	tons	day	lb/VMT	lb/VMT	lb/VMT							lb/VMT	lb/VMT	lb/VMT	lb/VMT	lb/VMT	lb/VMT
Contact Water Trucks	4.8	31.72	70	4.9	1.5	0.15	0.7	0.9	0.9	0.45	0.45	0.45	7.46	1.90	0.19	6.03	1.54	0.15

<sup>1</sup> Constants are from AP-42 Table 13.2.2-2 in Section 13.2.2.2, and emission factors are calculated using equation 1a.

### Unpaved Road Emissions

Route	Calculation Inputs						Uncontrolled Emissions						Controlled Emissions <sup>4</sup>					
	Annual Operation hr	Segment Length mi	Trips per Segment	Number of Trucks per Year	Effective Segment Length mi	Average VMT/yr <sup>4</sup> mi/yr	TSP		PM <sub>10</sub>		PM <sub>2.5</sub>		TSP		PM <sub>10</sub>		PM <sub>2.5</sub>	
				trucks/yr			lb/hr	tpy	lb/hr	tpy	lb/hr	tpy	lb/hr	tpy	lb/hr	tpy	lb/hr	tpy
Contact Water Trucks	8,760	1.49	2	853.3333	2.98	2543	2.16	7.66	0.55	1.95	0.06	0.20	0.48	1.72	0.12	0.44	0.012	0.044
<b>Totals</b>							<b>2.16</b>	<b>7.66</b>	<b>0.55</b>	<b>1.95</b>	<b>0.06</b>	<b>0.20</b>	<b>0.48</b>	<b>1.72</b>	<b>0.12</b>	<b>0.44</b>	<b>0.012</b>	<b>0.044</b>

<sup>1</sup> Surface silt = % of 75 micron diameter and smaller particles

<sup>2</sup>  $E = k \times (s/12)^a \times (W/3)^b$  (AP-42 page 13.2.2-4 Equation 1a, November 2006)

E = Site Specific Emission Factor (lb/VMT)

s = Surface material silt content (%)

k, a, b = constants from AP-42 Table 13.2.2-2

W = Weighted Mean Vehicle Weight from Haul Road Inputs (tons)

<sup>3</sup> PM<sub>10</sub> emission factor in equation is assumed as a surrogate for TSP emissions

<sup>4</sup> VMT/yr = Vehicle Miles Travelled per year = Trips per year \* Segment Length

<sup>5</sup> Wet Day Emission Factor =  $E \times (365 - \text{Wet Days})/365$ . Wet days value is the NM default allowed by NMED without additional justification.

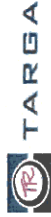
<sup>6</sup> Controlled Emissions = Uncontrolled Emissions \* (1 - Control Factor/100%)

Control Efficiency = 78%

Control<sub>adj</sub> = Control<sub>u</sub> + (1 - Control<sub>u</sub>) \* Control<sub>u</sub>

Control<sub>u</sub> = 60% for Base Course + (1 - 60% for Base Course) \* 44% for Speed Limit

Control<sub>adj</sub> = 78%



**Targa Northern Delaware LLC - Red Hills Gas Processing Plant**

Description	Value	Unit
Annual Operating Hours:	8,760	hr
Daily Operating Hours:	24	hr

Parameter	Unit
Empty Vehicle Weight <sup>1</sup>	16 ton
Load Size <sup>2</sup>	18,652 ton
Loaded Vehicle Weight <sup>3</sup>	34,672 ton
Mean Vehicle Weight <sup>4</sup>	25,31 ton
Vehicles per Day <sup>5</sup>	48 VPD
Vehicles per Year	406 VPY
Segment Length	1.84 mile
Trips per Segment	2
Effective Segment Length <sup>6</sup>	3.68 mile
Trips per Hour <sup>7</sup>	4
Wet Days <sup>8</sup>	70 day
Surface Silt Content <sup>9</sup>	4.8 %
Control Efficiency	78% %

<sup>2</sup> Include cargo, transported materials, etc. (~55.95 lb/ft<sup>3</sup> / 7,48052 gal/m<sup>3</sup> • 7560 gal/truck/ 26000lb/ton)

<sup>3</sup> Loaded vehicle weight = Empty + Load Size

\* Mean Vehicle weight = (Loaded Weight + Empty Weight) / 2

<sup>1</sup> Vehicles per day = Condensate and produced water throughput / 7560 gal truck<sup>6</sup> Effective segment length = trips per segment \* segment length
$$^{\dagger} \text{ Trips per hour} = \text{Vehicles per day} \div \text{Segments per trip} \div \text{Hours of Operation per Day}$$
<sup>a</sup> Wet days is the NM default allowed by NIMED without additional justification.

<sup>†</sup> Surface silt content based on AP-42 Section 13.2.2.2, Table 13.2.2-1

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### Unpaved Road Emission Factors

Unpaired And zinnissus ratios										Calculation Parameters <sup>1</sup>				Hourly Emission Factors				Annual Emission Factors			
	Route	a	W Silt Content Vehicle Weight	P Wet Days day	k	a		b		E <sup>1</sup>		E <sup>2</sup>									
						TSP	PM <sub>10</sub>	TSP	PM <sub>10</sub>	PM <sub>2.5</sub>	PM <sub>2.5</sub>	TSP	PM <sub>10</sub>	PM <sub>2.5</sub>	TSP	PM <sub>10</sub>	PM <sub>2.5</sub>				
		%	tons			lb/VMT	lb/VMT	lb/VMT	lb/VMT	lb/VMT	lb/VMT	lb/VMT	lb/VMT	lb/VMT	lb/VMT	lb/VMT	lb/VMT	lb/VMT			
	Route	4.8	25.31	70	4.9	1.5	0.15	0.7	0.9	0.45	0.45	6.74	1.72	0.17	5.44	1.39	0.14				
	Continuous Trucks	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				

<sup>1</sup> Constants are from A0-42. Table 13.2.2-2 In Section 13.2.2.2, and emission factors are calculated using equation 1a.

### Unpaved Road Emissions

Operational Area Emissions	Calculation Inputs						Uncontrolled Emissions						Controlled Emissions <sup>a</sup>					
	Annual Operation		Segment Length	Trips per Segment	Effective Average VMT/yr <sup>a</sup>	Average Segment Length	TSP		PM <sub>10</sub>		PM <sub>2.5</sub>		TSP		PM <sub>10</sub>		PM <sub>2.5</sub>	
	hr	mi	mi	mi	mi/yr	mi	lb/hr	tpy	lb/hr	tpy	lb/hr	tpy	lb/hr	tpy	lb/hr	tpy	lb/hr	tpy
Route		1.84																
Condensate Trucks	8,760		2	-405,701.7	3.68	1,493	1.15	4.06	0.29	1.04	0.03	0.10	0.26	0.91	0.07	0.23	0.007	0.023
Total <sup>d</sup>							4.15	4.06	0.29	1.04	0.03	0.10	0.26	0.91	0.07	0.23	0.007	0.023

<sup>1</sup> Surface silt = % of 75 micron diameter and smaller particles<sup>2</sup>  $E = k \times (s/12)^a \times (V/V)^{1/b}$  (AP-42 page 13.2.2.4 Equation 1a, November 2006)

E = Size Specific Emission Factor (lb/MMBT)

s = surface material silt content (%)

 $k, a, b = \text{constants from AP-Q2 Table 13.2.2-2}$ 

W = Weighted Mean Vehicle Weight from Haul Road Inputs (tons)

<sup>3</sup> PM<sub>10</sub> emission factor in equation is assumed as a surrogate for TSP emissions<sup>a</sup> VMT/Yr = Vehicle Miles Travelled per year = Trips per year \* Segment Length<sup>1</sup> Wet Day Emission Factor =  $E \cdot (365 - \text{Wet Days})/365$ . Wet days value is the number of days with precipitation greater than 0.01 in.<sup>b</sup> Controlled Emissions = Uncontrolled Emissions \* (1 - Control Factor/100%)
$$\text{Control Efficiency} = \frac{\text{Control} - \text{Control} - 1}{\text{Control} - 1} \times 100\%$$
$$\text{Control}_{13} = \text{Control}_8 + (1 - \text{Control}_8) \times \text{Control}_9$$
$$\text{Control}_{43} = 60\% \text{ for Base Course} + (1-60\% \text{ for Base Course}) \times 44\% \text{ for Speed Limit}$$

Control<sub>1</sub> = 78%



**TARGA**

Targa Northern Delays LLC - Red Hills Gas Processing Plant

## Contact Water Haul Roads (5-T) - Blue Haul Route

Size/Use	
Description	Value Unit
Annual Operating Hours:	8,760 hr
Daily Operating Hours:	24 hr

Parameter	Value	Unit
Empty Vehicle Weight <sup>1</sup>	16	ton
Load Size <sup>2</sup>	31.43	ton
Loaded Vehicle Weight <sup>3</sup>	47.43	ton
Mean Vehicle Weight <sup>4</sup>	31.72	ton
Vehicles Per Day <sup>5</sup>	2	VPD
Vehicles Per Year	853	VPY
Segment Length	1.1	mile
Trips per Segment	2	-
Effective Segment Length <sup>6</sup>	2.2	mile
Wet Days <sup>7</sup>	1	-
Wet Days <sup>8</sup>	70	day
Surface Silt Content <sup>9</sup>	4.8	%
Control Efficiency	78%	%

<sup>1</sup> Empty vehicle weight includes driver and occupants and full fuel load.  
<sup>2</sup> Include comp, transferred materials, etc. (~55.65 Bu/ft<sup>3</sup> / 7.4805 gal/ft<sup>3</sup> \* 7260 gal/truck / 2000lb/ton)

<sup>3</sup> Loaded vehicle weight = Empty + Load Size

<sup>4</sup> Mean Vehicle Weight = (Loaded Weight + Empty Weight) / 2

<sup>5</sup> Vehicles per day = Cycles/acre and produced water throughput / 7260 gal/truck

<sup>6</sup> Effective segment length = Trips per segment \* segment length

<sup>7</sup> Trips per hour = Vehicles per day \* Segments per trip + Hours of Operation per Day

<sup>8</sup> Wet Days is the 8th default allowed by HRED without additional justification

<sup>9</sup> Surface silt content based on 40-60 Section 13.2.2.2, Table 13.2.2-1

### Unpaved Road Emission Factors

Route	Calculation Parameters <sup>1</sup>						Hourly Emission Factors		Annual Emission Factors	
	Silt Content <sup>1</sup>	W	P	k	a	b	TSP	PM <sub>10</sub>	TSP	PM <sub>10</sub>
Contact Water Trucks	4.8	31.72	20	4.9	0.9	0.45	lb/VMT	lb/VMT	lb/VMT	lb/VMT
							lb/hr	lb/hr	lb/hr	lb/hr
							0.7	0.9	6.03	1.54
							0.15	0.19	1.54	0.15

<sup>1</sup> Constants are from AP-42 Table 13.2.2-2 in Section 13.2.2.2, and emission factors are calculated using equation 1a.

### Unpaved Road Emissions

Route	Calculation Inputs				Uncontrolled Emissions		Controlled Emissions <sup>6</sup>	
	Annual Operation	Segment Length	Trips per Segment	Effective Segment Length	TSP	PM <sub>10</sub>	TSP	PM <sub>10</sub>
Contact Water Trucks	8,760	1.1	2	2.20	1.60	0.41	1.27	0.32
					lb/hr	lb/hr	lb/hr	lb/hr
					5.66	1.44	4.39	1.09
					0.14	0.04	0.32	0.09
					0.32	0.09	0.32	0.09
					0.032	0.009	0.032	0.009

<sup>1</sup> Surface silt = % of 75 micron diameter and smaller particles

<sup>2</sup> E = k \* (121)<sup>0.85</sup> \* (W/P)<sup>0.75</sup> \* (AP-42 page 13.2.2-4 Equation 1a, November 2006)

<sup>3</sup> E = Site Specific Emission Factor (lb/0.047)

<sup>4</sup> k, b = constant from AP-42 Table 13.2.2-2

<sup>5</sup> k, b = constant from AP-42 Table 13.2.2-2

<sup>6</sup> PM<sub>10</sub> emission factor in equation is assumed

<sup>7</sup> W = Weighted Mean Vehicle Weight from Road Inputs (Items)

<sup>8</sup> W = Weighted Mean Vehicle Weight from Road Inputs (Items)

<sup>9</sup> W = Weighted Mean Vehicle Weight from Road Inputs (Items)

<sup>10</sup> W = Weighted Mean Vehicle Weight from Road Inputs (Items)

<sup>11</sup> W = Weighted Mean Vehicle Weight from Road Inputs (Items)

<sup>12</sup> W = Weighted Mean Vehicle Weight from Road Inputs (Items)

<sup>13</sup> W = Weighted Mean Vehicle Weight from Road Inputs (Items)

<sup>14</sup> W = Weighted Mean Vehicle Weight from Road Inputs (Items)

<sup>15</sup> W = Weighted Mean Vehicle Weight from Road Inputs (Items)

<sup>16</sup> W = Weighted Mean Vehicle Weight from Road Inputs (Items)

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<sup>66</sup> W = Weighted Mean Vehicle Weight from Road Inputs (Items)

<sup>67</sup> W = Weighted Mean Vehicle Weight from Road Inputs (Items)

<sup>68</sup> W = Weighted Mean Vehicle Weight from Road Inputs (Items)

<sup>69</sup> W = Weighted Mean Vehicle Weight from Road Inputs (Items)



Targa Northern Delaware LLC - Red Hills Gas Processing Plant

## Sour Water Haul Roads (4-T) - Orange Haul Route

### Site-Wide

Description	Value	Unit
Annual Operating Hours:	8,760	hr
Daily Operating Hours:	24	hr

### Unpaved Haul Road

Parameter	Value	Unit
Empty Vehicle Weight <sup>1</sup>	16	ton
Load Size <sup>2</sup>	31.43	ton
Loaded Vehicle Weight <sup>3</sup>	47.43	ton
Mean Vehicle Weight <sup>4</sup>	31.72	ton
Vehicles Per Day <sup>5</sup>	48	VPD
Vehicles Per Year	177	VPY
Segment Length	1.58	mile
Trips per Segment	2	-
Effective Segment Length <sup>6</sup>	3.16	mile
Trips per Hour <sup>7</sup>	4	-
Wet Days <sup>8</sup>	70	day
Surface Silt Content <sup>9</sup>	4.8	%
Control Efficiency	78%	%

<sup>1</sup> Empty vehicle weight includes driver and occupants and full fuel load.

<sup>2</sup> Include cargo, transported materials, etc. (-62.20 lb/ft<sup>3</sup> / 7,49052 gal/ft<sup>3</sup> \* 7560 gal truck/ 2000b/ton)

<sup>3</sup> Loaded vehicle weight = Empty + Load Size

<sup>4</sup> Mean Vehicle weight = (Loaded Weight + Empty Weight) / 2

<sup>5</sup> Vehicles per day = Condensate and produced water throughput / 7560 gal truck

<sup>6</sup> Effective segment length = trips per segment \* segment length

<sup>7</sup> Trips per hour = Vehicles per day \* Segments per trip = Hours of Operation per Day

<sup>8</sup> Wet days is the NM default allowed by NMED without additional justification

<sup>9</sup> Surface silt content based on AP-42 Section 13.2.2.2, Table 13.2.2-1

### Unpaved Road Emission Factors

Route	Calculation Parameters <sup>1</sup>									Hourly Emission Factors			Annual Emission Factors		
	s	W	P	k			a			b			E <sup>2</sup>		
	Silt Content <sup>1</sup> %	Mean Vehicle Weight <sup>2</sup> tons	Wet Days <sup>3</sup> day	TSP	PM <sub>10</sub>	PM <sub>2.5</sub>	TSP	PM <sub>10</sub>	PM <sub>2.5</sub>	TSP	PM <sub>10</sub>	PM <sub>2.5</sub>	TSP	PM <sub>10</sub>	PM <sub>2.5</sub>
Sour Water Trucks	4.8	31.72	70	4.9	1.5	0.15	0.7	0.9	0.9	0.45	0.45	0.45	7.46	1.90	0.19

<sup>1</sup> Constants are from AP-42 Table 13.2.2-2 in Section 13.2.2.2, and emission factors are calculated using equation 1a.

### Unpaved Road Emissions

Route	Calculation Inputs						Uncontrolled Emissions						Controlled Emissions <sup>4</sup>					
	Annual Operation	Segment Length	Trips per Segment	Number of Trucks per Year	Effective Segment Length	Average VMT/yr <sup>5</sup>	TSP		PM <sub>10</sub>		PM <sub>2.5</sub>		TSP		PM <sub>10</sub>		PM <sub>2.5</sub>	
	hr	mi		trucks/yr	mi	mi/yr	lb/hr	tpy	lb/hr	tpy	lb/hr	tpy	lb/hr	tpy	lb/hr	tpy	lb/hr	tpy
Sour Water Trucks	8,760	1.58	2	177,4998	3.16	561	0.48	1.69	0.12	0.43	0.012	0.043	0.11	0.38	0.027	0.10	0.0027	0.010
Totals							0.48	1.69	0.12	0.43	0.012	0.043	0.11	0.38	0.027	0.10	0.0027	0.010

<sup>1</sup> Surface silt = % of 75 micron diameter and smaller particles

<sup>2</sup>  $E = k \times (s/12)^{-0.5} \times a \times (W/3)^{-0.5}$  (AP-42 page 13.2.2-4 Equation 1a, November 2006)

E = Size Specific Emission Factor (lb/VMT)

s = surface material silt content (%)

k, a, b = constants from AP-42 Table 13.2.2-2

W = Weighted Mean Vehicle Weight from Haul Road Inputs (tons)

<sup>3</sup> PM<sub>10</sub> emission factor in equation 1a assumed as a surrogate for TSP emissions

<sup>4</sup> VMT/yr = Vehicle Miles Travelled per year = Trips per year \* Segment Length

<sup>5</sup> Wet Day Emission Factor =  $E \times (365 - \text{Wet Days})/365$ . Wet days value is the NM default allowed by NMED without additional justification.

<sup>6</sup> Controlled Emissions = Uncontrolled Emissions \* (1 - Control Factor/100%)

Control Efficiency = 78%

Control<sub>u</sub> = Control<sub>u</sub> + (1-Control<sub>u</sub>) \* Control<sub>u</sub>

Control<sub>u</sub> = 60% for Base Course + (1-60% for Base Course) \* 44% for Speed Limit

Control<sub>u</sub> = 78%

## Train 1 Flare Malfunction

Emission Unit: 1-EP-2  
 Source Description: Flare M  
 Manufacturer:

Destruction Efficiency: 98% Manufacturer guaranteed DRE for C3+ & H<sub>2</sub>S

## Fuel Data

## Flare Pilot

Flow Rate	500.0	scf/hr	Design
Flow Rate	0.00050	MMscf/hr	
Fuel heat value	1,050.00	Btu/scf	Estimated pipeline gas, HHV
Fuel usage	0.53	MMBtu/hr	
Flow Rate	4.38	MMscf/yr	

## Purge Gas

Flow Rate	2,000.00	scf/hr	Eng Estimate
Flow Rate	0.0020	MMscf/hr	scf/hr / 10 <sup>6</sup>
Fuel heat value	1050.00	Btu/scf	Estimated pipeline gas, HHV
Fuel usage	2.1	MMBtu/hr	MMscf/hr * Btu/scf
Flow Rate	17.5	MMscf/yr	

## Flare Malfunction

Flow Rate	75.00	MMscf/d	Engineering estimate
Flow Rate	3,125.00	Mscf/hr	
Flow Rate	3,125,000.00	scf/hr	Input flow rate (MMscf/day) * (1 day/24 hr) * (10 <sup>6</sup> scf/MMscf)
Flow Rate	3,625.00	Mscf/yr	
Fuel heat value	1,204.95	Btu/scf	ProMax, Inlet Gas
Fuel usage	3,765.47	MMBtu/hr	(scf/hr) * (Btu/scf) * (MMBtu/10 <sup>6</sup> Btu)

Inlet Gas Analysis <sup>4</sup>							
Composition <sup>1</sup>	Mol%	MW <sup>1</sup>	MW*Mol%	Spec. Volume (scf/lb) <sup>1</sup>	Heating Value (Btu/scf) <sup>1</sup>	Mass Flow (lb/hr) <sup>2</sup>	Mass Flow (lb/yr) <sup>3</sup>
Carbon Dioxide	6.009%	44.01	2.645	8.623	0.0	21777.1	25261.4
Nitrogen	2.305%	28.013	0.646	13.547	0.0	5316.3	6167.0
Hydrogen Sulfide	0.0012%	34.076	0.000	11.135	637.0	3.4	3.9
Methane	70.694%	16.043	11.341	23.65	1009.7	93411.9	108357.8
Ethane	11.117%	30.07	3.343	12.62	1768.7	27527.8	31932.2
Propane	5.881%	44.097	2.593	8.606	2517.2	21356.0	24772.9
i-Butane	0.744%	58.123	0.432	6.529	3252.6	3560.8	4130.5
n-Butane	1.818%	58.123	1.057	6.529	3262	8701.3	10093.5
i-Pentane	0.450%	72.15	0.325	5.26	3999.7	2675.5	3103.6
n-Pentane	0.464%	72.15	0.335	5.26	4008.7	2758.3	3199.6
Hexanes	0.286%	86.178	0.246	4.4	4756.1	2030.5	2355.4
Heptanes	0.143%	100.205	0.143	3.787	5502.8	1180.0	1368.8
Benzene	0.024%	78.114	0.019	4.858	3741.9	154.6	179.4
Toluene	0.011%	92.141	0.010	4.119	4474.8	79.8	92.6
Xylene	0.004%	106.16	0.005	3.574	4957	38.5	44.7
Ethylbenzene	0.001%	106.17	0.001	3.574	4970.6	7.9	9.1
Octane	0.048%	114.23	0.054	3.322	5796.1	448.1	519.8
VOC Total	9.9%		5.22			42,991.2	49,869.8
Total	100%		23.20			191,027.6	221,592.0

## Emission Rates

## Pilot+ Purge Gas

NOx	CO	VOC	H <sub>2</sub> S	SO <sub>2</sub>	Units	
0.0680	0.31				lb/MMBtu	Table 13.5-1; AP-42 Section 13
			3.57E-04		lb H <sub>2</sub> S/Mscf	Purchased sweet natural gas fuel, 0.25 gr H <sub>2</sub> S/100scf
			8.93E-04		lb H <sub>2</sub> S/hr	H <sub>2</sub> S rate * fuel usage
				7.14E-03	lb S/Mscf	Purchased sweet natural gas fuel, 5 gr S/100scf
				1.79E-02	lb SO <sub>2</sub> /hr	SO <sub>2</sub> rate * fuel usage
		0.00%			mol%	Assume no VOC content in purchased fuel (methane)
		23.7			ft <sup>3</sup> /lb	Specific volume
		0.00			lb/hr	vol. Gas * mole fraction / specific volume
				98%	%	Estimated conversion of combusted H <sub>2</sub> S to SO <sub>2</sub>
0.18	0.81	0.00	1.79E-05	0.0016	lb/hr	
0.78	3.56	0.0	7.82E-05	0.0072	tpy	

## Potential M Emission Rate

NOx	CO	VOC	H <sub>2</sub> S	SO <sub>2</sub>	Units	
0.068	0.31				lb/MMBtu	AP-42 Table 13.5 Emission Factors
				98%	%	Estimated conversion of combusted H <sub>2</sub> S to SO <sub>2</sub>
256.1	1,167.3	859.8	0.067	6.2	lb/hr	lb/MMBtu * MMBtu/hr
n-Hexane	Benzene	Toluene	Xylene	Ethylbenzene	Total HAPs	
40.6	3.1	1.6	0.77	0.16	46.2	lb/hr

## Notes

<sup>1</sup> From "Physical Properties of Hydrocarbons"

<sup>2</sup> Flow (lb/hr) = Volume (Mscf/event) / Duration (hr/event) \* 1000cf/Mscf / Sp. Vol. (scf/lb) \* Mol%

<sup>3</sup> Flow (tons/yr) = Volume (Mscf/yr) \* 1000scf/Mscf / Sp. Vol. (scf/lb) \* Mol%

<sup>4</sup> Inlet analysis from ProMax

**Train 1 Flare (Malfunction)****§98.233(n) Flare stack GHG emissions.****Pilot & Purge Gas & SSM****Step 1. Calculate contribution of un-combusted CH<sub>4</sub> emissions**

$$E_{a,CH_4} \text{ (un-combusted)} = V_a * (1 - \eta) * X_{CH_4} \quad (\text{Equation W-39B})$$

where:

 $E_{a,CH_4}$  = contribution of annual un-combusted CH<sub>4</sub> emissions from regenerator in cubic feet under actual conditions. $V_a$  = volume of gas sent to combustion unit during the year (cf) $\eta$  = Fraction of gas combusted by a burning flare (or regenerator), default value from Subpart W = 0.98For gas sent to an unlit flare,  $\eta$  is zero. $X_{CH_4}$  = Mole fraction of CH<sub>4</sub> in gas to the flare = 0.7069 Inlet Gas Analysis 1.0 pilot +Purge gas<sup>1</sup>**Step 2. Calculate contribution of un-combusted CO<sub>2</sub> emissions**

$$E_{a,CO_2} = V_a * X_{CO_2} \quad (\text{Equation W-20})$$

where:

 $E_{a,CO_2}$  = contribution of annual un-combusted CO<sub>2</sub> emissions from regenerator in cubic feet under actual conditions. $V_a$  = volume of gas sent to combustion unit during the year (cf) $X_{CO_2}$  = Mole fraction of CO<sub>2</sub> in gas to the flare = 0.060 Inlet Gas Analysis 0.0 pilot +Purge gas<sup>1</sup>**Step 3. Calculate contribution of combusted CO<sub>2</sub> emissions**

$$E_{a,CO_2} \text{ (combusted)} = \sum (\eta * V_a * Y_i * R_i) \quad (\text{Equation W-21})$$

where:

 $\eta$  = Fraction of gas combusted by a burning flare (or regenerator) = 0.98For gas sent to an unlit flare,  $\eta$  is zero. $V_a$  = volume of gas sent to combustion unit during the year (cf) $Y_i$  = mole fraction of gas hydrocarbon constituents:

Constituent J, Methane =	0.7069	Gas Analysis
Constituent J, Ethane =	0.1112	
Constituent J, Propane =	0.0588	
Constituent J, Butane =	0.02562	
Constituent J, Pentanes Plus =	0.0143	

 $R_i$  = number of carbon atoms in the gas hydrocarbon constituent:

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).**

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

where:

 $E_{s,n}$  = GHG volumetric emissions at standard temperature and pressure (STP) in cubic feet $E_{a,n}$  = GHG volumetric emissions at actual conditions (cf) $T_s$  = Temperature at standard conditions (F) = 60 F $T_a$  = Temperature at actual conditions (F) = 76 F

(Based on Annual Avg Max Temperature for Hobbs, NM from Western)

 $P_s$  = 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<sub>4</sub> and CO<sub>2</sub> mass emissions (ton).**

$$\text{Mass}_{s,n} = E_{s,n} * \rho_i * 0.0011023 \quad (\text{Equation W-36})$$

where:

 $\text{Mass}_{s,n}$  = GHG (CO<sub>2</sub>, CH<sub>4</sub>, or N<sub>2</sub>O) mass emissions at standard conditions in tons (tpy) $E_{s,n}$  = GHG (CO<sub>2</sub>, CH<sub>4</sub>, or N<sub>2</sub>O) volumetric emissions at standard conditions (cf) $\rho_i$  = Density of GHG i. Use:

CH <sub>4</sub> :	0.0192 kg/ft <sup>3</sup> (at 60F and 14.7 psia)
CO <sub>2</sub> :	0.0526 kg/ft <sup>3</sup> (at 60F and 14.7 psia)

**Step 6. Calculate annual N<sub>2</sub>O emissions from portable or stationary fuel combustion sources under actual conditions (cf) using Equation W-40.**

$$\text{Mass}_{s,N_2O} = 0.0011023 * \text{Fuel} * \text{HHV} * \text{EF} \quad (\text{Equation W-40})$$

where:

 $\text{Mass}_{s,N_2O}$  = annual N<sub>2</sub>O 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

Pilot &amp; Purge gas HHV = 0.0011 MMBtu/scf

Inlet Gas HHV = 0.0012 MMBtu/scf

EF = 1.00E-04 kg N<sub>2</sub>O/MMBtu10<sup>3</sup> = conversion factor from kg to metric tons.**Step 7. Calculate total annual emission from flare by summing Equations W-40, W-19, W-20, and W-21.**

Gas Sent to Flare	Gas Sent to Flare (cf/yr)	CH <sub>4</sub> Un-Combusted, $E_{a,CH_4}$ (cf)	CO <sub>2</sub> Un-Combusted, $E_{a,CO_2}$ (cf)	CO <sub>2</sub> Combusted, $E_{a,CO_2}$ (cf)	CH <sub>4</sub> Un-Combusted, $E_{a,CH_4}$ (scf)	CO <sub>2</sub> Un-Combusted, $E_{a,CO_2}$ (scf)	CO <sub>2</sub> Combusted, $E_{a,CO_2}$ (scf)	CH <sub>4</sub> Un-Combusted, $E_{a,CH_4}$ (tpy)	CO <sub>2</sub> Un-Combusted, $E_{a,CO_2}$ (tpy)	CO <sub>2</sub> Combusted, $E_{a,CO_2}$ (tpy)	N <sub>2</sub> O Mass Emissions (tpy)	CO <sub>2e</sub> (tpy)
Pilot & Purge <sup>1</sup>	21,900,000	438,000	0	21,462,000	424,579	0	20,809,294	8.99	0.00	1,206.54	0.00253	1432.0
SSM	3,625,000	51253	217,829	4,546,279	49,695	211,204	4,408,016	1.05	12.25	255.58	0.00046	294.3

	CO <sub>2</sub>	CH <sub>4</sub>	N <sub>2</sub> O
GWP	1	25	298



## Trains 2 and 3 Flares

Emission Unit: 2-EP-2a, 3-EP-2a  
 Source Description: Flare M  
 Manufacturer:

Destruction Efficiency: 98% Manufacturer guaranteed DRE for C3+ & H<sub>2</sub>S

## Fuel Data

## Flare Pilot

Flow Rate	500.0	scf/hr	Design
Flow Rate	0.00050	MMscf/hr	
Fuel heat value	1,050.00	Btu/scf	Estimated pipeline gas, HHV
Fuel usage	0.53	MMBtu/hr	
Flow Rate	4.38	MMscf/yr	

## Purge Gas

Flow Rate	2,000.00	scf/hr	Eng Estimate
Flow Rate	0.0020	MMscf/hr	scf/hr / 10 <sup>6</sup>
Fuel heat value	1050.00	Btu/scf	Estimated pipeline gas, HHV
Fuel usage	2.1	MMBtu/hr	MMscf/hr * Btu/scf
Flow Rate	17.5	MMscf/yr	

## Flare Malfunction

Flow Rate	200.00	MMscf/d	Engineering estimate
Flow Rate	8,333.33	Mscf/hr	
Flow Rate	8,333,333.33	scf/hr	Input flow rate (MMscf/day) * (1 day/24 hr) * (10 <sup>6</sup> scf/MMscf)
Flow Rate	9,666.67	Mscf/yr	
Fuel heat value	1,204.95	Btu/scf	ProMax, Inlet Gas
Fuel usage	10,041.25	MMBtu/hr	(scf/hr) * (Btu/scf) * (MMBtu/10 <sup>6</sup> Btu)

Inlet Gas Analysis <sup>4</sup>							
Composition <sup>1</sup>	Mol%	MW <sup>2</sup>	MW* Mol%	Spec. Volume (scf/lb) <sup>3</sup>	Heating Value (Btu/scf) <sup>1</sup>	Mass Flow (lb/hr) <sup>2</sup>	Mass Flow (lb/yr) <sup>3</sup>
Carbon Dioxide	6.009%	44.01	2.645	8.623	0.0	58072.2	67363.7
Nitrogen	2.305%	28.013	0.646	13.547	0.0	14176.9	16445.2
Hydrogen Sulfide	0.0012%	34.076	0.000	11.136	637.0	9.0	10.4
Methane	70.694%	16.043	11.341	23.65	1009.7	249098.3	288954.1
Ethane	11.117%	30.07	3.343	12.62	1768.7	73407.4	85152.5
Propane	5.881%	44.097	2.593	8.606	2517.2	56949.2	66051.1
i-Butane	0.744%	58.123	0.432	6.529	3252.6	9495.3	11014.6
n-Butane	1.818%	58.123	1.057	6.529	3262	23203.5	26916.1
i-Pentane	0.450%	72.15	0.325	5.26	3999.7	7134.6	8276.2
n-Pentane	0.464%	72.15	0.335	5.26	4008.7	7355.4	8532.2
Hexanes	0.286%	86.178	0.246	4.4	4756.1	5414.7	6281.0
Heptanes	0.143%	100.205	0.143	3.787	5502.8	3146.7	3650.1
Benzene	0.024%	78.114	0.019	4.858	3741.9	412.4	478.3
Toluene	0.011%	92.141	0.010	4.119	4474.8	212.8	246.8
Xylene	0.004%	106.16	0.005	3.574	4957	102.8	119.2
Ethylbenzene	0.001%	106.17	0.001	3.574	4970.6	21.0	24.4
Octane	0.048%	114.23	0.054	3.322	5796.1	1194.9	1386.1
VOC Total	9.9%		5.22			114,643.2	132,986.1
Total	100%		23.20			509,407.0	590,912.1

## Emission Rates

## Pilot+ Purge Gas

NOx	CO	VOC	H <sub>2</sub> S	SO <sub>2</sub>	Units	
0.0680	0.31				lb/MMBtu	Table 13.5-1; AP-42 Section 13
			3.57E-04		lb H <sub>2</sub> S/Mscf	Purchased sweet natural gas fuel, 0.25 gr H <sub>2</sub> S/100scf
			8.93E-04		lb H <sub>2</sub> S/hr	H <sub>2</sub> S rate * fuel usage
				7.14E-03	lb S/Mscf	Purchased sweet natural gas fuel, 5 gr S/100scf
				1.79E-02	lb SO <sub>2</sub> /hr	SO <sub>2</sub> rate * fuel usage
		0.00%			mol%	Assume no VOC content in purchased fuel (methane)
		23.7			ft <sup>3</sup> /lb	Specific volume
		0.00			lb/hr	Vol. Gas * mole fraction / specific volume
				98%	%	Estimated conversion of combusted H <sub>2</sub> S to SO <sub>2</sub>
0.18	0.81	0.00E+00	1.79E-05	0.0016	lb/hr	
0.78	3.56	0.0	7.82E-05	0.0072	tpy	

## Potential M Emission Rate

NOx	CO	VOC	H <sub>2</sub> S	SO <sub>2</sub>	Units	
0.068	0.31				lb/MMBtu	AP-42 Table 13.5 Emission Factors
				98%	%	Estimated conversion of combusted H <sub>2</sub> S to SO <sub>2</sub>
682.8	3,112.8	2,292.9	0.180	16.6	lb/hr	lb/MMBtu * MMBtu/hr
n-Hexane	Benzene	Toluene	Xylene	Ethylbenzene	Total HAPs	
108.3	8.2	4.3	2.1	0.4	123.3	lb/hr

## Notes

<sup>1</sup> From "Physical Properties of Hydrocarbons"

<sup>2</sup> Flow (lb/hr) = Volume (Mscf/event) / Duration (hr/event) \* 1000cf/Mscf / Sp. Vol. (scf/lb) \* Mol%

<sup>3</sup> Flow (tons/yr) = Volume (Mscf/yr) \* 1000scf/Mscf / Sp. Vol. (scf/lb) \* Mol%

<sup>4</sup> Inlet analysis from ProMax

## Trains 2 and 3 Emergency Flares

Emission Units: 2-EP-2a, 3-EP-2a

**998,233(n) Flare stack GHG emissions.**

Pilot &amp; Purge Gas &amp; SSM

Step 1. Calculate contribution of un-combusted CH<sub>4</sub> emissions

$$E_{a,CH_4}(\text{un-combusted}) = V_a \cdot (1 - \eta) \cdot X_{CH_4} \quad (\text{Equation W-39B})$$

where:

 $E_{a,CH_4}$  = contribution of annual un-combusted CH<sub>4</sub> emissions from regenerator in cubic feet under actual conditions. $V_a$  = volume of gas sent to combustion unit during the year (cf) $\eta$  = Fraction of gas combusted by a burning flare (or regenerator), default value from Subpart W = 0.98For gas sent to an unlit flare,  $\eta$  is zero. $X_{CH_4}$  = Mole fraction of CH<sub>4</sub> in gas to the flare = 0.7069 Inlet Gas Analysis 1.0 pilot +Purge gas<sup>1</sup>Step 2. Calculate contribution of un-combusted CO<sub>2</sub> emissions

$$E_{a,CO_2} = V_a \cdot X_{CO_2} \quad (\text{Equation W-20})$$

where:

 $E_{a,CO_2}$  = contribution of annual un-combusted CO<sub>2</sub> emissions from regenerator in cubic feet under actual conditions. $V_a$  = volume of gas sent to combustion unit during the year (cf) $X_{CO_2}$  = Mole fraction of CO<sub>2</sub> in gas to the flare = 0.060 Inlet Gas Analysis 0.0 pilot +Purge gas<sup>1</sup>Step 3. Calculate contribution of combusted CO<sub>2</sub> emissions

$$E_{a,CO_2}(\text{combusted}) = \sum (\eta \cdot V_a \cdot Y_i \cdot R_i) \quad (\text{Equation W-21})$$

where:

 $\eta$  = Fraction of gas combusted by a burning flare (or regenerator) = 0.98For gas sent to an unlit flare,  $\eta$  is zero. $V_a$  = volume of gas sent to combustion unit during the year (cf) $Y_i$  = mole fraction of gas hydrocarbon constituents:

Constituent j, Methane =	0.7069	Gas Analysis
Constituent j, Ethane =	0.1112	
Constituent j, Propane =	0.0588	
Constituent j, Butane =	0.02562	
Constituent j, Pentanes Plus =	0.0143	

 $R_i$  = number of carbon atoms in the gas hydrocarbon constituent:

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).

$$E_{v,n} = \frac{E_{a,n}}{(459.67 + T_a)} \cdot P_a \quad (\text{Equation W-33})$$

where:

 $E_{v,n}$  = GHG volumetric emissions at standard temperature and pressure (STP) in cubic feet $E_{a,n}$  = GHG volumetric emissions at actual conditions (cf) $T_s$  = Temperature at standard conditions (F) = 50 F $T_a$  = Temperature at actual conditions (F) = 76 F (Based on Annual Avg Max Temperature for Hobbs, NM from $P_s$  = 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<sub>4</sub> and CO<sub>2</sub> mass emissions (ton).

$$\text{Mass}_{i,j} = E_{v,i} \cdot \rho_i \cdot 0.0011023 \quad (\text{Equation W-36})$$

where:

 $\text{Mass}_{i,j}$  = GHG (CO<sub>2</sub>, CH<sub>4</sub>, or N<sub>2</sub>O) mass emissions at standard conditions in tons (tpy) $E_{v,i}$  = GHG (CO<sub>2</sub>, CH<sub>4</sub>, or N<sub>2</sub>O) volumetric emissions at standard conditions (cf) $\rho_i$  = Density of GHG i. Use:CH<sub>4</sub>: 0.0192 kg/ft<sup>3</sup> (at 60F and 14.7 psia)CO<sub>2</sub>: 0.0326 kg/ft<sup>3</sup> (at 60F and 14.7 psia)Step 6. Calculate annual N<sub>2</sub>O emissions from portable or stationary fuel combustion sources under actual conditions (cf) using Equation W-40.

$$\text{Mass}_{N_2O} = 0.0011023 \cdot \text{Fuel} \cdot \text{HHV} \cdot \text{EF} \quad (\text{Equation W-40})$$

where:

 $\text{Mass}_{N_2O}$  = annual N<sub>2</sub>O 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

Pilot &amp; Purge gas HHV = 0.0011 MMBtu/scf

Inlet Gas HHV = 0.0012 MMBtu/scf

EF = 1.00E-04 kg N<sub>2</sub>O/MMBtu10<sup>-9</sup> = conversion factor from kg to metric tons.

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

Gas Sent to Flare	Gas Sent to Flare (cf/yr)	CH <sub>4</sub> Un-Combusted, $E_{a,CH_4}$ (cf)	CO <sub>2</sub> Un-Combusted, $E_{a,CO_2}$ (cf)	CO <sub>2</sub> Combusted, $E_{a,CO_2}$ (cf)	CH <sub>4</sub> Un-Combusted, $E_{a,CH_4}$ (scf)	CO <sub>2</sub> Un-Combusted, $E_{a,CO_2}$ (scf)	CO <sub>2</sub> Combusted, $E_{a,CO_2}$ (scf)	CH <sub>4</sub> Un-Combusted, $E_{a,CH_4}$ (tpy)	CO <sub>2</sub> Un-Combusted, $E_{a,CO_2}$ (tpy)	CO <sub>2</sub> Combusted, $E_{a,CO_2}$ (tpy)	N <sub>2</sub> O Mass Emissions (tpy)	CO <sub>2e</sub> (tpy)
Pilot & Purge <sup>1</sup>	21,900,000	438000	0	21,462,000	424,679	0	20,809,294	8.99	0.00	1,206.54	0.00253	1432.0
SSM	9,666,667	136673	580,878	12,123,409	132,519	563,212	11,754,710	2.80	32.66	681.55	0.00128	784.7

	CO <sub>2</sub>	CH <sub>4</sub>	N <sub>2</sub> O
GWP	1	25	298

Note: <sup>1</sup> Pilot+purge fuel is pipeline quality and assumed to be methane.

Red Hills Gas Processing Plant

## Flare / Vapor Combustor

A) Enter information into the blue boxes.

B) See notes/instructions included below.

Unit EPN  
Unit Name

5-EP-2  
Cryo 5 & 6 Flare Malfunction

Flare EPN: 5-EP-2							
	Gas Stream 1	Gas Stream 2	Gas Stream 3		Gas Stream 1	Gas Stream 2	Gas Stream 3
Emission Unit ID	Sweep Gas	To Mole Sieve Stream		Hourly Gas Routed to Flare (MMBtu/hr)	2.295	12017.60166	
Hourly Gas Stream to Flare (Mscf/hr)	2.25	9607.63		Annual Gas Routed to Flare (MMBtu/yr)	20104.2	13940.42	
Annual Gas Stream to Flare (MMscf/yr)	19.71	11.14		Pilot Gas Routed to Flare (MMBtu/hr)	0.1989	0	
Max. Heat Value of Gas (Btu/scf)	1020	1250.84		Gas MW (lb/lbmol)	16.82	21.23	
Flare operational time (hr/yr)	8760	1.16		Gas Pressure (psia)	14.7	863.196	
Field Gas Mol Fraction (lbmol H <sub>2</sub> S/lb-mol)	-	-	-	Gas Temperature (°F)	70	123.308	
Field Gas Sulfur Content (S grains/100scf)	-	-	-	Field Gas H <sub>2</sub> S Wt.% to Flare (%)	0.0061	0.0000	
Pilot Gas to Flare (Mscf/hr)	0.195			Flare Control Efficiency	98	98	
Max. Heat Value of Pilot Gas (Btu/scf)	1020			Total VOC wt.% to Flare (%)	0.1573	22.6264	
Pilot Gas H <sub>2</sub> S Wt.% to Flare (%)	0.0061			Source of Flare Emission Factors	TCEQ	TCEQ	
Pilot Gas MW (lb/lbmol)	16.82			Use Highest NO <sub>x</sub> & CO Emission Factors From AP-42 or TCEQ	NO	NO	

Flare, Vapor Combustion Devices & Enclosed Devices Emission Factors			
Contaminant	Assist Type	AP-42 Emission Factor (lb/MMBtu)	TCEQ Emission Factors (lb/MMBtu)
NO <sub>x</sub>	Steam (Btu/scf >1000)	0.068	0.0485
	Steam (Btu/scf <1000)	0.068	0.068
	Air or Unassisted (Btu/scf >1000)	0.068	0.138
	Air or Unassisted (Btu/scf <1000)	0.068	0.0641
CO	Steam (Btu/scf >1000)	0.31	0.3503
	Steam (Btu/scf <1000)	0.31	0.3465
	Air or Unassisted (Btu/scf >1000)	0.31	0.2755
	Air or Unassisted (Btu/scf <1000)	0.31	0.5496
VOC	Air or Unassisted	0.0054	--

Total Emissions to Flare															
Pollutant	NO <sub>x</sub>			CO			VOC			SO <sub>2</sub>			H <sub>2</sub> S		
Gas Stream To Flare	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3
Uncontrolled (pph)	0.00	0.00	0.00	0.00	0.00	0.00	0.15	121549.60	0.00	0.00	0.00	0.00	0.01	0.00	0.00
Uncontrolled (tpy)	0.00	0.00	0.00	0.00	0.00	0.00	0.68	70.50	0.00	0.00	0.00	0.00	0.03	0.00	0.00
Field Gas (pph)	0.32	1658.43	0.00	0.63	3310.85	0.00	0.00	2430.99	0.00	0.01	0.00	0.00	0.00	0.00	0.00
Field Gas (tpy)	1.39	0.96	0.00	2.77	1.92	0.00	0.01	1.41	0.00	0.00	0.00	0.00	0.001	0.00	0.00
Pilot Gas (pph)	0.0274	0.0000	0.0000	0.0548	0.0000	0.0000	0.0011	0.0000	0.0000	0.0010	0.0000	0.0000	0.0000	0.0000	0.0000
Pilot Gas (tpy)	0.1202	0.0000	0.0000	0.2400	0.0000	0.0000	0.0047	0.0000	0.0000	0.0043	0.0000	0.0000	0.0000	0.0000	0.0000
Subtotal Flare (pph)	0.3442	1658.4290	0.0000	0.6871	3310.8493	0.0000	0.0042	2430.9920	0.0000	0.0122	0.0000	0.0000	0.0001	0.0000	0.0000
Subtotal Flare (tpy)	1.5074	0.9619	0.0000	3.0094	1.9203	0.0000	0.0182	1.4100	0.0000	0.0043	0.0000	0.0000	0.0006	0.0000	0.0000
Total Flare (pph)	1658.7732			3311.5363			2430.9962			0.0122			0.0001		

Red Hills Gas Processing Plant

## Flare / Vapor Combustor

A) Enter information into the blue boxes.

B) See notes/instructions included below.

Unit EPN

7-EP-2

Unit Name

Cryo 7 Flare Malfunction

Flare EPN: 7-EP-2							
	Gas Stream 1	Gas Stream 2	Gas Stream 3		Gas Stream 1	Gas Stream 2	Gas Stream 3
Emission Unit ID	Sweep Gas	To Mole Sieve Stream		Hourly Gas Routed to Flare (MMBtu/hr)	2.295	12017.60166	
Hourly Gas Stream to Flare (Mscf/hr)	2.25	9607.63		Annual Gas Routed to Flare (MMBtu/yr)	20104.2	13940.42	
Annual Gas Stream to Flare (MMBtu/yr)	19.71	11.14		Pilot Gas Routed to Flare (MMBtu/hr)	0.1989	0	
Max. Heat Value of Gas (Btu/scf)	1020	1250.84		Gas MW (lb/lbmol)	16.82	21.23	
Flare operational time (hr/yr)	8760	1.16		Gas Pressure (psia)	14.7	863.196	
Field Gas Mol Fraction (lbmol H <sub>2</sub> S/lb-mol)	-	-	-	Gas Temperature (°F)	70	123.308	
Field Gas Sulfur Content (S grains/100scf)	-	-	-	Field Gas H <sub>2</sub> S Wt.% to Flare (%)	0.0061	0	
Pilot Gas to Flare (Mscf/hr)	0.195			Flare Control Efficiency	98	98	
Max. Heat Value of Pilot Gas (Btu/scf)	1020			Total VOC wt.% to Flare (%)	0.1573	22.6264	
Pilot Gas H <sub>2</sub> S Wt.% to Flare (%)	0.0061			Source of Flare Emission Factors	TCEQ	TCEQ	
Pilot Gas MW (lb/lbmol)	16.82			Use Highest NO <sub>x</sub> & CO Emission Factors From AP-42 or TCEQ	NO	NO	

Flare, Vapor Combustion Devices & Enclosed Devices Emission Factors			
Contaminant	Assist Type	AP-42 Emission Factor (lb/MMBtu)	TCEQ Emission Factors (lb/MMBtu)
NO <sub>x</sub>	Steam (Btu/scf >1000)	0.068	0.0485
	Steam (Btu/scf <1000)	0.068	0.068
	Air or Unassisted (Btu/scf >1000)	0.068	0.138
	Air or Unassisted (Btu/scf <1000)	0.068	0.0641
CO	Steam (Btu/scf >1000)	0.31	0.3503
	Steam (Btu/scf <1000)	0.31	0.3465
	Air or Unassisted (Btu/scf >1000)	0.31	0.2755
	Air or Unassisted (Btu/scf <1000)	0.31	0.5496
VOC	Air or Unassisted	0.0054	--

Total Emissions to Flare															
Pollutant	NO <sub>x</sub>			CO			VOC			SO <sub>2</sub>			H <sub>2</sub> S		
Gas Stream To Flare	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3
Uncontrolled (pph)	0.00	0.00	0.00	0.00	0.00	0.00	0.15	121549.60	0.00	0.00	0.00	0.00	0.01	0.00	0.00
Uncontrolled (tpy)	0.00	0.00	0.00	0.00	0.00	0.00	0.68	70.50	0.00	0.00	0.00	0.00	0.03	0.00	0.00
Field Gas (pph)	0.32	1658.43	0.00	0.63	3310.85	0.00	0.00	2430.99	0.00	0.01	0.00	0.00	0.00	0.00	0.00
Field Gas (tpy)	1.39	0.96	0.00	2.77	1.92	0.00	0.01	1.41	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pilot Gas (pph)	0.0274	0.0000	0.0000	0.0548	0.0000	0.0000	0.0011	0.0000	0.0000	0.0010	0.0000	0.0000	0.0000	0.0000	0.0000
Pilot Gas (tpy)	0.1202	0.0000	0.0000	0.2400	0.0000	0.0000	0.0047	0.0000	0.0000	0.0043	0.0000	0.0000	0.0000	0.0000	0.0000
Subtotal Flare (pph)	0.3442	1658.4290	0.0000	0.6871	3310.8493	0.0000	0.0042	2430.9920	0.0000	0.0122	0.0000	0.0000	0.0001	0.0000	0.0000
Subtotal Flare (tpy)	1.5074	0.9619	0.0000	3.0094	1.9203	0.0000	0.0182	1.4100	0.0000	0.0043	0.0000	0.0000	0.0006	0.0000	0.0000
Total Flare (pph)		1658.7732			3311.5363			2430.9962		0.0122				0.0001	

## 2.5.EP.5

Hours of Haring per year	129
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Ratio for assist gas/flared gas fuel usage	
Assist gas	Misc./hr Ratio
Assist gas	0.2228 0.8612
Flared gas	0.036 0.1388
	0.259 1.0000



Lucid Energy Delaware, LLC  
Red Hills Gas Processing Plant

## Flare / Vapor Combustor

A) Enter information into the blue boxes.

B) See notes/instructions included below.

Unit EPN 5.5-EP-1b  
Unit Name AGI 2 Flare M

Flare EPN: 5.5-EP-1b							
	Gas Stream 1	Gas Stream 2	Gas Stream 3		Gas Stream 1	Gas Stream 2	Gas Stream 3
Emission Unit ID	Added Fuel Stream	Compressor Stream (900 gpm)	AGI 2 Compressors and VRU Blowdown	Hourly Gas Routed to Flare (MMBtu/hr)	85.00	9.57	0.15
Hourly Gas Stream to Flare (Mscf/hr)	83.33	126.39	1.999	Annual Gas Routed to Flare (MMBtu/yr)	5212.20	1173.34	0.30
Annual Gas Stream to Flare (MMscf/yr)	5.110	15.500	0.004	Pilot Gas Routed to Flare (MMBtu/hr)	0.39	0.00	0.00
Max. Heat Value of Gas (Btu/scf)	1020	75.7	75.7	Gas MW (lb/lbmol)	16.82	40.89	40.89
Flare operational time (hr/yr)	61.32	122.64	2	Gas Pressure (psia)	14.7	24.2	24.2
Field Gas Mol Fraction (lbmol H <sub>2</sub> S/lb-mol)	-	-	-	Gas Temperature (°F)	70	120	120
Field Gas Sulfur Content (S grains/100scf)	-	-	-	Field Gas H <sub>2</sub> S Wt.% to Flare (%)	0.0061	10.48	10.48
Pilot Gas to Flare (Mscf/hr)	0.38			Flare Control Efficiency	98	98	98
Max. Heat Value of Pilot Gas (Btu/scf)	1020			Total VOC wt.% to Flare (%)	0.1573	3.1622	3.1622
Pilot Gas H <sub>2</sub> S Wt.% to Flare (%)	0.0061			Source of Flare Emission Factors	TCEQ	TCEQ	TCEQ
Pilot Gas MW (lb/lbmol)	16.82			Use Highest NO <sub>x</sub> & CO Emission Factors From AP-42 or TCEQ	NO	NO	NO

Flare, Vapor Combustion Devices & Enclosed Devices Emission Factors			
Contaminant	Assist Type	AP-42 Emission Factor (lb/MMBtu)	TCEQ Emission Factors (lb/MMBtu)
NO <sub>x</sub>	Steam (Btu/scf >1000)	0.068	0.0485
	Steam (Btu/scf <1000)	0.068	0.068
	Air or Unassisted (Btu/scf >1000)	0.068	0.138
	Air or Unassisted (Btu/scf <1000)	0.068	0.0641
CO	Steam (Btu/scf >1000)	0.31	0.3503
	Steam (Btu/scf <1000)	0.31	0.3465
	Air or Unassisted (Btu/scf >1000)	0.31	0.2755
	Air or Unassisted (Btu/scf <1000)	0.31	0.5496
VOC	Air or Unassisted	0.0054	--

Total Emissions to Flare															
Pollutant	NO <sub>x</sub>			CO			VOC			SO <sub>2</sub>			H <sub>2</sub> S		
Gas Stream To Flare	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3
Uncontrolled (pph)	0.00	0.00	0.00	0.00	0.00	0.00	5.73	424.46	6.71	0.00	0.00	0.00	0.22	1406.48	22.25
Uncontrolled (tpy)	0.00	0.00	0.00	0.00	0.00	0.00	0.18	26.03	0.01	0.00	0.00	0.00	0.01	86.25	0.02
Field Gas (pph)	11.73	0.61	0.01	23.42	5.26	0.08	0.46	8.49	0.13	0.42	2642.45	41.79	0.00	28.13	0.44
Field Gas (tpy)	0.36	0.04	0.00	0.72	0.32	0.00	0.01	0.52	0.00	0.01	162.03	0.04	0.00	1.72	0.00
Pilot Gas (pph)	0.0535	0.0000	0.0000	0.1068	0.0000	0.0000	0.0021	0.0000	0.0000	0.0019	0.0000	0.0000	0.0000	0.0000	0.0000
Pilot Gas (tpy)	0.2343	0.0000	0.0000	0.4677	0.0000	0.0000	0.0092	0.0000	0.0000	0.0083	0.0000	0.0000	0.0001	0.0000	0.0000
Subtotal Flare (pph)	11.7835	0.6133	0.0097	23.5243	5.2582	0.0832	0.4604	8.4892	0.1343	0.4177	2642.45	41.7948	0.0044	28.1296	0.4449
Subtotal Flare (tpy)	0.5939	0.0376	0.0000	1.1857	0.3224	0.0001	0.0232	0.5206	0.0001	0.0211	162.0350	0.0418	0.0002	1.7249	0.0004
Total Flare (pph)	12.4065			28.8657			9.0839			2684.6612			28.5789		

Notes: Pilot Gas to Flare (Cell D22) includes Pilot Gas and Sweep Gas.  
MW of SO<sub>2</sub> = 64.066  
MW of H<sub>2</sub>S = 34.1  
The acid gas routed to the flare will also be curtailed to half by reducing the inlet flow during startup, maintenance, and shut down. This is achieved by switching to the backup compressor within 30 minutes or by reducing the inlet flow for these periods.

AGI 2 Bare Inlet Gas Analysis						
Composition	Mols%	MW1	MW*MoL%	Spec. Volume (cc/lb)	Heating Value (Btu/ccf1)	Mass Flow (lb/hr)
Carbon Dioxide	80.185%	44.01	35.290	8.623	0.0	10188.0
Nitrogen	0.000%	28.013	0.000	13.547	0.0	0.0
Hydrogen Sulfide	12.571%	34.076	4.284	11.136	637.0	1236.8
Methane	0.091%	16.043	0.015	23.65	1009.7	4.2
Ethane	0.026%	30.07	0.008	12.62	1768.7	2.2
Propane		44.097	0.000	8.606	2517.2	0.0
i-Butane		58.123	0.000	6.529	3252.6	0.0
n-Butane		58.123	0.000	6.529	3262	0.0
Pentane		72.15	0.000	5.26	3999.7	0.0
n-Pentane		72.15	0.000	5.26	4008.7	0.0
Hexanes		86.178	0.000	4.4	4756.1	0.0
n-Heptanes		100.205	0.000	3.787	5502.8	0.0
Benzene		78.114	0.000	4.858	3741.9	0.0
Toluene		92.141	0.000	4.119	4474.8	0.0
Xylene		106.16	0.000	3.574	4957	0.0
Ethylbenzene		106.17	0.000	3.574	4970.6	0.0
Oxetane		114.23	0.000	3.322	5796.1	0.0
Water		18.04	1.281	0.016	0	486241.0
VOC Total	0.0%					0.0
Total	100%		40.88			11,431.2

Combustor Inlet Gas Analysis		Thermal Oxidizer Inlet Gas Analysis	
Composition	Mass Flow (lb/hr.)	Composition	Mass Flow (lb/hr.)
Nitrogen	0.000	N <sub>2</sub>	0.24
Methane	0.000	C <sub>1</sub>	47.42
Carbon Diox	0.000	C <sub>2</sub>	96.937
Ethane	0.000	C <sub>3</sub>	34.86
Propane	0.070	H <sub>2</sub> S	1.87
Isobutane	0.362	C <sub>3</sub>	36.89
n-Butane	2.943	iC <sub>4</sub>	6.04
Isopentane	6.719	nC <sub>4</sub>	24.97
n-Pentane	8.233	iC <sub>5</sub>	10.67
Cyclopentane	0.643	nC <sub>5</sub>	13.46
2-Methylper	0.000	C <sub>6</sub>	26.53
3-Methylper	0.000	C <sub>7</sub>	0.52
n-Hexane	10.844	C <sub>8</sub>	0.24
Methylcyclo	0.000	C <sub>9</sub>	0.20
Benzene	0.470	C <sub>10</sub>	0.000
Cyclohexane	0.513	Cyclopentane	5.13
2-Methylcyclo	0.000	Benzene	37.54
3-Methylcyclo	0.000	Cyclohexane	3.95
n-Heptane	0.169	Methylcyclo	1.58
2-Methylcyclo	0.215	2,2,4 Trimethyl	0.29
Toluene	0.316	Toluene	12.20
n-Octane	0.028	Ethylbenzene	0.50
Ethylbenzene	0.006	p-Xylene	2.42
n-Nonane	0.007	H <sub>2</sub> O	2041.17
n-Decane	0.000	Pinene	0.000
Undecane	0.000	Pegmatene	0.000
Isododecane	0.000	TEG	0.000

Composition	lb/hr
Hydrogen Sulfide	0.00
Nitrogen	0.06
Carbon Dioxide	0.00
Methane	0.03
Ethane	0.01
Propane	0.77
Isobutane	0.38
N-Butane	0.92
Isopentane	0.61
N-Pentane	0.43
Hexanes +	0.37



## Section 7

### Information Used to Determine Emissions

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

- ☐ If manufacturer data are used, include specifications for emissions units and control equipment, including control efficiencies specifications and sufficient engineering data for verification of control equipment operation, including design drawings, test reports, and design parameters that affect normal operation.
  - ☐ If test data are used, include a copy of the complete test report. If the test data are for an emissions unit other than the one being permitted, the emission units must be identical. Test data may not be used if any difference in operating conditions of the unit being permitted and the unit represented in the test report significantly effect emission rates.
  - ☐ If the most current copy of AP-42 is used, reference the section and date located at the bottom of the page. Include a copy of the page containing the emissions factors, and clearly mark the factors used in the calculations.
  - ☐ If an older version of AP-42 is used, include a complete copy of the section.
  - ☐ If an EPA document or other material is referenced, include a complete copy.
  - ☐ Fuel specifications sheet.
  - ☐ If computer models are used to estimate emissions, include an input summary (if available) and a detailed report, and a disk containing the input file(s) used to run the model. For tank-flashing emissions, include a discussion of the method used to estimate tank-flashing emissions, relative thresholds (i.e., permit or major source (NSPS, PSD or Title V)), accuracy of the model, the input and output from simulation models and software, all calculations, documentation of any assumptions used, descriptions of sampling methods and conditions, copies of any lab sample analysis.
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This section contains the following references or actual document to support the emissions in the required forms and calculations in Section 6:

**Documentation used to support calculations in this permit revision:**

- Inlet Gas analyses
- BR&E ProMax methanol tank report
- Tanks 4.0.9d report

SAMPLE ID		COLLECTION DATA	
Operator	Targa Resources Inc	Pressure	1006 psig
Location	Red Hills Processing Complex	Sample Temp	N/A
Site	Red Hills 1	Atm Temp	80 F
Site Type	Plant	Collection Date	07/26/2023
Sample Point	Plant Inlet	Collection Time	8:57 AM
Spot/Comp	Spot	Collection By	Mike McKinney
Meter ID		Pressure Base	14.730 psi
Purchaser		Temperature Base	60 F
Fluid	Gas	Container(s)	PL1611

### Onsite Testing by Stain Tube

METHOD	TYPE	MEAS VALUE	MOL%	GRAINS/100	PPMV
GPA2377	H2S	0.00 PPMV	0.0000	0.00	0.0

Mol%, Grains/100, PPMV are pressure and temperature corrected to base conditions.

### GPA 2286 Gas Extended Fractional Analysis

COMPOUND	FORMULA	MOL%	WT%	GPM
HELIUM	He	0.0190	0.0035	0.0019
NITROGEN	N2	1.5613	1.9844	0.1711
CARBON DIOXIDE	CO2	1.8379	3.6699	0.3124
*OXYGEN+ARGON	O2+Ar	0.0000	0.0000	0.0000
HYDROGEN SULFIDE	H2S	0.0000	0.0000	0.0000
METHANE	C1	74.7804	54.4308	12.6258
ETHANE	C2	11.8034	16.1032	3.1438
PROPANE	C3	5.9517	11.9075	1.6330
I-BUTANE	iC4	0.8249	2.1753	0.2688
N-BUTANE	nC4	1.8722	4.9372	0.5878
I-PENTANE	iC5	0.4229	1.3844	0.1540
N-PENTANE	nC5	0.4492	1.4705	0.1622
NEO-PENTANE	neC5	0.0000	0.0000	0.0000
HEXANES PLUS	C6+	0.4771	1.9333	0.1915
TOTALS:		100.0000	100.0000	19.2523

Value of "0.0000" interpreted as below detectable limit. Onsite H2S value is used in fractional if performed.

\*Oxygen+Argon: Compounds elute as single peak; additional testing required to distinguish each.

LIQUID YIELD	C2+	C3+	C4+	C5+	26# Liquid	10# Liquid
GAL/MSCF	6.1412	2.9974	1.3644	0.5077	0.7639	
CALC PROP	BTU/CF	Specific Gr.	Z Factor	Mol Weight	LB/SCF	Wobbe IDX
DRY	1,267.6	0.7636	0.9962	22.51	0.0596	1,450.6
WATER SAT.	1,246.9	0.7615	0.9958	22.12	0.0586	

C6+ ONLY	4,840.3	3.0837		89.31		
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# Hexanes Plus Detail - Red Hills Processing Complex:Red Hills 1:Plant Inlet:7/26/2023

C6 GROUP	FORMULA	MOL%	WT%
2,2-dimethylbutane	C6H14	0.004690	0.018338
2,3-dimethylbutane+cyclopentane	C6H14	0.016975	0.066371
2-methylpentane	C6H14	0.095346	0.372796
3-methylpentane	C6H14	0.043253	0.169116
benzene	C6H6	0.015599	0.055284
cyclohexane	C6H12	0.045889	0.175225
methylcyclopentane	C6H12	0.040069	0.153002
n-hexane	C6H14	0.101061	0.395141
<b>TOTALS:</b>		<b>0.362882</b>	<b>1.405273</b>

C7 GROUP	FORMULA	MOL%	WT%
1,1-dimethylcyclopentane+3-methylhexane	C7H16	0.013333	0.060616
2,2-dimethylpentane	C7H16	0.001105	0.005024
2,3-dimethylpentane	C7H16	0.002382	0.010829
2,4-dimethylhexane+ethylcyclopentane	C7H14	0.001635	0.007284
2,4-dimethylpentane	C7H16	0.000233	0.001059
2-methylhexane	C7H16	0.010920	0.049646
3,3-dimethylpentane	C7H16	0.000560	0.002546
cis-1,3-dimethylcyclopentane+3-Ethylpentane	C7H14	0.004702	0.020947
cycloheptane	C7H14	0.000000	0.000000
methylcyclohexane+2,2-dimethylhexane+2,2,4-trimethylpentane	C7H14	0.024620	0.109679
n-heptane	C7H16	0.021652	0.098437
toluene	C7H8	0.007627	0.031885
trans-1,2-dimethylcyclopentane+cis-1,2-Dimethylcyclopentane	C7H14	0.001110	0.004945
trans-1,3-dimethylcyclopentane	C7H14	0.003800	0.016929
<b>TOTALS:</b>		<b>0.093679</b>	<b>0.419826</b>

C8 GROUP	FORMULA	MOL%	WT%
1-ethyl-1-methylcyclopentane	C8H16	0.000340	0.001731
2,2,3-trimethylpentane	C8H18	0.001271	0.006587
2,3,4-trimethylpentane	C8H18	0.000731	0.003789
2,3,4-trimethylpentane	C8H18	0.000731	0.003789
2,5-dimethylhexane	C8H18	0.000000	0.000000
2-methylheptane+4-methylheptane	C8H18	0.004714	0.024431
3,3-dimethylhexane	C8H18	0.000458	0.002374
3-methylheptane	C8H18	0.001149	0.005955
cis-1,2-dimethylcyclohexane	C8H16	0.002318	0.011802

cis-1,3-dimethylcyclohexane	C8H16	0.000394	0.002006
cyclooctane	C8H16	0.000000	0.000000
ethylbenzene	C8H10	0.000245	0.001180
ethylcyclohexane	C8H16	0.000685	0.003488
m-xylene+p-xylene	C8H10	0.000749	0.003608
n-octane	C8H18	0.002962	0.015351
o-xylene	C8H10	0.000171	0.000824
trans-1,3-dimethylcyclohexane	C8H16	0.000000	0.000000
<b>TOTALS:</b>		<b>0.016918</b>	<b>0.086915</b>

C9 GROUP	FORMULA	MOL%	WT%
1,1,2-trimethylcyclohexane	C9H18	0.000137	0.000785
1,2,3-trimethylbenzene	C9H12	0.000061	0.000333
1,2,4-trimethylbenzene+tert-butylbenzene	C9H12	0.000112	0.000611
1,3,5-trimethylbenzene	C9H12	0.000045	0.000245
2,2,3-trimethylhexane	C9H20	0.000182	0.001059
2,2,4-trimethylhexane	C9H20	0.000451	0.002624
2,2-dimethylheptane	C9H20	0.000000	0.000000
2,3,4-trimethylhexane	C9H20	0.000186	0.001082
2,4,4-trimethylhexane	C9H20	0.000401	0.002333
2,5-dimethylheptane	C9H20	0.000294	0.001711
2-methyloctane	C9H20	0.000000	0.000000
3,4-dimethylheptane	C9H20	0.000081	0.000471
cis,cis-1,2,3-trimethylcyclohexane	C9H18	0.000044	0.000252
isopropylbenzene+1,1,3-trimethylcyclopentane	C9H12	0.000000	0.000000
methylcyclooctane	C9H18	0.000067	0.000384
m-ethyltoluene+p-ethyltoluene	C9H12	0.000208	0.001134
n-nonane	C9H20	0.000306	0.001781
propylbenzene	C9H12	0.000307	0.001674
propylcyclohexane	C9H18	0.000056	0.000321
r-1,t-2,c-3-trimethylcyclohexane	C9H18	0.000169	0.000968
r-1,t-2,t-4-trimethylcyclohexane	C9H18	0.000039	0.000223
trans,trans-1,2,4-trimethylcyclohexane	C9H18	0.000000	0.000000
Unidentified C9	C9	0.000000	0.000000
<b>TOTALS:</b>		<b>0.003146</b>	<b>0.017991</b>

C10 GROUP	FORMULA	MOL%	WT%
1,2,3,4-tetramethylbenzene	C10H14	0.000000	0.000000
1,2,3,5-tetramethylbenzene	C10H14	0.000000	0.000000
1,2,4,5-tetramethylbenzene	C10H14	0.000000	0.000000

1,2-diethylbenzene	C10H14	0.000000	0.000000
1,2-dimethyl-3-ethylbenzene	C10H14	0.000000	0.000000
1,2-dimethyl-4-ethylbenzene	C10H14	0.000000	0.000000
1,3-diethylbenzene	C10H14	0.000000	0.000000
1,3-dimethyl-2-ethylbenzene	C10H14	0.000000	0.000000
1,4-diethylbenzene	C10H14	0.000000	0.000000
1,4-dimethyl-2-ethylbenzene	C10H14	0.000000	0.000000
1-methyl-2-isopropylbenzene	C10H14	0.000000	0.000000
1-methyl-2-propylbenzene	C10H14	0.000000	0.000000
1-methyl-3-isopropylbenzene	C10H14	0.000000	0.000000
1-methyl-4-isopropylbenzene	C10H14	0.000000	0.000000
2-methylnonane	C10H22	0.000184	0.001188
3-ethyloctane	C10H22	0.000052	0.000336
3-methylnonane	C10H22	0.000000	0.000000
4-methylnonane	C10H22	0.000137	0.000884
butylbenzene	C10H14	0.000000	0.000000
butylcyclohexane	C10H20	0.000000	0.000000
isobutylbenzene	C10H14	0.000000	0.000000
naphthalene	C10H8	0.000000	0.000000
n-decane	C10H22	0.000080	0.000516
sec-butylbenzene	C10H14	0.000000	0.000000
tert-butylcyclohexane	C10H20	0.000000	0.000000
Unidentified C10	C10	0.000000	0.000000
<b>TOTALS:</b>		<b>0.000453</b>	<b>0.002924</b>

C11 GROUP	FORMULA	MOL%	WT%
n-undecane	C11H24	0.000055	0.000390
pentylbenzene	C11H16	0.000000	0.000000
Unidentified C11	C11	0.000000	0.000000
<b>TOTALS:</b>		<b>0.000055</b>	<b>0.000390</b>

C12 GROUP	FORMULA	MOL%	WT%
n-dodecane	C12H26	0.000000	0.000000
Unidentified C12	C12	0.000000	0.000000
<b>TOTALS:</b>		<b>0.000000</b>	<b>0.000000</b>

C13 GROUP	FORMULA	MOL%	WT%
n-tridecane	C13H28	0.000000	0.000000
Unidentified C13	C13	0.000000	0.000000
<b>TOTALS:</b>		<b>0.000000</b>	<b>0.000000</b>

C14 GROUP	FORMULA	MOL%	WT%
n-tetradecane	C14H30	0.000000	0.000000
Unidentified C14	C14	0.000000	0.000000
TOTALS:		0.000000	0.000000

C15+ GROUP	FORMULA	MOL%	WT%
n-pentadecane	C15H32	0.000000	0.000000
Unidentified C15	C15	0.000000	0.000000
TOTALS:		0.000000	0.000000

SAMPLE ID		COLLECTION DATA	
Operator	Targa Resources Inc	Pressure	847 psig
Location	Red Hills Processing Complex	Sample Temp	N/A
Site	Red Hills 2	Atm Temp	90 F
Site Type	Plant	Collection Date	07/26/2023
Sample Point	Plant Inlet	Collection Time	9:22 AM
Spot/Comp	Spot	Collection By	Mike McKinney
Meter ID		Pressure Base	14.730 psi
Purchaser		Temperature Base	60 F
Fluid	Gas	Container(s)	CITCO0808

### Onsite Testing by Stain Tube

METHOD	TYPE	MEAS VALUE	MOL%	GRAINS/100	PPMV
GPA2377	H2S	1.00 PPMV	0.0001	0.07	1.1

Mol%, Grains/100, PPMV are pressure and temperature corrected to base conditions.

### GPA 2286 Gas Extended Fractional Analysis

COMPOUND	FORMULA	MOL%	WT%	GPM
HELIUM	He	0.0191	0.0034	0.0019
NITROGEN	N2	2.0078	2.5101	0.2200
CARBON DIOXIDE	CO2	3.5460	6.9644	0.6027
*OXYGEN+ARGON	O2+Ar	0.0000	0.0000	0.0000
HYDROGEN SULFIDE	H2S	0.0001	0.0002	0.0000
METHANE	C1	73.6108	52.7003	12.4285
ETHANE	C2	11.0755	14.8622	2.9500
PROPANE	C3	5.7363	11.2883	1.5739
I-BUTANE	iC4	0.7966	2.0662	0.2596
N-BUTANE	nC4	1.8117	4.6993	0.5688
I-PENTANE	iC5	0.4302	1.3852	0.1567
N-PENTANE	nC5	0.4384	1.4116	0.1583
NEO-PENTANE	neC5	0.0000	0.0000	0.0000
HEXANES PLUS	C6+	0.5275	2.1088	0.2111
TOTALS:		100.0000	100.0000	19.1316

Value of "0.0000" interpreted as below detectable limit. Onsite H2S value is used in fractional if performed.

\*Oxygen+Argon: Compounds elute as single peak; additional testing required to distinguish each.

LIQUID YIELD	C2+	C3+	C4+	C5+	26# Liquid	10# Liquid
GAL/MSCF	5.8784	2.9284	1.3545	0.5261	0.7974	
CALC PROP	BTU/CF	Specific Gr.	Z Factor	Mol Weight	LB/SCF	Wobbe IDX
DRY	1,236.7	0.7763	0.9962	22.83	0.0605	1,403.6
WATER SAT.	1,216.5	0.7740	0.9958	22.43	0.0595	



C6+ ONLY	4,842.5	3.0930		89.58	
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# Hexanes Plus Detail - Red Hills Processing Complex:Red Hills 2:Plant Inlet:7/26/2023

C6 GROUP	FORMULA	MOL%	WT%
2,2-dimethylbutane	C6H14	0.005060	0.019460
2,3-dimethylbutane+cyclopentane	C6H14	0.023560	0.090606
2-methylpentane	C6H14	0.094690	0.364156
3-methylpentane	C6H14	0.046734	0.179728
benzene	C6H6	0.021315	0.074302
cyclohexane	C6H12	0.049742	0.186821
methylcyclopentane	C6H12	0.045308	0.170168
n-hexane	C6H14	0.102680	0.394884
<b>TOTALS:</b>		<b>0.389089</b>	<b>1.480125</b>

C7 GROUP	FORMULA	MOL%	WT%
1,1-dimethylcyclopentane+3-methylhexane	C7H16	0.014850	0.066405
2,2-dimethylpentane	C7H16	0.000928	0.004150
2,3-dimethylpentane	C7H16	0.002964	0.013254
2,4-dimethylhexane+ethylcyclopentane	C7H14	0.002123	0.009303
2,4-dimethylpentane	C7H16	0.000218	0.000975
2-methylhexane	C7H16	0.011856	0.053017
3,3-dimethylpentane	C7H16	0.000582	0.002603
cis-1,3-dimethylcyclopentane+3-Ethylpentane	C7H14	0.005628	0.024661
cycloheptane	C7H14	0.000000	0.000000
methylcyclohexane+2,2-dimethylhexane+2,2,4-trimethylpentane	C7H14	0.029054	0.127308
n-heptane	C7H16	0.023812	0.106481
toluene	C7H8	0.013188	0.054228
trans-1,2-dimethylcyclopentane+cis-1,2-Dimethylcyclopentane	C7H14	0.001344	0.005889
trans-1,3-dimethylcyclopentane	C7H14	0.004453	0.019512
<b>TOTALS:</b>		<b>0.111000</b>	<b>0.487786</b>

C8 GROUP	FORMULA	MOL%	WT%
1-ethyl-1-methylcyclopentane	C8H16	0.000625	0.003130
2,2,3-trimethylpentane	C8H18	0.001572	0.008014
2,3,4-trimethylpentane	C8H18	0.001019	0.005195
2,3,4-trimethylpentane	C8H18	0.001019	0.005195
2,5-dimethylhexane	C8H18	0.000000	0.000000
2-methylheptane+4-methylheptane	C8H18	0.006007	0.030622
3,3-dimethylhexane	C8H18	0.000653	0.003329
3-methylheptane	C8H18	0.001484	0.007565
cis-1,2-dimethylcyclohexane	C8H16	0.003082	0.015434

cis-1,3-dimethylcyclohexane	C8H16	0.000580	0.002904
cyclooctane	C8H16	0.000134	0.000671
ethylbenzene	C8H10	0.000506	0.002397
ethylcyclohexane	C8H16	0.001047	0.005243
m-xylene+p-xylene	C8H10	0.001378	0.006529
n-octane	C8H18	0.004074	0.020768
o-xylene	C8H10	0.000335	0.001587
trans-1,3-dimethylcyclohexane	C8H16	0.000000	0.000000
<b>TOTALS:</b>		<b>0.023515</b>	<b>0.118583</b>

C9 GROUP	FORMULA	MOL%	WT%
1,1,2-trimethylcyclohexane	C9H18	0.000053	0.000299
1,2,3-trimethylbenzene	C9H12	0.000050	0.000268
1,2,4-trimethylbenzene+tert-butylbenzene	C9H12	0.000114	0.000611
1,3,5-trimethylbenzene	C9H12	0.000043	0.000231
2,2,3-trimethylhexane	C9H20	0.000124	0.000710
2,2,4-trimethylhexane	C9H20	0.000630	0.003606
2,2-dimethylheptane	C9H20	0.000121	0.000693
2,3,4-trimethylhexane	C9H20	0.000252	0.001442
2,4,4-trimethylhexane	C9H20	0.000588	0.003366
2,5-dimethylheptane	C9H20	0.000602	0.003446
2-methyloctane	C9H20	0.000000	0.000000
3,4-dimethylheptane	C9H20	0.000122	0.000698
cis,cis-1,2,3-trimethylcyclohexane	C9H18	0.000062	0.000349
isopropylbenzene+1,1,3-trimethylcyclopentane	C9H12	0.000086	0.000461
methylcyclooctane	C9H18	0.000034	0.000192
m-ethyltoluene+p-ethyltoluene	C9H12	0.000041	0.000220
n-nonane	C9H20	0.000310	0.001774
propylbenzene	C9H12	0.000126	0.000676
propylcyclohexane	C9H18	0.000072	0.000406
r-1,t-2,c-3-trimethylcyclohexane	C9H18	0.000235	0.001324
r-1,t-2,t-4-trimethylcyclohexane	C9H18	0.000060	0.000338
trans,trans-1,2,4-trimethylcyclohexane	C9H18	0.000000	0.000000
Unidentified C9	C9	0.000000	0.000000
<b>TOTALS:</b>		<b>0.003725</b>	<b>0.021110</b>

C10 GROUP	FORMULA	MOL%	WT%
1,2,3,4-tetramethylbenzene	C10H14	0.000000	0.000000
1,2,3,5-tetramethylbenzene	C10H14	0.000000	0.000000
1,2,4,5-tetramethylbenzene	C10H14	0.000000	0.000000

1,2-diethylbenzene	C10H14	0.000000	0.000000
1,2-dimethyl-3-ethylbenzene	C10H14	0.000000	0.000000
1,2-dimethyl-4-ethylbenzene	C10H14	0.000000	0.000000
1,3-diethylbenzene	C10H14	0.000000	0.000000
1,3-dimethyl-2-ethylbenzene	C10H14	0.000000	0.000000
1,4-diethylbenzene	C10H14	0.000000	0.000000
1,4-dimethyl-2-ethylbenzene	C10H14	0.000000	0.000000
1-methyl-2-isopropylbenzene	C10H14	0.000000	0.000000
1-methyl-2-propylbenzene	C10H14	0.000000	0.000000
1-methyl-3-isopropylbenzene	C10H14	0.000000	0.000000
1-methyl-4-isopropylbenzene	C10H14	0.000000	0.000000
2-methylnonane	C10H22	0.000088	0.000559
3-ethyloctane	C10H22	0.000000	0.000000
3-methylnonane	C10H22	0.000000	0.000000
4-methylnonane	C10H22	0.000000	0.000000
butylbenzene	C10H14	0.000000	0.000000
butylcyclohexane	C10H20	0.000000	0.000000
isobutylbenzene	C10H14	0.000000	0.000000
naphthalene	C10H8	0.000000	0.000000
n-decane	C10H22	0.000067	0.000425
sec-butylbenzene	C10H14	0.000000	0.000000
tert-butylcyclohexane	C10H20	0.000000	0.000000
Unidentified C10	C10	0.000000	0.000000
<b>TOTALS:</b>		<b>0.000155</b>	<b>0.000984</b>

C11 GROUP	FORMULA	MOL%	WT%
n-undecane	C11H24	0.000036	0.000251
pentylbenzene	C11H16	0.000000	0.000000
Unidentified C11	C11	0.000000	0.000000
<b>TOTALS:</b>		<b>0.000036</b>	<b>0.000251</b>

C12 GROUP	FORMULA	MOL%	WT%
n-dodecane	C12H26	0.000000	0.000000
Unidentified C12	C12	0.000000	0.000000
<b>TOTALS:</b>		<b>0.000000</b>	<b>0.000000</b>

C13 GROUP	FORMULA	MOL%	WT%
n-tridecane	C13H28	0.000000	0.000000
Unidentified C13	C13	0.000000	0.000000
<b>TOTALS:</b>		<b>0.000000</b>	<b>0.000000</b>

C14 GROUP	FORMULA	MOL%	WT%
n-tetradecane	C14H30	0.000000	0.000000
Unidentified C14	C14	0.000000	0.000000
TOTALS:		0.000000	0.000000

C15+ GROUP	FORMULA	MOL%	WT%
n-pentadecane	C15H32	0.000000	0.000000
Unidentified C15	C15	0.000000	0.000000
TOTALS:		0.000000	0.000000

SAMPLE ID		COLLECTION DATA	
Operator	Targa Resources Inc	Pressure	854 psig
Location	Red Hills Processing Complex	Sample Temp	N/A
Site	Red Hills 3	Atm Temp	90 F
Site Type	Plant	Collection Date	07/26/2023
Sample Point	Plant Inlet	Collection Time	9:30 AM
Spot/Comp	Spot	Collection By	Mike McKinney
Meter ID		Pressure Base	14.730 psi
Purchaser		Temperature Base	60 F
Fluid	Gas	Container(s)	CITCO0996

### Onsite Testing by Stain Tube

METHOD	TYPE	MEAS VALUE	MOL%	GRAINS/100	PPMV
GPA2377	H2S	1.00 PPMV	0.0001	0.07	1.1

Mol%, Grains/100, PPMV are pressure and temperature corrected to base conditions.

### GPA 2286 Gas Extended Fractional Analysis

COMPOUND	FORMULA	MOL%	WT%	GPM
HELIUM	He	0.0204	0.0036	0.0021
NITROGEN	N2	1.9418	2.4213	0.2128
CARBON DIOXIDE	CO2	3.2044	6.2773	0.5446
*OXYGEN+ARGON	O2+Ar	0.0000	0.0000	0.0000
HYDROGEN SULFIDE	H2S	0.0001	0.0002	0.0000
METHANE	C1	73.7111	52.6360	12.4448
ETHANE	C2	11.0154	14.7434	2.9338
PROPANE	C3	5.8239	11.4311	1.5979
I-BUTANE	iC4	0.8437	2.1828	0.2750
N-BUTANE	nC4	1.9071	4.9339	0.5988
I-PENTANE	iC5	0.4776	1.5338	0.1739
N-PENTANE	nC5	0.4724	1.5171	0.1705
NEO-PENTANE	neC5	0.0000	0.0000	0.0000
HEXANES PLUS	C6+	0.5821	2.3195	0.2330
TOTALS:		100.0000	100.0000	19.1870

Value of "0.0000" interpreted as below detectable limit. Onsite H2S value is used in fractional if performed.

\*Oxygen+Argon: Compounds elute as single peak; additional testing required to distinguish each.

LIQUID YIELD	C2+	C3+	C4+	C5+	26# Liquid	10# Liquid
GAL/MSCF	5.9828	3.0490	1.4512	0.5774	0.8751	
CALC PROP	BTU/CF	Specific Gr.	Z Factor	Mol Weight	LB/SCF	Wobbe IDX
DRY	1,249.5	0.7784	0.9961	22.84	0.0605	1,416.3
WATER SAT.	1,229.1	0.7760	0.9957	22.44	0.0595	

C6+ ONLY	4,839.4	3.0909		89.52	
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# Hexanes Plus Detail - Red Hills Processing Complex:Red Hills 3:Plant Inlet:7/26/2023

C6 GROUP	FORMULA	MOL%	WT%
2,2-dimethylbutane	C6H14	0.006084	0.023337
2,3-dimethylbutane+cyclopentane	C6H14	0.022660	0.086920
2-methylpentane	C6H14	0.109689	0.420750
3-methylpentane	C6H14	0.054166	0.207773
benzene	C6H6	0.022890	0.079587
cyclohexane	C6H12	0.053366	0.199915
methylcyclopentane	C6H12	0.049424	0.185148
n-hexane	C6H14	0.113442	0.435146
<b>TOTALS:</b>		<b>0.431721</b>	<b>1.638576</b>

C7 GROUP	FORMULA	MOL%	WT%
1,1-dimethylcyclopentane+3-methylhexane	C7H16	0.016273	0.072581
2,2-dimethylpentane	C7H16	0.001046	0.004665
2,3-dimethylpentane	C7H16	0.003552	0.015843
2,4-dimethylhexane+ethylcyclopentane	C7H14	0.002322	0.010148
2,4-dimethylpentane	C7H16	0.000246	0.001097
2-methylhexane	C7H16	0.013110	0.058473
3,3-dimethylpentane	C7H16	0.000675	0.003011
cis-1,3-dimethylcyclopentane+3-Ethylpentane	C7H14	0.005902	0.025795
cycloheptane	C7H14	0.000000	0.000000
methylcyclohexane+2,2-dimethylhexane+2,2,4-trimethylpentane	C7H14	0.030773	0.134492
n-heptane	C7H16	0.025133	0.112098
toluene	C7H8	0.015640	0.064144
trans-1,2-dimethylcyclopentane+cis-1,2-Dimethylcyclopentane	C7H14	0.001386	0.006057
trans-1,3-dimethylcyclopentane	C7H14	0.004612	0.020157
<b>TOTALS:</b>		<b>0.120670</b>	<b>0.528561</b>

C8 GROUP	FORMULA	MOL%	WT%
1-ethyl-1-methylcyclopentane	C8H16	0.000649	0.003242
2,2,3-trimethylpentane	C8H18	0.001573	0.007998
2,3,4-trimethylpentane	C8H18	0.001035	0.005263
2,3,4-trimethylpentane	C8H18	0.001035	0.005263
2,5-dimethylhexane	C8H18	0.000000	0.000000
2-methylheptane+4-methylheptane	C8H18	0.006415	0.032617
3,3-dimethylhexane	C8H18	0.000740	0.003763
3-methylheptane	C8H18	0.001590	0.008084
cis-1,2-dimethylcyclohexane	C8H16	0.003158	0.015774



cis-1,3-dimethylcyclohexane	C8H16	0.000623	0.003112
cyclooctane	C8H16	0.000140	0.000699
ethylbenzene	C8H10	0.000659	0.003114
ethylcyclohexane	C8H16	0.001113	0.005559
m-xylene+p-xylene	C8H10	0.001686	0.007967
n-octane	C8H18	0.004401	0.022377
o-xylene	C8H10	0.000443	0.002093
trans-1,3-dimethylcyclohexane	C8H16	0.000000	0.000000
<b>TOTALS:</b>		<b>0.025260</b>	<b>0.126925</b>

C9 GROUP	FORMULA	MOL%	WT%
1,1,2-trimethylcyclohexane	C9H18	0.000066	0.000371
1,2,3-trimethylbenzene	C9H12	0.000055	0.000294
1,2,4-trimethylbenzene+tert-butylbenzene	C9H12	0.000109	0.000583
1,3,5-trimethylbenzene	C9H12	0.000164	0.000877
2,2,3-trimethylhexane	C9H20	0.000120	0.000685
2,2,4-trimethylhexane	C9H20	0.000451	0.002575
2,2-dimethylheptane	C9H20	0.000117	0.000668
2,3,4-trimethylhexane	C9H20	0.000294	0.001678
2,4,4-trimethylhexane	C9H20	0.000566	0.003231
2,5-dimethylheptane	C9H20	0.000691	0.003945
2-methyloctane	C9H20	0.000000	0.000000
3,4-dimethylheptane	C9H20	0.000127	0.000725
cis,cis-1,2,3-trimethylcyclohexane	C9H18	0.000067	0.000376
isopropylbenzene+1,1,3-trimethylcyclopentane	C9H12	0.000115	0.000615
methylcyclooctane	C9H18	0.000000	0.000000
m-ethyltoluene+p-ethyltoluene	C9H12	0.000172	0.000920
n-nonane	C9H20	0.000396	0.002261
propylbenzene	C9H12	0.000208	0.001113
propylcyclohexane	C9H18	0.000044	0.000247
r-1,t-2,c-3-trimethylcyclohexane	C9H18	0.000318	0.001787
r-1,t-2,t-4-trimethylcyclohexane	C9H18	0.000079	0.000444
trans,trans-1,2,4-trimethylcyclohexane	C9H18	0.000000	0.000000
Unidentified C9	C9	0.000000	0.000000
<b>TOTALS:</b>		<b>0.004159</b>	<b>0.023395</b>

C10 GROUP	FORMULA	MOL%	WT%
1,2,3,4-tetramethylbenzene	C10H14	0.000000	0.000000
1,2,3,5-tetramethylbenzene	C10H14	0.000000	0.000000
1,2,4,5-tetramethylbenzene	C10H14	0.000000	0.000000

1,2-diethylbenzene	C10H14	0.000000	0.000000
1,2-dimethyl-3-ethylbenzene	C10H14	0.000000	0.000000
1,2-dimethyl-4-ethylbenzene	C10H14	0.000000	0.000000
1,3-diethylbenzene	C10H14	0.000000	0.000000
1,3-dimethyl-2-ethylbenzene	C10H14	0.000000	0.000000
1,4-diethylbenzene	C10H14	0.000000	0.000000
1,4-dimethyl-2-ethylbenzene	C10H14	0.000000	0.000000
1-methyl-2-isopropylbenzene	C10H14	0.000000	0.000000
1-methyl-2-propylbenzene	C10H14	0.000000	0.000000
1-methyl-3-isopropylbenzene	C10H14	0.000000	0.000000
1-methyl-4-isopropylbenzene	C10H14	0.000000	0.000000
2-methylnonane	C10H22	0.000076	0.000481
3-ethyloctane	C10H22	0.000000	0.000000
3-methylnonane	C10H22	0.000000	0.000000
4-methylnonane	C10H22	0.000068	0.000431
butylbenzene	C10H14	0.000000	0.000000
butylcyclohexane	C10H20	0.000000	0.000000
isobutylbenzene	C10H14	0.000000	0.000000
naphthalene	C10H8	0.000000	0.000000
n-decane	C10H22	0.000066	0.000418
sec-butylbenzene	C10H14	0.000000	0.000000
tert-butylcyclohexane	C10H20	0.000000	0.000000
Unidentified C10	C10	0.000000	0.000000
<b>TOTALS:</b>		<b>0.000210</b>	<b>0.001330</b>

C11 GROUP	FORMULA	MOL%	WT%
n-undecane	C11H24	0.000055	0.000383
pentylbenzene	C11H16	0.000000	0.000000
Unidentified C11	C11	0.000000	0.000000
<b>TOTALS:</b>		<b>0.000055</b>	<b>0.000383</b>

C12 GROUP	FORMULA	MOL%	WT%
n-dodecane	C12H26	0.000000	0.000000
Unidentified C12	C12	0.000000	0.000000
<b>TOTALS:</b>		<b>0.000000</b>	<b>0.000000</b>

C13 GROUP	FORMULA	MOL%	WT%
n-tridecane	C13H28	0.000000	0.000000
Unidentified C13	C13	0.000000	0.000000
<b>TOTALS:</b>		<b>0.000000</b>	<b>0.000000</b>

C14 GROUP	FORMULA	MOL%	WT%
n-tetradecane	C14H30	0.000000	0.000000
Unidentified C14	C14	0.000000	0.000000
TOTALS:		0.000000	0.000000

C15+ GROUP	FORMULA	MOL%	WT%
n-pentadecane	C15H32	0.000036	0.000340
Unidentified C15	C15	0.000000	0.000000
TOTALS:		0.000036	0.000340

SAMPLE ID		COLLECTION DATA	
Operator	Targa Resources Inc	Pressure	1002 psig
Location	Red Hills Processing Complex	Sample Temp	N/A
Site	Red Hills 4	Atm Temp	90 F
Site Type	Plant	Collection Date	07/26/2023
Sample Point	4,5&6 Combined Inlet	Collection Time	10:19 AM
Spot/Comp	Spot	Collection By	Mike McKinney
Meter ID		Pressure Base	14.730 psi
Purchaser		Temperature Base	60 F
Fluid	Gas	Container(s)	PL2398

### Onsite Testing by Stain Tube

METHOD	TYPE	MEAS VALUE	MOL%	GRAINS/100	PPMV
GPA2377	H2S	1.50 PPMV	0.0002	0.11	1.7

Mol%, Grains/100, PPMV are pressure and temperature corrected to base conditions.

### GPA 2286 Gas Extended Fractional Analysis

COMPOUND	FORMULA	MOL%	WT%	GPM
HELIUM	He	0.0229	0.0042	0.0023
NITROGEN	N2	2.0697	2.6336	0.2268
CARBON DIOXIDE	CO2	3.3287	6.6541	0.5659
*OXYGEN+ARGON	O2+Ar	0.0000	0.0000	0.0000
HYDROGEN SULFIDE	H2S	0.0002	0.0003	0.0000
METHANE	C1	74.5125	54.2967	12.5826
ETHANE	C2	11.0490	15.0908	2.9433
PROPANE	C3	5.5371	11.0904	1.5195
I-BUTANE	iC4	0.7159	1.8900	0.2334
N-BUTANE	nC4	1.6258	4.2922	0.5105
I-PENTANE	iC5	0.3602	1.1804	0.1312
N-PENTANE	nC5	0.3677	1.2050	0.1328
NEO-PENTANE	neC5	0.0000	0.0000	0.0000
HEXANES PLUS	C6+	0.4103	1.6623	0.1631
TOTALS:		100.0000	100.0000	19.0114

Value of "0.0000" interpreted as below detectable limit. Onsite H2S value is used in fractional if performed.

\*Oxygen+Argon: Compounds elute as single peak; additional testing required to distinguish each.

LIQUID YIELD	C2+	C3+	C4+	C5+	26# Liquid	10# Liquid
GAL/MSCF	5.6338	2.6905	1.1710	0.4271	0.6447	
CALC PROP	BTU/CF	Specific Gr.	Z Factor	Mol Weight	LB/SCF	Wobbe IDX
DRY	1,219.9	0.7626	0.9963	22.54	0.0597	1,396.9
WATER SAT.	1,200.0	0.7605	0.9959	22.15	0.0587	

C6+ ONLY	4.814.8	3.0796		89.19		
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# Hexanes Plus Detail - Red Hills Processing Complex:Red Hills 4:4,5&6 Combined Inlet:7/26/2023

C6 GROUP	FORMULA	MOL%	WT%
2,2-dimethylbutane	C6H14	0.003148	0.012322
2,3-dimethylbutane+cyclopentane	C6H14	0.019196	0.075139
2-methylpentane	C6H14	0.075075	0.293866
3-methylpentane	C6H14	0.036147	0.141490
benzene	C6H6	0.021385	0.075875
cyclohexane	C6H12	0.040892	0.156319
methylcyclopentane	C6H12	0.035164	0.134423
n-hexane	C6H14	0.078088	0.305660
<b>TOTALS:</b>		<b>0.309095</b>	<b>1.195094</b>

C7 GROUP	FORMULA	MOL%	WT%
1,1-dimethylcyclopentane+3-methylhexane	C7H16	0.010663	0.048532
2,2-dimethylpentane	C7H16	0.000726	0.003304
2,3-dimethylpentane	C7H16	0.002502	0.011388
2,4-dimethylhexane+ethylcyclopentane	C7H14	0.001549	0.006908
2,4-dimethylpentane	C7H16	0.000206	0.000938
2-methylhexane	C7H16	0.008275	0.037663
3,3-dimethylpentane	C7H16	0.000405	0.001843
cis-1,3-dimethylcyclopentane+3-Ethylpentane	C7H14	0.004032	0.017982
cycloheptane	C7H14	0.000000	0.000000
methylcyclohexane+2,2-dimethylhexane+2,2,4-trimethylpentane	C7H14	0.021472	0.095762
n-heptane	C7H16	0.016798	0.076455
toluene	C7H8	0.010903	0.045631
trans-1,2-dimethylcyclopentane+cis-1,2-Dimethylcyclopentane	C7H14	0.000966	0.004308
trans-1,3-dimethylcyclopentane	C7H14	0.003182	0.014191
<b>TOTALS:</b>		<b>0.081679</b>	<b>0.364905</b>

C8 GROUP	FORMULA	MOL%	WT%
1-ethyl-1-methylcyclopentane	C8H16	0.000446	0.002273
2,2,3-trimethylpentane	C8H18	0.001095	0.005681
2,3,4-trimethylpentane	C8H18	0.000712	0.003694
2,3,4-trimethylpentane	C8H18	0.000712	0.003694
2,5-dimethylhexane	C8H18	0.000000	0.000000
2-methylheptane+4-methylheptane	C8H18	0.004163	0.021600
3,3-dimethylhexane	C8H18	0.000436	0.002262
3-methylheptane	C8H18	0.001026	0.005323
cis-1,2-dimethylcyclohexane	C8H16	0.002152	0.010969

cis-1,3-dimethylcyclohexane	C8H16	0.000409	0.002085
cyclooctane	C8H16	0.000000	0.000000
ethylbenzene	C8H10	0.000428	0.002064
ethylcyclohexane	C8H16	0.000761	0.003879
m-xylene+p-xylene	C8H10	0.000949	0.004576
n-octane	C8H18	0.002873	0.014907
o-xylene	C8H10	0.000238	0.001148
trans-1,3-dimethylcyclohexane	C8H16	0.000000	0.000000
<b>TOTALS:</b>		<b>0.016400</b>	<b>0.084155</b>

C9 GROUP	FORMULA	MOL%	WT%
1,1,2-trimethylcyclohexane	C9H18	0.000038	0.000218
1,2,3-trimethylbenzene	C9H12	0.000000	0.000000
1,2,4-trimethylbenzene+tert-butylbenzene	C9H12	0.000062	0.000338
1,3,5-trimethylbenzene	C9H12	0.000000	0.000000
2,2,3-trimethylhexane	C9H20	0.000108	0.000629
2,2,4-trimethylhexane	C9H20	0.000453	0.002639
2,2-dimethylheptane	C9H20	0.000057	0.000332
2,3,4-trimethylhexane	C9H20	0.000196	0.001142
2,4,4-trimethylhexane	C9H20	0.000401	0.002336
2,5-dimethylheptane	C9H20	0.000520	0.003029
2-methyloctane	C9H20	0.000000	0.000000
3,4-dimethylheptane	C9H20	0.000084	0.000489
cis,cis-1,2,3-trimethylcyclohexane	C9H18	0.000050	0.000287
isopropylbenzene+1,1,3-trimethylcyclopentane	C9H12	0.000000	0.000000
methylcyclooctane	C9H18	0.000000	0.000000
m-ethyltoluene+p-ethyltoluene	C9H12	0.000067	0.000366
n-nonane	C9H20	0.000270	0.001573
propylbenzene	C9H12	0.000212	0.001157
propylcyclohexane	C9H18	0.000210	0.001204
r-1,t-2,c-3-trimethylcyclohexane	C9H18	0.000182	0.001044
r-1,t-2,t-4-trimethylcyclohexane	C9H18	0.000051	0.000292
trans,trans-1,2,4-trimethylcyclohexane	C9H18	0.000000	0.000000
Unidentified C9	C9	0.000000	0.000000
<b>TOTALS:</b>		<b>0.002961</b>	<b>0.017075</b>

C10 GROUP	FORMULA	MOL%	WT%
1,2,3,4-tetramethylbenzene	C10H14	0.000000	0.000000
1,2,3,5-tetramethylbenzene	C10H14	0.000000	0.000000
1,2,4,5-tetramethylbenzene	C10H14	0.000000	0.000000



1,2-diethylbenzene	C10H14	0.000000	0.000000
1,2-dimethyl-3-ethylbenzene	C10H14	0.000000	0.000000
1,2-dimethyl-4-ethylbenzene	C10H14	0.000000	0.000000
1,3-diethylbenzene	C10H14	0.000000	0.000000
1,3-dimethyl-2-ethylbenzene	C10H14	0.000000	0.000000
1,4-diethylbenzene	C10H14	0.000000	0.000000
1,4-dimethyl-2-ethylbenzene	C10H14	0.000000	0.000000
1-methyl-2-isopropylbenzene	C10H14	0.000000	0.000000
1-methyl-2-propylbenzene	C10H14	0.000000	0.000000
1-methyl-3-isopropylbenzene	C10H14	0.000000	0.000000
1-methyl-4-isopropylbenzene	C10H14	0.000000	0.000000
2-methylnonane	C10H22	0.000000	0.000000
3-ethyloctane	C10H22	0.000000	0.000000
3-methylnonane	C10H22	0.000000	0.000000
4-methylnonane	C10H22	0.000000	0.000000
butylbenzene	C10H14	0.000000	0.000000
butylcyclohexane	C10H20	0.000000	0.000000
isobutylbenzene	C10H14	0.000000	0.000000
naphthalene	C10H8	0.000000	0.000000
n-decane	C10H22	0.000053	0.000343
sec-butylbenzene	C10H14	0.000000	0.000000
tert-butylcyclohexane	C10H20	0.000000	0.000000
Unidentified C10	C10	0.000000	0.000000
<b>TOTALS:</b>		<b>0.000053</b>	<b>0.000343</b>

<b>C11 GROUP</b>	<b>FORMULA</b>	<b>MOL%</b>	<b>WT%</b>
n-undecane	C11H24	0.000050	0.000355
pentylbenzene	C11H16	0.000000	0.000000
Unidentified C11	C11	0.000000	0.000000
<b>TOTALS:</b>		<b>0.000050</b>	<b>0.000355</b>

<b>C12 GROUP</b>	<b>FORMULA</b>	<b>MOL%</b>	<b>WT%</b>
n-dodecane	C12H26	0.000047	0.000364
Unidentified C12	C12	0.000000	0.000000
<b>TOTALS:</b>		<b>0.000047</b>	<b>0.000364</b>

<b>C13 GROUP</b>	<b>FORMULA</b>	<b>MOL%</b>	<b>WT%</b>
n-tridecane	C13H28	0.000000	0.000000
Unidentified C13	C13	0.000000	0.000000
<b>TOTALS:</b>		<b>0.000000</b>	<b>0.000000</b>

C14 GROUP	FORMULA	MOL%	WT%
n-tetradecane	C14H30	0.000000	0.000000
Unidentified C14	C14	0.000000	0.000000
TOTALS:		0.000000	0.000000

C15+ GROUP	FORMULA	MOL%	WT%
n-pentadecane	C15H32	0.000000	0.000000
Unidentified C15	C15	0.000000	0.000000
TOTALS:		0.000000	0.000000

Pantechs Laboratories, Inc. - Order: 632-3913 - Order Date: 11/16/2022  
Order Description: Red Hills Processing Complex, Plant Inlets, Dehy Inlets, Amine Inlet/Wastes, Glycol Waste Streams

SAMPLE ID		COLLECTION DATA	
Operator	Targa Resources Inc	Pressure	989 psig
Location	Red Hills Processing Complex	Sample Temp	N/A
Site	AGI Plant	Atm Temp	40 F
Site Type	Plant	Collection Date	11/16/2022
Sample Point	Amine Inlet	Collection Time	11:47 AM
Spot/Comp	Spot	Collection By	Cody Carson
Meter ID		Pressure Base	14,730 psi
Purchaser		Temperature Base	60 F
Fluid	Gas	Container(s)	PL0535

#### Onsite Testing by Stain Tube

METHOD	TYPE	MEAS VALUE	MOL%	GRAINS/100	PPMV
GPA2377	H2S	0.48 vol%	0.5073	322.16	5,122.3

Mol%, Grains/100, PPMV are pressure and temperature corrected to base conditions.

#### GPA 2286 Gas Extended Fractional Analysis

COMPOUND	FORMULA	MOL%	WT%	GPM
HELIUM	He	0.0163	0.0030	0.0017
NITROGEN	N2	1.7564	2.2295	0.1925
CARBON DIOXIDE	CO2	5.3464	10.6618	0.9090
*OXYGEN+ARGON	O2+Ar	0.0113	0.0164	0.0010
HYDROGEN SULFIDE	H2S	0.5073	0.7834	0.0683
METHANE	C1	74.9394	54.4759	12.6562
ETHANE	C2	9.4940	12.9357	2.5294
PROPANE	C3	4.5706	9.1325	1.2544
I-BUTANE	iC4	0.7855	2.0688	0.2561
N-BUTANE	nC4	1.5005	3.9518	0.4713
I-PENTANE	iC5	0.4378	1.4313	0.1595
N-PENTANE	nC5	0.3253	1.0635	0.1175
NEO-PENTANE	neC5	0.0130	0.0425	0.0050
HEXANES PLUS	C6+	0.2962	1.2039	0.1200
TOTALS:		100.0000	100.0000	18.7417

Value of "0.0000" interpreted as below detectable limit. Onsite H2S value is used in fractional if performed.

\*Oxygen+Argon: Compounds elute as single peak; additional testing required to distinguish each.

LIQUID YIELD	C2+	C3+	C4+	C5+	26# Liquid	10# Liquid
GAL/MSCF	4.9131	2.3837	1.1293	0.3970	0.5788	
CALC PROP	BTU/CF	Specific Gr.	Z Factor	Mol Weight	LB/SCF	Wobbe IDX
DRY	1,170.0	0.7644	0.9964	22.70	0.0601	1,338.2
WATER SAT.	1,150.9	0.7622	0.9961	22.31	0.0591	

C6+ ONLY	4,862.9	3.0970		89.70	
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# Hexanes Plus Detail - Red Hills Processing Complex:AGI Plant:Amine Inlet:11/16/2022

C6 GROUP	FORMULA	MOL%	WT%
2,2-dimethylbutane	C6H14	0.005850	0.022843
2,3-dimethylbutane+cyclopentane	C6H14	0.016850	0.065797
2-methylpentane	C6H14	0.067623	0.264058
3-methylpentane	C6H14	0.035812	0.139841
benzene	C6H6	0.008943	0.031654
cyclohexane	C6H12	0.019650	0.074936
methylcyclopentane	C6H12	0.024430	0.093164
n-hexane	C6H14	0.055963	0.218528
<b>TOTALS:</b>		<b>0.235121</b>	<b>0.910821</b>

C7 GROUP	FORMULA	MOL%	WT%
1,1-dimethylcyclopentane+3-methylhexane	C7H16	0.007525	0.034167
2,2-dimethylpentane	C7H16	0.000632	0.002870
2,3-dimethylpentane	C7H16	0.001930	0.008763
2,4-dimethylhexane+ethylcyclopentane	C7H14	0.000775	0.003448
2,4-dimethylpentane	C7H16	0.000113	0.000513
2-methylhexane	C7H16	0.005837	0.026503
3,3-dimethylpentane	C7H16	0.000459	0.002084
cis-1,3-dimethylcyclopentane+3-Ethylpentane	C7H14	0.002224	0.009895
cycloheptane	C7H14	0.000000	0.000000
methylcyclohexane+2,2-dimethylhexane+2,2,4-trimethylpentane	C7H14	0.009432	0.041964
n-heptane	C7H16	0.008229	0.037363
toluene	C7H8	0.005835	0.024361
trans-1,2-dimethylcyclopentane+cis-1,2-Dimethylcyclopentane	C7H14	0.000480	0.002136
trans-1,3-dimethylcyclopentane	C7H14	0.001742	0.007750
<b>TOTALS:</b>		<b>0.045213</b>	<b>0.201817</b>

C8 GROUP	FORMULA	MOL%	WT%
1-ethyl-1-methylcyclopentane	C8H16	0.000218	0.001108
2,2,3-trimethylpentane	C8H18	0.000448	0.002319
2,3,4-trimethylpentane	C8H18	0.000293	0.001517
2,3,4-trimethylpentane	C8H18	0.000293	0.001517
2,5-dimethylhexane	C8H18	0.000000	0.000000
2-methylheptane+4-methylheptane	C8H18	0.001871	0.009684
3,3-dimethylhexane	C8H18	0.000267	0.001382
3-methylheptane	C8H18	0.000485	0.002510
cis-1,2-dimethylcyclohexane	C8H16	0.000720	0.003661
cis-1,3-dimethylcyclohexane	C8H16	0.000205	0.001042

cyclooctane	C8H16	0.000112	0.000569
ethylbenzene	C8H10	0.000609	0.002930
ethylcyclohexane	C8H16	0.000354	0.001800
m-xylene+p-xylene	C8H10	0.000680	0.003271
n-octane	C8H18	0.001248	0.006460
o-xylene	C8H10	0.000220	0.001058
trans-1,3-dimethylcyclohexane	C8H16	0.000134	0.000681
<b>TOTALS:</b>		<b>0.008157</b>	<b>0.041509</b>

C9 GROUP	FORMULA	MOL%	WT%
1,1,2-trimethylcyclohexane	C9H18	0.000039	0.000223
1,2,3-trimethylbenzene	C9H12	0.000267	0.001454
1,2,4-trimethylbenzene+tert-butylbenzene	C9H12	0.000362	0.001972
1,3,5-trimethylbenzene	C9H12	0.000106	0.000577
2,2,3-trimethylhexane	C9H20	0.000054	0.000314
2,2,4-trimethylhexane	C9H20	0.000201	0.001168
2,2-dimethylheptane	C9H20	0.000064	0.000372
2,3,4-trimethylhexane	C9H20	0.000130	0.000756
2,4,4-trimethylhexane	C9H20	0.000000	0.000000
2,5-dimethylheptane	C9H20	0.000270	0.001569
2-methyloctane	C9H20	0.000017	0.000099
3,4-dimethylheptane	C9H20	0.000039	0.000227
cis,cis-1,2,3-trimethylcyclohexane	C9H18	0.000000	0.000000
isopropylbenzene+1,1,3-trimethylcyclopentane	C9H12	0.000099	0.000539
methylcyclooctane	C9H18	0.000032	0.000183
m-ethyltoluene+p-ethyltoluene	C9H12	0.000169	0.000920
n-nonane	C9H20	0.000289	0.001680
propylbenzene	C9H12	0.000252	0.001372
propylcyclohexane	C9H18	0.000142	0.000812
r-1,t-2,c-3-trimethylcyclohexane	C9H18	0.000111	0.000635
r-1,t-2,t-4-trimethylcyclohexane	C9H18	0.000028	0.000160
trans,trans-1,2,4-trimethylcyclohexane	C9H18	0.000000	0.000000
Unidentified C9	C9	0.000000	0.000000
<b>TOTALS:</b>		<b>0.002671</b>	<b>0.015032</b>

C10 GROUP	FORMULA	MOL%	WT%
1,2,3,4-tetramethylbenzene	C10H14	0.000087	0.000529
1,2,3,5-tetramethylbenzene	C10H14	0.000167	0.001016
1,2,4,5-tetramethylbenzene	C10H14	0.000000	0.000000
1,2-diethylbenzene	C10H14	0.000094	0.000572
1,2-dimethyl-3-ethylbenzene	C10H14	0.000096	0.000584

1,2-dimethyl-4-ethylbenzene	C10H14	0.000000	0.000000
1,3-diethylbenzene	C10H14	0.000104	0.000633
1,3-dimethyl-2-ethylbenzene	C10H14	0.000062	0.000377
1,4-diethylbenzene	C10H14	0.000109	0.000663
1,4-dimethyl-2-ethylbenzene	C10H14	0.000106	0.000645
1-methyl-2-isopropylbenzene	C10H14	0.000068	0.000414
1-methyl-2-propylbenzene	C10H14	0.000075	0.000456
1-methyl-3-isopropylbenzene	C10H14	0.000000	0.000000
1-methyl-4-isopropylbenzene	C10H14	0.000164	0.000997
2-methylnonane	C10H22	0.000156	0.001006
3-ethyloctane	C10H22	0.000149	0.000961
3-methylnonane	C10H22	0.000059	0.000380
4-methylnonane	C10H22	0.000095	0.000612
butylbenzene	C10H14	0.000220	0.001338
butylcyclohexane	C10H20	0.000099	0.000629
isobutylbenzene	C10H14	0.000042	0.000255
naphthalene	C10H8	0.000064	0.000372
n-decane	C10H22	0.000448	0.002888
sec-butylbenzene	C10H14	0.000044	0.000268
tert-butylcyclohexane	C10H20	0.000036	0.000229
Unidentified C10	C10	0.000000	0.000000
<b>TOTALS:</b>		<b>0.002544</b>	<b>0.015824</b>

C11 GROUP	FORMULA	MOL%	WT%
n-undecane	C11H24	0.000686	0.004859
pentylbenzene	C11H16	0.000116	0.000779
Unidentified C11	C11	0.000000	0.000000
<b>TOTALS:</b>		<b>0.000802</b>	<b>0.005638</b>

C12 GROUP	FORMULA	MOL%	WT%
n-dodecane	C12H26	0.000314	0.002424
Unidentified C12	C12	0.001075	0.008297
<b>TOTALS:</b>		<b>0.001389</b>	<b>0.010721</b>

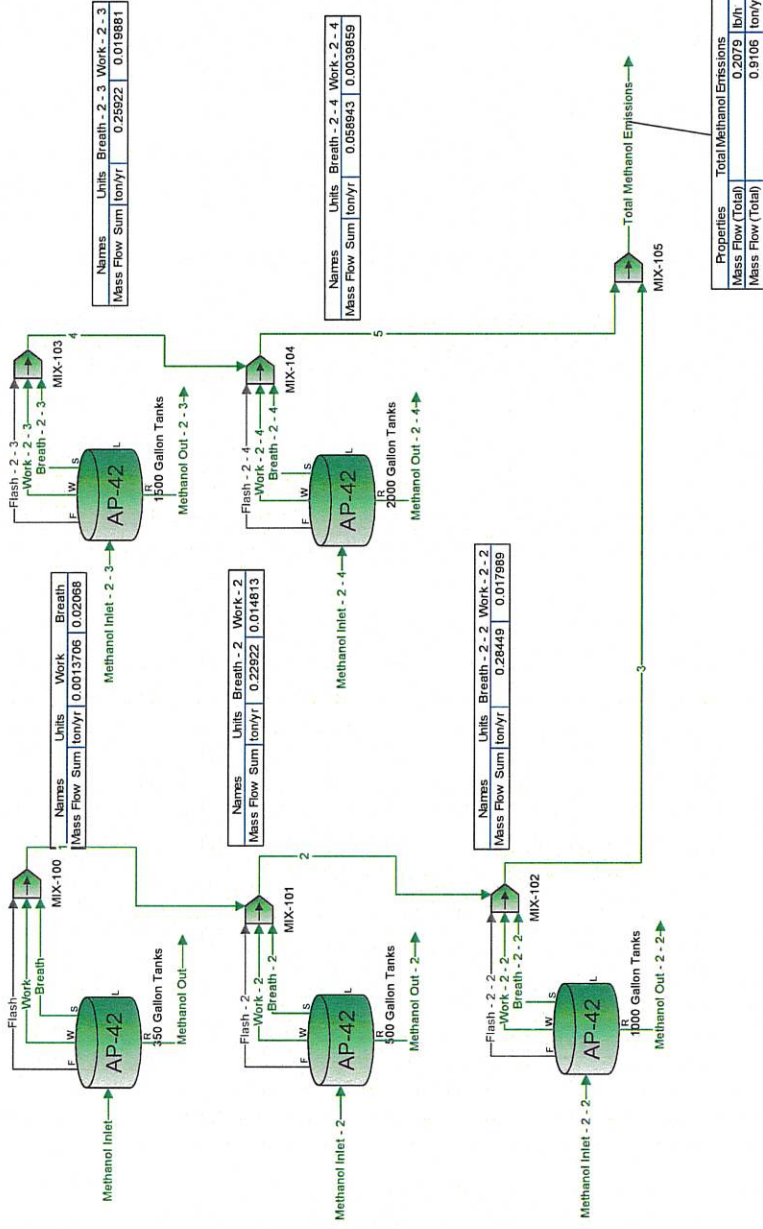
C13 GROUP	FORMULA	MOL%	WT%
n-tridecane	C13H28	0.000149	0.001245
Unidentified C13	C13	0.000000	0.000000
<b>TOTALS:</b>		<b>0.000149</b>	<b>0.001245</b>

C14 GROUP	FORMULA	MOL%	WT%
n-tetradecane	C14H30	0.000102	0.000917

Unidentified C14	C14	0.000000	0.000000
<b>TOTALS:</b>		<b>0.000102</b>	<b>0.000917</b>

C15+ GROUP	FORMULA	MOL%	WT%
n-pentadecane	C15H32	0.000037	0.000356
Unidentified C15	C15	0.000000	0.000000
<b>TOTALS:</b>		<b>0.000037</b>	<b>0.000356</b>





**TANKS 4.0.9d**  
**Emissions Report - Detail Format**  
**Tank Identification and Physical Characteristics**

**Identification**

User Identification:	TK-Gasoline
City:	Midland-Odessa
State:	New Mexico
Company:	Targa Northern Delaware
Type of Tank:	Vertical Fixed Roof Tank
Description:	300 gallon gasoline tank

**Tank Dimensions**

Shell Height (ft):	5.00
Diameter (ft):	3.20
Liquid Height (ft):	4.50
Avg. Liquid Height (ft):	2.50
Volume (gallons):	270.73
Turnovers:	365.00
Net Throughput(gal/yr):	98,816.26
Is Tank Heated (y/n):	N

**Paint Characteristics**

Shell Color/Shade:	Gray/Light
Shell Condition:	Poor
Roof Color/Shade:	Gray/Light
Roof Condition:	Poor

**Roof Characteristics**

Type:	Cone
Height (ft)	0.00
Slope (ft/ft) (Cone Roof)	0.00

**Breather Vent Settings**

Vacuum Settings (psig):	-0.03
Pressure Settings (psig)	0.03

Meteorological Data used in Emissions Calculations: Roswell, New Mexico (Avg Atmospheric Pressure = 12.73 psia)

**TANKS 4.0.9d**  
**Emissions Report - Detail Format**  
**Liquid Contents of Storage Tank**

**TK-Gasoline - Vertical Fixed Roof Tank**  
**Midland-Odessa, New Mexico**

Mixture/Component	Month	Daily Liquid Surf. Temperature (deg F)			Liquid Bulk Temp (deg F)	Vapor Pressure (psia)			Vapor Mol. Weight	Liquid Mass Fract.	Vapor Mass Fract.	Mol. Weight	Basis for Vapor Pressure Calculations
		Avg.	Min.	Max.		Avg.	Min.	Max.					
Gasoline (RVP 9)	All	71.36	58.03	84.73	63.60	5.7413	4.4351	7.3387	67.0000			92.00	Option 4: RVP=9, ASTM Slope=3

**TANKS 4.0.9d**  
**Emissions Report - Detail Format**  
**Detail Calculations (AP-42)**

**TK-Gasoline - Vertical Fixed Roof Tank**  
**Midland-Odessa, New Mexico**

<b>Annual Emission Calculations</b>	
Standing Losses (lb):	142.7524
Vapor Space Volume (cu ft):	20.1062
Vapor Density (lb/cu ft):	0.0676
Vapor Space Expansion Factor:	0.5074
Vented Vapor Saturation Factor:	0.5879
<b>Tank Vapor Space Volume:</b>	
Vapor Space Volume (cu ft):	20.1062
Tank Diameter (ft):	3.2000
Vapor Space Outage (ft):	2.5000
Tank Shell Height (ft):	5.0000
Average Liquid Height (ft):	2.5000
Roof Outage (ft):	0.0000
<b>Roof Outage (Cone Roof)</b>	
Roof Outage (ft):	0.0000
Roof Height (ft):	0.0000
Roof Slope (ft/ft):	0.0000
Shell Radius (ft):	1.6000
<b>Vapor Density</b>	
Vapor Density (lb/cu ft):	0.0676
Vapor Molecular Weight (lb/lb-mole):	67.0000
Vapor Pressure at Daily Average Liquid Surface Temperature (psia):	5.7413
Daily Avg. Liquid Surface Temp. (deg. R):	531.0618
Daily Average Ambient Temp. (deg. F):	60.8167
Ideal Gas Constant R (psia.cuft / (lb-mol-deg R)):	10.731
Liquid Bulk Temperature (deg. R):	523.2867
Tank Paint Solar Absorptance (Shell):	0.6300
Tank Paint Solar Absorptance (Roof):	0.6300
Daily Total Solar Insolation Factor (Btu/sq ft day):	1,810.0000
<b>Vapor Space Expansion Factor</b>	
Vapor Space Expansion Factor:	0.5074
Daily Vapor Temperature Range (deg. R):	53.4084
Daily Vapor Pressure Range (psia):	2.5038
Breather Vent Press. Setting Range (psia):	0.0800
Vapor Pressure at Daily Average Liquid Surface Temperature (psia):	5.7413
Vapor Pressure at Daily Minimum Liquid Surface Temperature (psia):	4.4951
Vapor Pressure at Daily Maximum Liquid Surface Temperature (psia):	7.3387
Daily Avg. Liquid Surface Temp. (deg R):	531.0618
Daily Min. Liquid Surface Temp. (deg R):	517.6997
Daily Max. Liquid Surface Temp. (deg R):	544.4039
Daily Ambient Temp. Range (deg. R):	28.5333
<b>Vented Vapor Saturation Factor</b>	
Vented Vapor Saturation Factor:	0.5879
Vapor Pressure at Daily Average Liquid Surface Temperature (psia):	5.7413
Vapor Space Outage (ft):	2.5000
<b>Working Losses (lb):</b>	
Working Losses (lb):	225.2253
Vapor Molecular Weight (lb/lb-mole):	67.0000
Vapor Pressure at Daily Average Liquid Surface Temperature (psia):	5.7413
Annual Net Throughput (gal/yr):	99,816.2508
Annual Turnovers:	365.0000
Turnover Factor:	0.2489
Maximum Liquid Volume (gal):	270.7255
Maximum Liquid Height (ft):	4.8000
Tank Diameter (ft):	3.2000
Working Loss Product Factor:	1.0000
<b>Total Losses (lb):</b>	<b>367.9777</b>

**TANKS 4.0.9d**  
**Emissions Report - Detail Format**  
**Individual Tank Emission Totals**

**Emissions Report for: Annual**

**TK-Gasoline - Vertical Fixed Roof Tank**  
**Midland-Odessa, New Mexico**

Components	Losses(lbs)		
	Working Loss	Breathing Loss	Total Emissions
Gasoline (RVP 9)	225.23	142.75	367.98

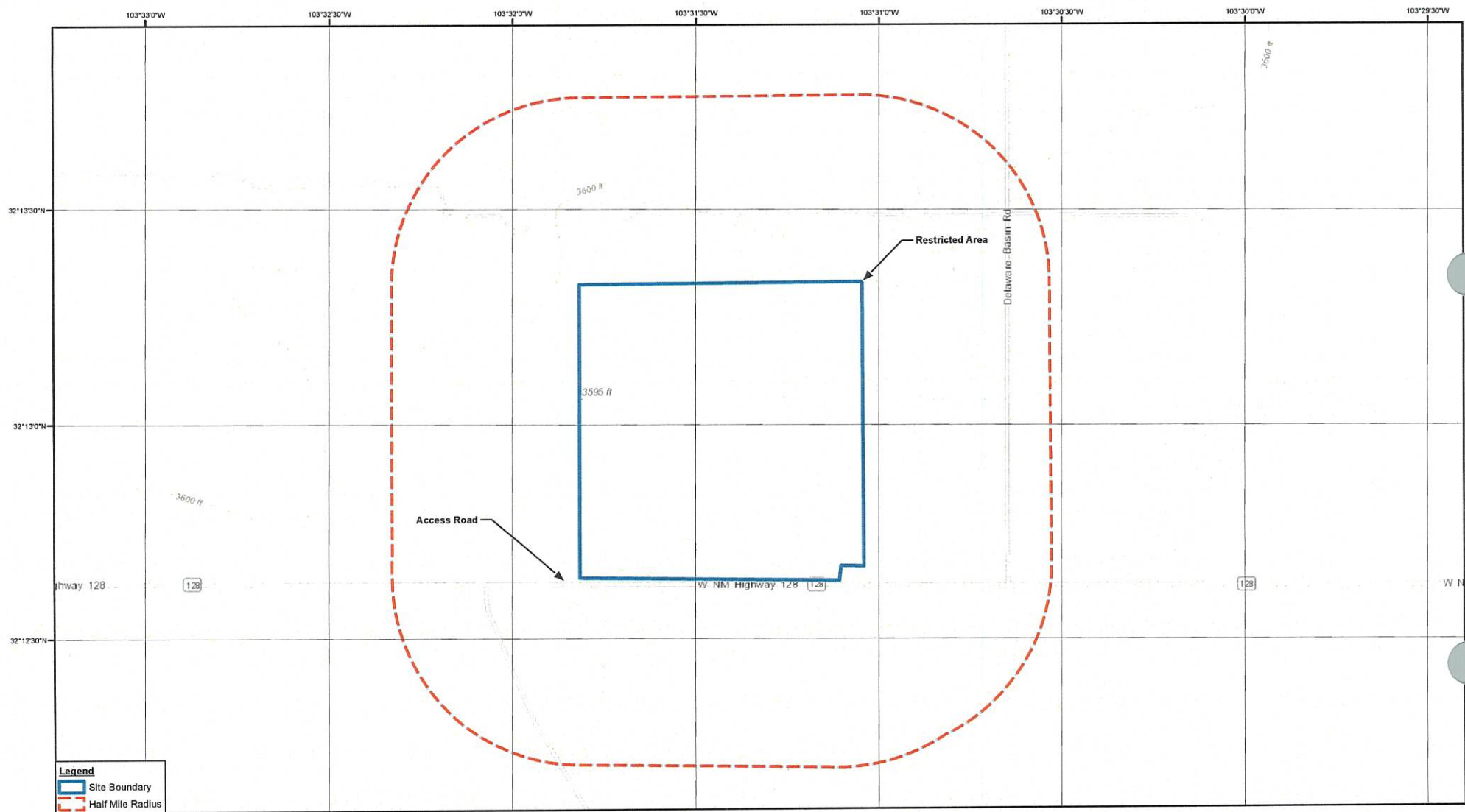
# Section 8

## 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	

A map is attached to this application.



Source: ESRI Topographic Basemap, Accessed 2018

0 750 1,500  
Feet  
Coordinate System:  
NAD 1983 UTM Zone 13N



LUCID ENERGY DELAWARE, LLC  
LEA COUNTY, NEW MEXICO  
RED HILLS GAS PLANT

FACILITY LOCATION MAP

Jun 15, 2019

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.
- 

A copy of the required public notice items is included in this section.



## Jaimy Karacaoglu

---

**From:** Jaimy Karacaoglu  
**Sent:** Wednesday, March 20, 2024 10:41 AM  
**To:** aaron@noalmark.com  
**Subject:** Red Hills Gas Processing Plant Public Service Announcement

Dear 1 Radio Square,

Per New Mexico Administrative Code 20.2.72.203.B NMAC and according to the Guidance for Public Notice for Air Quality Permit Applications – **(5) Notifications: Submittal of Public Service Announcement (PSA):** A public service announcement required for permits and significant permit revisions must be submitted to at least one radio or television station, which services the municipality, or county which the facility is or will be located. **Therefore, based on the above, we respectfully ask you to air the information shown below as a Public Service Announcement.**

The public service announcement request must contain the following information about the facility or proposed facility (20.2.72.203.D NMAC).

- a) The name: **Red Hills Gas Processing Plant**, location: **32.210556°**, **-103.523889°** and type of business: **gas processing plant**.
- b) The name and principal owner or operator: **Targa Northern Delaware, LLC** – owner and operator.
- c) The type of process or change for which the permit is sought: **NSR Significant Revision – addition of malfunction flaring emissions, methanol tanks, exempt diesel and gasoline tanks, haul road emissions, and pigging emissions**.
- d) Locations where the notices have been posted in Estancia, NM 87016: **(1) Red Hills Gas Processing Plant Facility Entrance (2) Woolword Community Library – 100 E. Utah Ave, Jal, NM 88252 (3) Jal City Hall – 309 South Main Street, Jal, NM 88252 (4) Jal United States Post Office – 111 South 4<sup>th</sup> St., Jal, NM 88252**
- e) The Department's address or telephone number to which comments may be directed: **Permit Programs manager; New Mexico Environment Department; Air Quality Bureau; 525 Camino de los Marquez, Suite 1, Santa Fe, New Mexico; 87505-1816; (505) 476-4300; 1 (800) 224-7009.**

Regards,

Jaimy Karacaoglu  
Consultant

P 505.266.6611 M 410.903.0750  
9400 Holly Avenue NE, Building 3, Suite B, Albuquerque, NM 87122  
Email: [jaimy.karacaoglu@trinityconsultants.com](mailto:jaimy.karacaoglu@trinityconsultants.com)



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View our capabilities in the [Environmental Consulting](#), [Built Environment](#), [Life Sciences](#), and [Water & Ecology](#) markets.

## Submittal of Public Service Announcement – Certification

I, Jaimy Karacaoglu, the undersigned, certify that on **March 20, 2024**, submitted a public service announcement to 1 Radio Square (**KZOR-KIXN-KPZA-KEJL-KLEA-KBIM FM-KBIM**) that serves the City of **Hobbs, Lea County, New Mexico**, in which the source is or is proposed to be located and that 1 Radio Square **DID NOT RESPOND**.

Signed this 20 day of March, 2024.

Jaimy Karacaoglu  
Signature

3/20/2024  
Date

Jaimy Karacaoglu  
Printed Name

Consultant – Trinity Consultants  
Title {APPLICANT OR RELATIONSHIP TO APPLICANT}



## Holtec

from PAGE 1

in this bill, I remain committed to passing a durable legislative solution that ensures we are appropriately managing our nation's spent nuclear fuel."

John Heaton, co-chair of the Eddy-Lea Energy Alliance applauded the removal of the language, arguing it could have stymied a national solution to nuclear reactor waste and thus affect the proliferation of nuclear power throughout the U.S.

ELEA is a group of local government and business leaders from southeast New Mexico that provided the land and recruited Holtec to build the project.

Heaton said the Holtec facility is essential to expanded use of atomic power as a means of reducing carbon emissions from energy in New Mexico and the U.S. He said the energy source is critical to the state's goal of 100 percent carbon-free electricity by 2045, as outlined in the 2019 Energy Transition Act.

"Without nuclear power, it's really hard to lower carbon emissions," Heaton said. "To have language to actively stifle nuclear power by not being able to address the back end of the fuel cycle makes no sense. Whether it's a public or private entity, that kind of legislation that prevents the public sector from getting involved makes no sense."

Monica Perales, an attorney for Fasken Oil and Ranch, a Permian-basin oil company opposed to the project and which testified against it during the recent court hearing, said concerns are for the "incompatible land uses" posed by a nuclear waste facility alongside the oilfields of the basin.

The Permian Basin is the most active in the U.S., generating about 6 million barrels of oil per day in southeast New Mexico and West Texas. That industry also provides almost half of New Mexico's state revenue, which could be at risk should a facility like Holtec's go into operation, Perales said.

"We make up about half of New Mexico's budget. We don't want to jeopardize that. We have competing land uses here," she said. "They want to bring in spent nuclear fuel and we think that puts the oil and gas industry at risk."

Perales said Fasken and the Permian Basin Coalition, a consortium of oil and gas

companies and landowners in the region, felt "defeated" and betrayed by Holtec's apparent inability to see the language included. She said opposition to the storage Holtec proposed was bipartisan and roundly rejected by officials in both New Mexico and Texas.

"We collaborated on the draft and want the Senate Appropriations to be similar to the House Appropriations language so they can meet in the middle," Perales said. "By no means are we backing down. We feel very disappointed and let down, but we're not going to give up."

Like many other critics of the proposal, Perales argued that a permanent repository does not exist for disposal of the spent fuel, meaning the Holtec site could by default become the final resting place for the waste. It's designed as a temporary storage site at the surface, and she said if the waste stays there long-term it could pose increased risks to the area, it's people and businesses.

"We're opposing it as a state and local community that didn't benefit from this waste and are now being forced to take the burden of storing it for God knows how long," Perales said. "We have sufficient data to show the site does not qualify for the storage of spent nuclear fuel. It's got to be single-use land. You can't have storage of spent nuclear fuel within the proximity of mineral extraction. I'm just shocked that the NRC is working in a vacuum."

But Heaton argued against viewing the used fuel rods as waste. He said the rods could be retrieved in the future from Holtec's site and reprocessed for use in advanced nuclear reactors. Such a processing or reuse facility, Heaton said, could also be brought to southeast New Mexico to diversify its oil-dependent economy.

"There are many other options for that fuel," Heaton said. "Burying spent fuel might not be the best option. Everybody recognizes used fuel is not absent of power that could be reused. It's another economic development project that could come to our area. Those are job creators."

Adrian Hedden can be reached at 575-628-5516.

## Ex-Trump aide's bid to stave off prison sentence denied

WASHINGTON (AP) — The Supreme Court on Monday refused to halt a prison sentence for former Trump White House official Peter Navarro as he appeals his contempt of Congress conviction.

Navarro is expected to report Tuesday to a federal prison for a four-month sentence, after being found guilty of misdemeanor charges for refusing to cooperate with a congressional investigation into the Jan. 6, 2021, attack on the U.S. Capitol. He had asked to stay free while he appealed his conviction.

Navarro has maintained that he couldn't cooperate with the committee because former President Donald Trump had invoked executive privilege. Lower courts have rejected that argument, finding he couldn't prove Trump had actually invoked it.

The Monday order signed by Supreme Court Chief Justice John Roberts, who handles emergency applications from Washington, D.C., said he has "no basis to disagree" with the appeals court ruling, though he said the finding doesn't affect the eventual outcome of Navarro's appeal.



Navarro

Navarro, who served as a White House trade adviser, was the second Trump aide convicted of misdemeanor contempt of Congress charges. Former White House adviser Steve Bannon previously received a four-month sentence but was allowed to stay free pending appeal by U.S. District Judge Carl Nichols, who was appointed by Trump.

Navarro was found guilty of defying a subpoena for documents and a deposition from the House Jan. 6 committee. U.S. District Judge Amit Mehta, who was appointed by President Barack Obama, refused his push to stave off his prison sentence and the federal appeals court in Washington agreed.

The Supreme Court is also separately preparing to hear arguments on whether Trump himself has presidential immunity from charges alleging he interfered in the 2020 election.

## Microchips

from PAGE 1

Funk said it's important to keep the microchip scanner charged so it can be operational and beneficial to the public.

"Albuquerque has a program like this and has had good success of getting animals to their owners," Funk said.

According to the City of Albuquerque Animal Welfare director Carolyn Ortega, they have five business locations with microchip scanners as well as seven police substations and 22 fire stations.

"The program began in July 2023," Ortega said. "It's been really, really successful."

166 lost pets were taken to local police substations or fire stations with about 72

of them having microchips and 38 percent of those microchipped were reunited with their owners, according to Ortega.

"It really does help them get home much faster," Ortega said.

Peterson, in Hobbs, also has a microchip scanner, however it is not through the animal adoption center program.

Businesses that would like to participate in the program can contact Missy Funk by email at mfunfuk@hobbsnm.org or call 575-397-8923.

Christina Holt's email is reporter3@hobbsnews.com.

## Loan

from PAGE 1

applies for the loan amounts to maintain operating capital.

"This is all based on the work plan from our engineers and helps us meet our growth and keeps our substations up-to-date and lines put in," she said.

Coop customers should also be aware the annual power pole inspection program is underway.

LCEC has contracted with Alamon Utility Services and INTEC Services to perform the annual power pole inspection to evaluate the quality, condition and stability of transmission and distribution poles. Inspections have begun and will continue for two to

three months. Inspections will take place in Lea and Gage County service areas.

Inspection crews, utilizing pickups and ATVs, may be observed on or near members' properties.

Occasionally, they may need to request access to utility poles located behind fences or gates from property owners.

The pole inspection process is brief and serves to confirm the safety of poles. If you have any questions, please call LCEC at 575-396-3631.

Levi Hill's email is managingeditor@hobbsnews.com.

## County

from PAGE 1

fence off so that cattle cannot get onto the roadway," Reid replied.

"Well, I don't agree with that. I think the county should work with this rancher," Jackson said. "We're telling the oilfield that they can make a living and you have no consequences."

Lea County Commissioner Brad Weber said there are other solutions to the issue other than vacating the roadway.

The Freeholders Committee, appointed by commissioners, recommended to not vacate the roadway so that citizens can access the state land.

"According to Statute 67-5-4, if the freeholders do not recommend the vacation of the road, this board can do nothing but deny the vacation. If the freeholders come back and recommend that it be vacated, then this commission can choose to vacate or not," Lea County Attorney John Caldwell said.

Though the commissioners denied the request to vacate the roadway, they agreed to further discuss this issue at a later date. Lea County Commissioners Pat Sims and Dean Jackson both voted against the resolution — in effect voting to vacate the easement.

Reid also presented the request to vacate the roadway between Eva and Hunter St., which is north of Hobbs and a dedicated alley.

Property owner Arturo Aranda requested the vacation of the easement because it divides his property.

Aranda would like to have a circle horse track, to care for his horses, to grow a garden and have a greenhouse, according to the request.

The roadway between Eva and Hunter St. was supposed to be Lham St., which was never developed, Reid said.

The reason the Freeholders Committee is recommending the denial of the request is because the alley way allows access to

utilities. If the roadway is vacated, the block lane would be larger than 1,320 feet according to subdivision regulations in ordinance 35, according to Reid.

"So, if we vacate, we are violating our ordinance," Reid said.

"I think this one has some valid reasons for not vacating it," Sims said.

"There's not any reason why they can't ride their horses and play on it. They just can't build a structure on it," Weber said.

The Lea County Commissioners unanimously approved to deny Aranda's request. Also during the meeting:

■ Facilities Director Edmundo Lara, presented commissioners with two requests for the demolition of structures on recently acquired county properties — due to safety.

One property is located directly south of the Lea County Fairgrounds parking lot on East Avenue D and Roosevelt Street, in Lovington.

The other property is located north of the Lea County Sheriff's Department on South Commercial Street and East Avenue K, in Lovington.

The location at East Avenue D will cost approximately \$86,000 for demolition, and \$39,000 for the property on South Commercial Street.

Commissioners unanimously approved two contracts with G.W.C. Construction, in Lovington, for the demolition of structures on the properties.

■ Lea County Manager Mike Gallagher presented a request to purchase 1.73 acres at 701 E. Avenue D, in Lovington, for \$575,000. The land is located south of the Lea County Fairgrounds parking lot.

Lea County Commissioners unanimously approved the purchase the land.

Christina Holt's email is reporter3@hobbsnews.com.

## Uber driver hits, kills a toddler after dropping her family at home

HOUSTON (AP) —

A 1-year-old girl died after being hit by an Uber driver who had just dropped her family at their apartment complex in Houston and apparently didn't see her in front of his car as he pulled away, authorities said.

Harris County Sheriff's officials said the girl's family members then pulled the

driver from his vehicle and assaulted him Sunday.

"It's just an unfortunate tragedy at this point," said sheriff's officer Lt. K. Benoit.

The driver thought his path was clear after dropping the girl and her family off, but as he drove forward he hit the girl and dragged her for a bit, Harris County

Sheriff Ed Gonzalez said.

Surveillance video shows the girl walking alone in front of the car just before she was hit.

"We as parents, relatives, custodians of children, we have to be a lot more alert, hold their hands, guide them to a safe place and then watch the driver pull away," Benoit said.

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### NOTICE OF AIR QUALITY PERMIT APPLICATION

Targa Northern Delaware, LLC announces its application submitted to the New Mexico Environment Department for the modification of its Red Hills Gas Processing Plant facility. The expected date of application submission to the Air Quality Bureau is March 18, 2024.

The exact location for the proposed facility known as Red Hills Gas Processing Plant, is at 1934 W NM Highway 128, Jal, NM 88332. The approximate location of this site is 24 miles WNW of Jal, NM in Lea county.

The proposed modification consists of authorizing methanol tanks, haul roads, piping launching and receiving activities, and malfunction flaring.

The estimated maximum quantities of any regulated air contaminant will be as follows in pounds per hour (pph) and tons per year (tpy) and could occur only during the course of the Department's review:

Pollutant	Pounds per hour	Tons per year
Particulate Matter (PM)	32	107
PM <sub>10</sub>	22	95
PM <sub>2.5</sub>	18	75
Sulfur Dioxide (SO <sub>2</sub> )	4,956	542
Nitrogen Oxides (NO <sub>x</sub> )	7,156	462
Carbon Monoxide (CO)	21,635	568
Volatile Organic Compounds (VOC)	16,810	646
Total sum of all Hazardous Air Pollutants (HAPs)	1,137	138
Toxic Air Pollutant (TAP)	N/A	N/A
Green House Gas Emissions as Total CO <sub>2</sub> e	N/A	1,466,568 tpy

The standard and maximum operating schedules of the facility will be from 24 hours per day, 7 days a week and a maximum of 52 weeks per year.

Owners and operators of the facility include: Targa Northern Delaware, LLC, PO Box 1689, Lovington, NM 88360.

If you have any comments about the construction or operation of this facility, and you want your comments to be made as part of the permit review process, you must submit your comments in writing to this address: Permit Programs Manager, New Mexico Environment Department, Air Quality Bureau, 525 Camino de los Marquez, Suite 1; Santa Fe, New Mexico 87505-1316. Other comments and questions may be submitted verbally. (505) 439-4300; 1-800-324-7009.

Please refer to the company name and site name, or send a copy of this notice along with your comments, since the Department may have not yet received the permit application. Please include a legible return mailing address with your comments. Once the Department has performed a preliminary review of the application and its air quality impacts, the Department's notice will be published in the legal section of a newspaper circulated near the facility location.

General information about air quality and the permitting process, and links to the regulations can be found at the Air Quality Bureau's website: [www.enr.nm.gov/air-quality/permitting-section-home-page/](http://www.enr.nm.gov/air-quality/permitting-section-home-page/). The regulation dealing with public participation in the permit review process is 20.2.7.206 NMAC.

**Atención**  
Este es un aviso de la oficina de Calidad del Aire del Departamento del Medio Ambiente de Nuevo México, acerca de las emisiones producidas por un establecimiento en esta área. Si usted desea información en español, por favor comuníquese con esa oficina al teléfono 505-429-3395.

**Notice of Non-Discrimination**  
NMED does not discriminate on the basis of race, color, national origin, disability, age or sex in the administration of its programs or activities, as required by applicable laws and regulations. NMED is responsible for coordination of compliance efforts and receipt of inquiries concerning non-discrimination requirements implemented by 40 C.F.R. Part 7, including Title VI of the Civil Rights Act of 1964, as amended; Section 504 of the Rehabilitation Act of 1973; the Age Discrimination Act of 1975, Title III of the Education Amendments of 1972, and Section 13 of the Federal Water Pollution Control Act Amendments of 1972. If you have any questions about this notice or any of NMED's non-discrimination programs, policies or procedures, or if you believe that you have been discriminated against with respect to a NMED program or activity, you may contact: Non-Discrimination Coordinator, NMED, 11905 St. Francis Dr., Suite 4405, Santa Fe, NM 87505, (505) 837-2855, nd.coordinator@enr.nm.gov. You may also visit our website at <https://www.enr.nm.gov/non-employee-discrimination-complaint-page/> to learn how and where to file a complaint of discrimination.

[illegible]

LEGAL LEGAL LEGAL LEGAL

LEGAL NOTICE  
March 19, 2024

**OIL CONSERVATION DIVISION  
SANTA FE, NEW MEXICO**

**STATE OF NEW MEXICO TO:**  
**All named parties and persons**

(NOTE: All land descriptions herein refer to the New Mexico Principal Meridian whether or not so stated.)

or claim in the following case  
and notes to the public.

[illegible][illegible][illegible]



## General Posting of Notices – Certification

I, Joseph Tillman Austin, the undersigned, certify that on 03/18/2024, posted a true and correct copy of the attached Public Notice in the following publicly accessible and conspicuous places in the Town of Jal, Lea County, State of New Mexico on the following dates:

1. Facility entrance: 03/18/2024
2. Woolword Community Library, 100 E. Utah Ave, Jal, NM 88252: 03/18/2024
3. Jal City Hall, 309 South Main Street, Jal, NM 88252: 03/18/2024
4. Jal United States Post Office, 111 South 4<sup>th</sup> Street, Jal, NM 88252: 03/18/2024

Signed this 18<sup>th</sup> day of March, 2024.

J. T. Austin  
Signature

03/18/2024  
Date

Joseph Tillman Austin  
Printed Name

Sr. Environmental Specialist  
Title

Mar 18, 2024 at 09:46:03

132.113001,-103.192736

100 E Utah Ave

Jal NM 88252

United States

## NOTICE

Targa Northern Delaware, LLC announces its application submittal to the New Mexico Environment Department for an application for the modification of its Red Hills Gas Processing Plant facility. The expected date of application submittal to the Air Quality Bureau is March 18, 2024.

The exact location for the proposed facility known as Red Hills Gas Processing Plant, is at 1934 W NM Highway 128, Jal, NM 88252. The approximate location of this facility is 24 miles WNW of Jal, NM in Lea county.

The proposed modification consists of authorizing methanol tanks, haul roads, pigging launching and receiving activities, and malfunction flaring.

The estimated maximum quantities of any regulated air contaminant will be as follows in pound per hour (pph) and tons per year (tpy) and could change slightly during the course of the Department's review:

Pollutant:	Pounds per hour	Tons per year
Particulate Matter (PM)	32	107
PM <sub>10</sub>	22	95
PM <sub>2.5</sub>	18	75
Sulfur Dioxide (SO <sub>2</sub> )	4,916	542
Nitrogen Oxides (NO <sub>x</sub> )	7,156	462
Carbon Monoxide (CO)	21,635	568
Volatile Organic Compounds (VOC)	16,610	646
Total sum of all Hazardous Air Pollutants (HAPs)	1,117	138
Toxic Air Pollutant (TAP)	N/A	N/A
Green House Gas Emissions as Total CO <sub>2</sub> e	n/a	1,466,568 tpy

The standard and maximum operating schedules of the facility will be from 24 hours per day, 7 days a week and a maximum of 52 weeks per year.

Owners and operators of the facility include: Targa Northern Delaware, LLC, PO Box 1689, Lovington, NM 88260.

If you have any comments about the construction or operation of this facility, and you want your comments to be made as part of the permit review process, you must submit your comments in writing to this address: Permit Programs Manager; New Mexico Environment Department; Air Quality Bureau; 525 Camino de los Marquez, Suite 1; Santa Fe, New Mexico; 87505-1816. Other comments and questions may be submitted verbally. (505) 476-4300; 1 800 224-7009.

Please refer to the company name and site name, or send a copy of this notice along with your comments, since the Department may have not yet received the permit application. Please include a legible return mailing address with your comments. Once the Department has performed a preliminary review of the application and its air quality impacts, the Department's notice will be published in the legal section of a newspaper circulated near the facility location.

General information about air quality and the permitting process, and links to the regulations can be found at the Air Quality Bureau's website: [www.env.nm.gov/air-quality/permitting-section-home-page/](http://www.env.nm.gov/air-quality/permitting-section-home-page/). The regulation dealing with public participation in the permit review process is 20.2.72.206 NMAC.

### Atención

Este es un aviso de la oficina de Calidad del Aire del Departamento del Medio Ambiente de Nuevo México, acerca de las emisiones producidas por un establecimiento en esta área. Si usted desea información en español, por favor comuníquese con esa oficina al teléfono 505-629-3395.

### Notice of Non-Discrimination

NMED does not discriminate on the basis of race, color, national origin, disability, age or sex in the administration of its programs or activities, as required by applicable laws and regulations. NMED is responsible for coordination of compliance efforts and receipt of inquiries concerning non-discrimination requirements implemented by 40 C.F.R. Part 7, including Title VI of the Civil Rights Act of 1964, as amended; Section 504 of the Rehabilitation Act of 1973; the Age Discrimination Act of 1975, Title IX of the Education Amendments of 1972, and Section 13 of the Federal Water Pollution Control Act Amendments of 1972. If you have any questions about this notice or any of NMED's non-discrimination programs, policies or procedures, or if you believe that you have been discriminated against with respect to a NMED program or activity, you may contact: Non-Discrimination Coordinator, NMED, 1190 St. Francis Dr., Suite N4050, P.O. Box 5469, Santa Fe, NM 87502, (505) 827-2855, [nd.coordinator@env.nm.gov](mailto:nd.coordinator@env.nm.gov). You may also visit our website at <https://www.env.nm.gov/non-employee-discrimination-complaint-page/> to learn how and where to file a complaint of discrimination.



Please see a professional preparer for assistance with complicated returns.

- Form 1095-A, if applicable
- Information for other i
- Information for all dedu
- Total paid to date



Mar 18, 2024 at 09:52:57  
+32.115411,-103.194667  
111 S Fourth St  
Jal NM 88252  
United States

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Mar 18, 2024 at 10:00:38  
+32.116282,-103.200698  
701 W Wyoming Ave  
Jal NM 88252  
United States

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Mar 18, 2024 at 10:41:50  
+32.217862,-103.528357  
Jal NM 88252  
United States

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179,869	\$	19,524.00
127,266	\$	17,805.00
155,454	\$	15,642.00
178,057	\$	14,304.00





## Notified Citizens (within 0.5 miles of Red Hills Gas Processing Plant)

### Area of Interest (AOI) Information

Area : 1,874.65 acres

Mar 18 2024 22:14:06 Mountain Daylight Time



Parcel Lines

Parcel

State Road

Township

Dashed Township

Section

Dashed Section

QSection

Dashed QSection

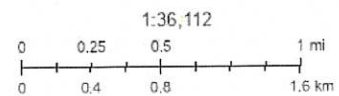
Lot Lines

Townships

Sections

Lea County Roads

Lea County Boundary



Texas Parks & Wildlife, CONANP, Esri, TomTom, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, EPA, NPS, US Census Bureau, USGS, USFWS

## Parcels

#	Owner #	Name	In Care of Name	Mailing Address 1	Mailing Address 2
1	204523	VANGARD WIRELESS LCC	INSITE WIRELESS GROUP LLC %	RYAN PTS DEPT 607 %	PO BOX 460389
2	90142	SOUTHWESTERN PUBLIC SERVICE CO	N/A	6086 W 48TH AVE	N/A
3	212712	SHOUP 2018 GRANDCHILDREN'S EDU TRS	CARLSBAD NATIONAL BANK TRUSTEE %	202 W STEVENS	N/A
4		N/A	N/A	N/A	N/A
5	211739	NGL NORTH RANCH LLC	N/A	6120 S YALE AVE	STE 805
6	90142	SOUTHWESTERN PUBLIC SERVICE CO	N/A	6086 W 48TH AVE	N/A
7	210728	OWL MCCLOY LANDFILL LLC	N/A	8214 WESTCHESTER DR	SUITE 850
8		N/A	N/A	N/A	N/A
9	51787	QUAIL RANCH LLC	N/A	PO BOX 2197	N/A
10		N/A	N/A	N/A	N/A
11	207339	AGAVE ENERGY COMPANY	LUCID ARTESIA COMPANY %	KE ANDREWS & CO %	2424 RIDGE RD
12	51787	QUAIL RANCH LLC	N/A	PO BOX 2197	N/A
13	51787	QUAIL RANCH LLC	N/A	PO BOX 2197	N/A
14	211739	NGL NORTH RANCH LLC	N/A	6120 S YALE AVE	STE 805
15	51801	FORTNER, BILLIE MC KANDLES	HALE, MARY NELL MC KANDLES	1033 PARK CENTER ST	N/A
16	211739	NGL NORTH RANCH LLC	N/A	6120 S YALE AVE	STE 805
17	51787	QUAIL RANCH LLC	N/A	PO BOX 2197	N/A
18	51787	QUAIL RANCH LLC	N/A	PO BOX 2197	N/A
19	51787	QUAIL RANCH LLC	N/A	PO BOX 2197	N/A
20	207339	AGAVE ENERGY COMPANY	LUCID ARTESIA COMPANY %	KE ANDREWS & CO %	2424 RIDGE RD

#	Mailing City	Mailing State	Mailing Zipcode	Location	Area(acres)
1	HOUSTON	TX	77056	N/A	0.15
2	AMARILLO	TX	79109	N/A	1.42
3	CARLSBAD	NM	88221	N/A	4.43
4	N/A	N/A	N/A	N/A	7.91
5	TULSA	OK	74136	N/A	22.46
6	AMARILLO	TX	79109	N/A	39.74
7	DALLAS	TX	75225	N/A	41.01
8	N/A	N/A	N/A	N/A	47.40
9	HOUSTON	TX	77252	N/A	66.48
10	N/A	N/A	N/A	N/A	68.42
11	ROCKWALL	TX	75087	N/A	79.34
12	HOUSTON	TX	77252	1620 W NM HIGHWAY 128	86.36
13	HOUSTON	TX	77252	N/A	105.74
14	TULSA	OK	74136	N/A	117.46
15	BENBROOK	TX	76126	N/A	150.51
16	TULSA	OK	74136	N/A	155.76
17	HOUSTON	TX	77252	N/A	156.36
18	HOUSTON	TX	77252	N/A	207.07
19	HOUSTON	TX	77252	N/A	214.25
20	ROCKWALL	TX	75087	N/A	302.39

Lea County, New Mexico Portico Disclaimer:

Information deemed reliable but not guaranteed. Copyright 2023.

MAP TO BE USED FOR TAX PURPOSES ONLY. NOT TO BE USED FOR CONVEYANCE.

Square Foot and Year Built listed only to be used for comparative purposes, NOT to be used for commerce.

**March 19, 2024**

**CERTIFIED MAIL 7014 2870 0001 4722 6759**

**RETURN RECEIPT REQUESTED (certified mail is required, return receipt is optional)**

Dear **Neighbor/Environmental Director/County or Municipal Official,**

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**Lovington, NM 88260**

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Sincerely,

**Targa Northern Delaware, LLC**

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**Lovington, NM 88260**

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7014 2670 0001 4722 6780

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Postage	\$
Certified Fee	
Return Receipt Fee (Endorsement Required)	
Restricted Delivery Fee (Endorsement Required)	
Total Postage & Fees	\$

**\$0.00!  
US POSTAGE**  
3/19/2024  
062512395454  
87113  
000029659

**AGAVE ENERGY COMPANY**  
2424 RIDGE RD  
ROCKWALL, TX 75087

Sent To  
Street & Apt. No.  
or PO Box No.  
City, State, ZIP+4

PS Form 3800, J

7014 2670 0001 4722 6773

**U.S. Postal Service™  
CERTIFIED MAIL® RECEIPT**  
Domestic Mail Only

For delivery information, visit our website at [www.usps.com](http://www.usps.com)

**OFFICIAL**

Postage	\$
Certified Fee	
Return Receipt Fee (Endorsement Required)	
Restricted Delivery Fee (Endorsement Required)	
Total Postage & Fees	\$

**\$0.00!  
US POSTAGE**  
3/19/2024  
062512395454  
87113  
000029658

**BILLIE MC KANDLES FORTNER**  
1033 PARK CENTER ST  
BENBROOK, TX 76126

Sent To  
Street & Apt. No.  
or PO Box No.  
City, State, ZIP+4

PS Form 3800, J

7014 2670 0001 4722 6759

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CERTIFIED MAIL® RECEIPT**  
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For delivery information, visit our website at [www.usps.com](http://www.usps.com)

**OFFICIAL USE**

Postage	\$
Certified Fee	
Return Receipt Fee (Endorsement Required)	
Restricted Delivery Fee (Endorsement Required)	
Total Postage & Fees	\$

**MAYOR OF JAL**  
PO DRAWER 340  
710 W. WYOMING  
JAL, NM 88252

Sent To  
Street & Apt. No.  
or PO Box No.  
City, State, ZIP+4

PS Form 3800, J

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## 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 Red Hills Gas Processing Plant is an existing natural gas processing plant located in Lea County. The primary function of the plant is to remove CO<sub>2</sub> and water from field gas so that the gas can meet pipeline specifications. The plant has been designated a primary Standard Industrial Classification (SIC) Code of 1311.

The gas will be treated to remove acid gases (H<sub>2</sub>S and SO<sub>2</sub>) dehydrated to remove water and processed to remove C<sub>2</sub>+ hydrocarbons from the gas stream. Several plant systems will be involved to perform these functions.

#### Slug Catcher / Separator

A slug catcher has been installed at the front of Train 1 to catch and separate any free hydrocarbon liquids and water present in the inlet pipeline gas stream. It is capable of handling large slugs of liquid brought into the plant from pipeline pigging operations. This equipment acts as a three-phase separator to separate the free hydrocarbons, gas to be processed, and any water that may condensed in the pipeline after field dehydration. A separate inlet system consisting of a series of separators and slug catchers will be associated with Train 2, and Train 3, 4, 5, and 6.

#### Propane Refrigeration

The propane refrigeration system works in tandem with the overhead stabilization system to remove heavier hydrocarbons in the gas stream in order to increase cryogenic efficiencies later in the process. Typically, the gas stream is refrigerated to just above -200°F and C<sub>4</sub>+ components are dropped out of the process gas in varying efficiencies so the cryogenic equipment can concentrate on the lighter C<sub>2</sub> and C<sub>3</sub> components.

#### Stabilizer Overhead / Compressor

The overhead stabilization system is in place to assist in increasing plant efficiencies of Natural Gas Liquid (NGL) production and to lower the Reid Vapor Pressure (RVP) of the pipeline liquids and condensate after they are dropped out of the gas stream. Through a process that chills and compresses the gas from the inlet system, remaining vapors are separated off the refrigeration stream and are processed so the RVP is lowered to 9. Both the condensate from the refrigeration section of the plant and the hydrocarbon liquids out of the slug catcher are combined, stabilized and sent to the tank farm for truck or pipeline sales. Any remaining vapors are recycled back to the front of the stabilization process. The liquid in the tank farm is then stable and thus does not give off significant vapors. The tank farm is equipped with a fuel gas blanket for further protection.

#### Amine Treating

The amine unit is designed to remove CO<sub>2</sub> and H<sub>2</sub>S from the natural gas stream to meet pipeline specifications. In addition, carbon dioxide can freeze in the cryogenic unit, forming dry ice and forcing the shutdown of the facility. Amine treating is an exothermic chemical reaction process. The treating solution is a mixture of RO water and approximately 28-35% DEA (diethanolamine). This aqueous mixture is regenerated and reused. Lean DEA solution is pumped to the top of the contactor and allowed to flow downward. Wet gas is fed into the bottom of the contactor and flows upward. As the lean DEA solution flows down through the contactor, it comes into contact with the wet gas. The CO<sub>2</sub> reacts with the amine to form an amine carbonate. The reacted amine, known as "sour" or "rich" amine, and the processed ("sweet") gas continues to the dehydration system. Emissions from amine units 1-EP-4 and 2-EP-4 are controlled by the thermal oxidizer unit EP-5. Emissions from amine units 2.5-EP-4 and 5.5-RP-1d are controlled by Acid Gas Injection Wells (AGI) #1 and #2, respectively. During AGI compressor downtime, the controlled emissions are handled by Emergency AGI Flares, units 2.5-EP-5 and 5.5-EP-1b. Emissions from amine unit, 3-EP-4, are routed to the thermal oxidizer unit, EP-6. Emissions from amine unit, 4-EP-4, are routed to the thermal oxidizer unit, EP-8. Emissions from amine units, 5-EP-1f and 6-EP-1f, are routed to the thermal oxidizer unit, EP-10.

**Hot Oil System**

The hot oil system at the plant is used to provide heat to certain processes within the facility. The system will circulate hot oil and deliver 50.0 MMBTU/hr to other processes. It consists of the following components:

- Natural Gas-Fired Heater – This provides heat input into the system by burning natural gas and circulating the oil through the heater. The heater also has a convection section that assists in heating the regeneration gas for the molecular sieves.
- Hot Oil Pumps – These pumps circulate the required amount of hot oil through the system.
- Hot Oil Surge Tank – This tank provides expansion volume for the system. As the system heats up, the liquid will expand. This tank allows for the liquid to expand without spilling out of the system.
- Heat Exchangers – A series of exchangers, mainly the amine reboilers, glycol reboilers and regeneration gas heat exchangers that remove heat from the hot oil system and transfer it to the respective process.

**Glycol Dehydration**

Triethylene glycol (TEG) dehydration is used to remove water from the natural gas stream and is accomplished by reducing the inlet water dew point (temperature at which vapor begins to condense into a liquid) to the outlet dew point temperature which will contain a specified amount of water. Water vapor is absorbed by the TEG solution. The wet gas is brought into contact with dry "lean" glycol in a countercurrent contactor tower. Water vapor is absorbed in the glycol and consequently, its dew point reduces. Wet gas passing through the contactor tower is dehydrated, then passed to the mol sieves. The wet (or "rich") glycol then flows from the absorber to a regeneration system in which it is partially decompressed, then heated to remove water

vapor, resulting in "lean" glycol that is reintroduced to the contactor tower. Emissions from glycol dehydrator units, 1-EP-3 and 2a-EP-3, are controlled by thermal oxidizer unit, EP-5. Emissions from the other glycol dehydrator units, 3-EP-3 and 4-EP-3, are controlled by thermal oxidizer units, EP-6 and EP-8, respectively. Emissions from glycol dehydrator units, 5-EP-1e and 6-EP-1e, are controlled by thermal oxidizer, EP-10.

**Molecular Sieve Dehydration**

Molecular sieve dehydration is used upstream of the cryogenic units to achieve a gas stream dew point of -150°F. The process uses two molecular sieve vessels with one vessel in service absorbing moisture from the gas stream and the other vessel in the regeneration mode. During the regeneration mode, hot, dry gas (regen gas) is passed up through the vessel to drive off the absorbed moisture from the molecular sieve. The gas comes from the discharge of the residue compressors and it is passed through a heat exchanger (heated by hot oil) and a heater to achieve a temperature of approximately 500°F. After the gas passes through the bed it is cooled in an air-cooled exchanger. The water in the gas condenses and is separated from the gas stream in a separator. The regen gas can be routed to the sales gas stream, depending on the water content of the gas.

**Cryogenic Unit**

The cryogenic unit is designed to liquefy natural gas components from the sweet, dehydrated inlet gas by removing work (heat) from the gas by means of the turbo expander. The cryogenic unit recovers natural gas liquids (NGL) by cooling the gas stream to extremely cold temperatures (-150°F and lower) and condensing components such as ethane, propane, butanes and heavier. The gas is cooled by a series of heat exchangers and by rapidly lowering the pressure of the gas from around 760 PSIG to approximately 190 PSIG. Once the gas has passed through the system of heat exchangers and expansion, it is re-compressed using the energy obtained from expanding the gas. The gas is sent to residue compressors and pipelined out of the facility.

In case the compressors are shut in, the gas is temporarily sent to the emergency flares.

**Storage and Loading Operations**

The natural gas liquids will be stored in up to five pressurized 90,000-gallon tanks, also called bullets. These tanks are not a source of regulated pollutants. The tank loading will take place via a pressurized, closed loop system. Unloading is done directly into a pipeline. The controls for tanks are listed below:

- Condensate tanks 1-T-1 through 1-T-6 are controlled by the enclosed combustion devices, EP-7
- Sour slop tanks, 2-T-1 and 2-T-2, are controlled by the sour slop tank control flare, EP-9
- Condensate tanks 3-T-1 through 3-T-6, are controlled by the enclosed combustion devices, EP-10
- Sour water tanks 4-T-1 and 4-T-2, are controlled by the sour slop tank control flare, EP-13.

**Flares**

The plant flares are used during startup, shutdown, maintenance and upset conditions. The only steady state operations associated with this flare are from the pilot and purge gas streams. SSM emissions from the plant flare result from

maintenance activities per manufacturer-recommended or other preventative maintenance schedules. These maintenance activities include, but are not limited to compressor catalyst changes, blowdowns for associated maintenance throughout the facility, instrument calibrations, and process safety device maintenance.

**Emergency AGI Flare**

When the AGI wells are inoperable due to maintenance or upset conditions, acid gas will be flared for limited periods at the acid gas flares. Under startup, shutdown, maintenance, and upset conditions the AGI wells could be offline. During times when an AGI well is down, the sour gas will be sent to the respective acid gas flare. The AGI Flare units, 2.5-EP-5 and 5.5-EP-5, will also control in-condensable and flash tank emissions from the amine vent units, 2.5-EP-4 and 5.5-EP-5.

## 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):**

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

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

☒ Yes      ☐ No

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

☒ Yes      ☐ No

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

☒ Yes      ☐ No

**C. Make a determination:**

- ☒ The source, as described in this application, constitutes the entire source for 20.2.70, 20.2.72, 20.2.73, or 20.2.74 NMAC applicability purposes. If in "A" above you evaluated only the source that is the subject of this application, all "YES" boxes should be checked. If in "A" above you evaluated other sources as well, you must check **AT LEAST ONE** of the boxes "NO" to conclude that the source, as described in the application, is the entire source for 20.2.70, 20.2.72, 20.2.73, and 20.2.74 NMAC applicability purposes.
- ☐ The source, as described in this application, **does not** constitute the entire source for 20.2.70, 20.2.72, 20.2.73, or 20.2.74 NMAC applicability purposes (A permit may be issued for a portion of a source). The entire source consists of the following facilities or emissions sources (list and describe):

# Section 12

## Section 12.A

### PSD Applicability Determination for All Sources

(Submitting under 20.2.72, 20.2.74 NMAC)

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

A. This facility is:

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

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

- a. NOx: **10.0** TPY
- b. CO: **10.0** TPY
- c. VOC: **15.54** TPY
- d. SOx: **10.0** TPY
- e. PM: **9.15** TPY
- f. PM10: **2.33** TPY
- g. PM2.5: **0.23** TPY
- h. Fluorides: **N/A** TPY
- i. Lead: **N/A** TPY
- j. Sulfur compounds (listed in Table 2): **9.03** TPY
- k. GHG: **5,298.22** TPY

C. Netting **is not required (project is not significant).**

D. BACT is **not required for this modification, as this application is a minor modification.**

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

This facility is an existing PSD major source. This is the only permit modification for this facility at this time.

**PSD Applicability Review**

Targa proposes to modify NSR Permit 4310-M6 by authorizing malfunction flaring, pigging, haul roads, and methanol tanks. This project will not allow the site to realize greater throughput than what had been previously authorized.

This modification is not related to any previous projects completed at the facility and does not exceed the significant emission rates in Table 2 of 20.2.74.502 NMAC, as demonstrated below.

**PSD Applicability Step 1 – Project Determination and Project Increases**

For this application, the "project" includes:

- Methanol tanks (TK-M)
- Haul Roads (Haul-ORR, Haul-Green, Haul-Red, Haul-Blue, Haul-OR2)
- Malfunction Flaring (Flare-M)
- Pig launching and receiving (REC-1 through REC-7)

**Baseline Emission Calculations**

As a conservative first estimate, it was assumed that the baseline actual emissions are 0 tpy for all units in lieu of reviewing 10 years of data to determine the highest baseline actual emissions based on the highest 24-month consecutive period.

**Net Emissions Change Calculation****Project Emissions Increase**

Unit	NO <sub>x</sub> (ton/yr)	CO (ton/yr)	VOC (ton/yr)	SO <sub>x</sub> (ton/yr)	PM (ton/yr)	PM <sub>10</sub> (ton/yr)	PM <sub>2.5</sub> (ton/yr)	H <sub>2</sub> S (ton/yr)	CO <sub>2e</sub> (ton/yr)
TK-M	-	-	0.91	-	-	-	-	-	-
Haul-ORR	-	-	-	-	4.88	1.24	0.12	-	-
Haul-Green	-	-	-	-	1.72	0.44	0.04	-	-
Haul-Red	-	-	-	-	0.91	0.23	0.023	-	-
Haul-Blue	-	-	-	-	1.27	0.32	0.032	-	-
Haul-OR2	-	-	-	-	0.38	0.10	0.010	-	-
Flare-M	10.00	10.00	10.00	10.00	-	-	-	9.00	5022.29
REC-1	-	-	0.62	-	-	-	-	0.026	45.07
REC-2	-	-	0.08	-	-	-	-	3.48E-03	6.10
REC-3	-	-	0.08	-	-	-	-	1.03E-06	4.71
REC-4	-	-	0.16	-	-	-	-	2.06E-06	9.41
REC-5	-	-	0.16	-	-	-	-	2.06E-06	9.41
REC-6	-	-	2.11	-	-	-	-	2.65E-05	120.73
REC-7	-	-	1.41	-	-	-	-	1.77E-05	80.49



**Step 1 – Project Net Emissions Change**

Unit	NO <sub>x</sub> (ton/yr)	CO (ton/yr)	VOC (ton/yr)	SO <sub>x</sub> (ton/yr)	PM (ton/yr)	PM <sub>10</sub> (ton/yr)	PM <sub>2.5</sub> (ton/yr)	H <sub>2</sub> S (ton/yr)	CO <sub>2e</sub> (ton/yr)
TK-M	-	-	0.91	-	-	-	-	-	-
Haul-ORR	-	-	-	-	4.88	1.24	0.12	-	-
Haul-Green	-	-	-	-	1.72	0.44	0.04	-	-
Haul-Red	-	-	-	-	0.91	0.23	0.023	-	-
Haul-Blue	-	-	-	-	1.27	0.32	0.032	-	-
Haul-OR2	-	-	-	-	0.38	0.10	0.010	-	-
Flare-M	10.00	10.00	10.00	10.00	-	-	-	9.00	5022.29
REC-1	-	-	0.62	-	-	-	-	0.026	45.07
REC-2	-	-	0.08	-	-	-	-	3.48E-03	6.10
REC-3	-	-	0.08	-	-	-	-	1.03E-06	4.71
REC-4	-	-	0.16	-	-	-	-	2.06E-06	9.41
REC-5	-	-	0.16	-	-	-	-	2.06E-06	9.41
REC-6	-	-	2.11	-	-	-	-	2.65E-05	120.73
REC-7	-	-	1.41	-	-	-	-	1.77E-05	80.49
Project Total	10.00	10.00	15.54	10.00	9.15	2.33	0.23	9.03	5298.22
PSD Significance	40	100	40	40	25	15	10	10	75,000
Are project emissions significant?	No	No	No	No	No	No	No	No	No

## 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 RELEVANT TO YOUR FACILITY'S NOTICE OF INTENT OR PERMIT.

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

**Table for State Regulations:**

<u>State Regulation Citation</u>	<b>Title</b>	<b>Applies ? Enter Yes or No</b>	<b>Unit(s) or Facility</b>	<b>Justification:</b>
20.2.1 NMAC	General Provisions	Yes	Facility	General Provisions apply to Notice of Intent, Construction, and Title V permit applications.
20.2.3 NMAC	Ambient Air Quality Standards NMAAQS	Yes	Facility	This site is in compliance with the Federal and New Mexico ambient air quality standards. Air dispersion modeling was completed for the July 2019 NSR permit application.
20.2.7 NMAC	Excess Emissions	Yes	Facility	This regulation establishes requirements for the facility if operations at the facility result in any excess emissions. The owner or operator will operate the source at the facility having an excess emission, to the extent practicable, including associated air pollution control equipment, in a manner consistent with good air pollution control practices for minimizing emissions. The facility will notify the NMED of any excess emission per 20.2.7.110 NMAC.
20.2.23 NMAC	Fugitive Dust Control	No	N/A	<p>This regulation may apply if, this is an application for a notice of intent (NOI) per 20.2.73 NMAC, if the activity or facility is a fugitive dust source listed at 20.2.23.108.A NMAC, <b>and</b> if the activity or facility is located in an area subject to a mitigation plan pursuant to 40 CFR 51.930.</p> <p>As of January 2019, the only areas of the State subject to a mitigation plan per 40 CFR 51.930 are in Doña Ana and Luna Counties.</p> <p>As this site is a permitted facility located in Lea County, NM, this regulation does not apply.</p>
20.2.33 NMAC	Gas Burning Equipment - Nitrogen Dioxide	No	N/A	This facility does not have gas burning equipment with a heat input greater than 1,000,000 MMBtu.
20.2.34 NMAC	Oil Burning Equipment: NO <sub>2</sub>	No	N/A	This facility does not have oil burning equipment ( <b>external combustion emission sources, such as oil-fired boilers and heaters</b> ) having a heat input of greater than 1,000,000 million British Thermal Units per year per unit.
20.2.35 NMAC	Natural Gas Processing Plant – Sulfur	Yes	Facility	This regulation establishes sulfur emission standards for natural gas processing plants. The proposed facility meets the definition of a new natural gas processing plant under this regulation and is subject to the requirements of this regulation [20.2.35.7 (B) NMAC]. The facility will comply with all requirements under 20.2.35 NMAC as applicable.
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	This regulation could apply to storage tanks at petroleum production facilities, processing facilities, tanks batteries, or hydrocarbon storage facilities. This facility does not meet any of the applicability determinations under 20.2.38 NMAC; therefore, this regulation does not apply.
20.2.39 NMAC	Sulfur Recovery Plant - Sulfur	No	N/A	This regulation could apply to sulfur recovery plants that are <b>not</b> part of petroleum or natural gas processing facilities. As this site is a natural gas processing facility, this regulation does not apply.
20.2.50 NMAC	Oil and Gas Sector – Ozone Precursor Pollutants	Yes	EP-7, EP-12, EP-5, EP-6, EP-8, EP-10, FUG (Train 2-4), FUG-1 (Train 1), 1.5-EP-3, 4-EP-3, 5-EP-1e, 6-EP-1e, 3-Load, 4-Load, 5-Load, 1-EP-	<p>113 – The facility does not have any applicable units. Therefore, this regulation does not apply.</p> <p>114 – This facility has electric engines with reciprocating compressors. Thus, this rule applies to the facility.</p> <p>115 – The control devices and closed vent systems at this facility are used to comply with the requirements of this rule; therefore, they are subject to the requirements of this rule.</p> <p>116 – This facility will have equipment leaks and fugitive emissions. Thus, it will comply with this regulation.</p>

<u>State Regulation Citation</u>	<b>Title</b>	<b>Applies ? Enter Yes or No</b>	<b>Unit(s) or Facility</b>	<b>Justification:</b>
			1, 1.5-EP-1g, 2-EP-1b, 2-EP-1h, 2a-EP-1d, 2.5-EP-1d, 4-EP-1d, 4-EP-1h, 5-EP-1a, 5-EP-1b, 6-EP-1a, 6-EP-1b, 5.5-EP-1a., REC-1 through REC-7	<p>117 – This facility is a natural gas processing plant. Thus, it is not subject to this rule.</p> <p>118 – This facility has less than 2 tpy VOC emissions. Thus, this rule does not apply to the facility.</p> <p>119 – This facility has heater and reboiler units with a capacity greater than 20 MMBtu/hr. Therefore, this rule is applicable to this facility.</p> <p>120 – This facility is connected to a pipeline. Thus, this rule does not apply to the facility.</p> <p>121 – Pig launching and receiving activities have the potential to emit more than 1 tpy; therefore, this regulation applies.</p> <p>122 – All pneumatic controllers and pumps are air controlled. Thus, the facility is not subject to this rule.</p> <p>123 – This facility has less than 2 tpy maximum allowable VOC emissions. Thus, it is not subject to this subpart.</p> <p>124 – The facility does not have any applicable activities. Therefore, this regulation does not apply.</p> <p>125 – The facility does not qualify for a small business. Thus, this regulation is not applicable.</p> <p>126 – The facility does not have any applicable activities. Therefore, this regulation does not apply.</p> <p>127 – The facility does not have any applicable activities. Therefore, this regulation does not apply.</p>
20.2.61.109 NMAC	Smoke & Visible Emissions	Yes	Stationary Combustion Equipment	This regulation that limits opacity to 20% applies to Stationary Combustion Equipment, such as engines, boilers, heaters, and flares unless your equipment is subject to another state regulation that limits particulate matter such as 20.2.19 NMAC (see 20.2.61.109 NMAC). The listed equipment must comply with this regulation.
20.2.70 NMAC	Operating Permits	Yes	Facility	This facility is a Title V major source and operates under Title V permit number P278-M1.
20.2.71 NMAC	Operating Permit Fees	Yes	Facility	If 20.2.70 NMAC applies, then 20.2.71 NMAC applies. All operating permit fees will be paid, as required.
20.2.72 NMAC	Construction Permits	Yes	Facility	This facility is subject to 20.2.72 NMAC and currently operates under NSR permit number 4310-M6.
20.2.73 NMAC	NOI & Emissions Inventory Requirements	Yes	Facility	All facilities that are a Title V Major Source as defined at 20.2.70.7.R NMAC, are subject to Emissions Inventory Reporting.
20.2.74 NMAC	Permits – Prevention of Significant Deterioration (PSD)	Yes	Facility	This facility is a PSD major source and currently operates under NSR permit number 4310-M6.
20.2.75 NMAC	Construction Permit Fees	No	N/A	As this is a Title V permit application, construction permit fees do not apply.
20.2.77 NMAC	New Source Performance	Yes	Units subject to 40 CFR 60	This is a stationary source which is subject to the requirements of 40 CFR Part 60.

<u>State Regulation Citation</u>	<b>Title</b>	<b>Applies ? Enter Yes or No</b>	<b>Unit(s) or Facility</b>	<b>Justification:</b>
20.2.78 NMAC	Emission Standards for HAPS	No	N/A	This facility emits hazardous air pollutants but none of which are subject to the requirements of 40 CFR Part 61.
20.2.79 NMAC	Permits – Nonattainment Areas	No	N/A	This facility is not located in a non-attainment area and therefore it is not subject to this regulation.
20.2.80 NMAC	Stack Heights	No	N/A	This regulation establishes requirements for the evaluation of stack heights and other dispersion techniques. This regulation does not apply as all stacks at the facility follow good engineering practice.
20.2.82 NMAC	MACT Standards for source categories of HAPS	Yes	Units Subject to 40 CFR 63	This regulation applies to all sources emitting hazardous air pollutants, which are subject to the requirements of 40 CFR Part 63.

**Table for Applicable Federal Regulations:**

<u>Federal Regulation Citation</u>	<b>Title</b>	<b>Applies? Enter Yes or No</b>	<b>Unit(s) or Facility</b>	<b>Justification:</b>
40 CFR 50	NAAQS	No	N/A	The modeling and conditions developed from the modeling are the applicable requirements to demonstration compliance with the NAAQs.
NSPS 40 CFR 60, Subpart A	General Provisions	Yes	Units subject to 40 CFR 60	Applies if any other Subpart in 40 CFR 60 applies.
NSPS 40 CFR 60.40a, Subpart Da	Subpart Da, Performance Standards for Electric Utility Steam Generating Units	No	N/A	This regulation establishes standards of 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 CFR 60.40b Subpart Db	Electric Utility Steam Generating Units	No	N/A	This regulation does not apply because the facility does not operate any electric utility steam generating units.
40 CFR 60.40c, Subpart Dc	Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units	Yes	1-EP-1, 1.5-EP-1g, 4-EP-1g, 2-EP-1b, 2-EP-1h, 2a-EP-1d, 2.5-EP-1d, EP-5,	The listed units are steam generating units for which construction, modification or reconstruction is commenced after June 9, 1989 and that have a maximum design heat input capacity of 29 MW (100 MMBtu/hr) or less, but greater than or equal to 2.9 MW (10 MMBtu/hr).



<u>Federal Regulation Citation</u>	<b>Title</b>	<b>Applies? Enter Yes or No</b>	<b>Unit(s) or Facility</b>	<b>Justification:</b>
			EP-6, EP-8, 3-EP-1b, 4-EP-1a, 4-EP-1b, 4-EP-1d, 4-EP-1e, 4-EP-1h, 5-EP-1a, 5-EP-1b, 5-EP-1d, 6-EP-1a, 6-EP-1b, 6-EP-1d, 7-EP-1d, 5.5-EP-1a, EP-11	
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	Except as provided in paragraph (b) of this section, the affected facility to which this subpart applies is each storage vessel with a storage capacity greater than 151,416 liters (40,000 gallons) that is used to store petroleum liquids for which construction is commenced after May 18, 1978 and prior to July 23, 1984. The condensate tanks at this facility were constructed after July 23, 1984, therefore, this subpart 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	Yes	1-T-1, 1-T-2, 1-T-3, 1-T-4, 1-T-5, 1-T-6, 3-T-1, 3-T-2, 3-T-3, 3-T-4, 3-T-5, 3-T-6	Except as provided in paragraph (b) of this section, the affected facility to which this subpart applies is each storage vessel with a capacity greater than or equal to 75 cubic meters (m <sup>3</sup> ) that is used to store volatile organic liquids (VOL) for which construction, reconstruction, or modification is commenced after July 23, 1984. The tanks at this facility have a design capacity greater than or equal to 75 m <sup>3</sup> but less than 151 m <sup>3</sup> storing a liquid with a maximum true vapor pressure more than 15.0 kPa.
NSPS 40 CFR 60.330 Subpart GG	Stationary Gas Turbines	No	N/A	There are no turbines onsite; therefore, this regulation does not apply.
NSPS 40 CFR 60, Subpart KKK	Leaks of VOC from Onshore Gas Plants	No	N/A	Affected Facility with Leaks of VOC from Onshore Gas Plants. Any affected facility under paragraph (a) of this section that commences construction, reconstruction, or modification after January 20, 1984 and on or before August 23, 2011, is subject to the requirements of this subpart. As this site was constructed after August 23, 2011, Subpart KKK is not applicable.
NSPS 40 CFR Part 60 Subpart LLL	Standards of Performance for Onshore Natural Gas Processing: SO <sub>2</sub> Emissions	No	N/A	This regulation applies to onshore natural gas processing facilities which commence construction, reconstruction, or modification after January 20, 1984 and on or before August 23, 2011. As this site was constructed after August 23, 2011, Subpart LLL does not apply.
NSPS 40 CFR Part 60 Subpart OOOO	Standards of Performance for Crude Oil and Natural Gas Production,	Yes	1-EP-4, FUG (Train 1), reciprocating compressors	This regulation establishes emission standards and compliance schedule for the control of volatile organic compounds (VOC) emissions from affected facilities that commence construction, modification, or reconstruction after August 23, 2011 and before September 18, 2015. Since the facility has equipment that was constructed or modified after August 23, 2011 and



<u>Federal Regulation Citation</u>	<u>Title</u>	<u>Applies? Enter Yes or No</u>	<u>Unit(s) or Facility</u>	<u>Justification:</u>
	Transmission, and Distribution for which construction, modification or reconstruction commenced after August 23, 2011 and before September 18, 2015			<p>before September 18, 2015, pneumatic devices and equipment leaks are subject to this regulation. Amine Units, reciprocating compressors, and fugitive equipment leaks constructed between August 24, 2011 and September 18, 2015 are subject to this regulation. The owner will comply with any applicable requirements under this subpart. Some of the condensate tanks at the facility are pressurized and do not meet the definition of a storage vessel in this regulation. All atmospheric condensate storage tanks are exempt from this regulation as they have less than 6 tpy VOC per affected unit. [40 CFR 60.5395].</p> <p>Sweetening units located at onshore natural gas processing plants are an affected unit. [40 CFR 60.5365(g)(1)].</p> <p>Leak standards will apply to new and modified units at this facility as per [40 CFR 60.5400].</p> <p>The pneumatic devices located at the facility will not be continuous gas bleed and therefore will not have applicable requirements under this regulation [40 CFR 60.5365(d)(3)]. This facility uses pneumatic air devices.</p>
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	2-EP-4, 2.5-EP-4, 3-EP-4, 4-EP-4, 5-EP-1f, 6-EP-1f, FUG (Train 2-4), FUG-1	<p>This regulation applies to amine units and fugitive equipment leaks which commenced construction after September 18, 2015.</p> <p>Some of the condensate tanks at the facility are pressurized and do not meet the definition of a storage vessel in this regulation. All atmospheric condensate storage tanks are exempt from this regulation as they have less than 6 tpy VOC per affected unit. [40 CFR 60.5365a].</p>
NSPS 40 CFR Part 60 Subpart OOOOb	Standards of Performance for Crude Oil and Natural Gas Facilities for which Construction Commenced After November 15, 2021	Yes	FUG-AGI2, FGCOMP-1, FGCOMP-2	This regulation is applicable to natural gas processing plants modified after December 6, 2022. The facility is subject to this regulation because the following subparts apply:
NSPS 40 CFR 60 Subpart IIII	Standards of performance for Stationary Compression Ignition Internal Combustion Engines	No	N/A	Not applicable as there are no compression ignition engines included in this permit.
NSPS 40 CFR Part 60 Subpart JJJJ	Standards of Performance for Stationary Spark Ignition Internal Combustion Engines	Yes	1-Gen-1	This regulation establishes standards of performance for stationary spark ignition internal combustion engines. The Caterpillar CG137 engine, unit 1-GEN-1, at this facility is subject to NSPS JJJJ as it commenced construction after June 12, 2006 and was manufactured on or after July 1, 2007 [§60.4230(a)(4)(i)].
NSPS 40 CFR 60 Subpart TTTT	Standards of Performance for Greenhouse Gas Emissions for Electric Generating Units	No	N/A	The facility does not operate an affected source under this subpart.

<b><u>Federal Regulation Citation</u></b>	<b>Title</b>	<b>Applies? Enter Yes or No</b>	<b>Unit(s) or Facility</b>	<b>Justification:</b>
NSPS 40 CFR 60 Subpart UUUU	Emissions Guidelines for Greenhouse Gas Emissions and Compliance Times for Electric Utility Generating Units	No	N/A	The facility does not operate an affected source under this subpart.
NSPS 40 CFR 60, Subparts WWW, XXX, Cc, and Cf	Standards of performance for Municipal Solid Waste (MSW) Landfills	No	N/A	This facility is not an MSW landfill.
NESHAP 40 CFR 61 Subpart A	General Provisions	No	N/A	NSPS 40 CFR 61 does not apply to the facility because the facility does not emit or have the triggering substances on site and/or the facility is not involved in the triggering activity. The facility is not subject to this regulation. None of the subparts of Part 61 apply to the facility.
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. This facility is not involved in these activities. This regulation does not apply.
NESHAP 40 CFR 61 Subpart V	National Emission Standards for Equipment Leaks (Fugitive Emission Sources)	No	N/A	This regulation establishes national emission standards for equipment leaks (fugitive emission sources). The facility does not have equipment that operates in volatile hazardous air pollutant (VHAP) service [40 CFR Part 61.240]. The regulated activities subject to this regulation do not take place at this facility. The facility is not subject to this regulation.
MACT 40 CFR 63, Subpart A	General Provisions	Yes	Units Subject to 40 CFR 63	Applies if any other Subpart in 40 CFR 63 applies.
MACT 40 CFR 63.760 Subpart HH	Oil and Natural Gas Production Facilities	Yes	1-EP-3, 2a-EP-3, 3-EP-3, 4-EP-3, 5-EP-1e, 6-EP-1e, FUG, FUG-1	<p>This regulation establishes national emission standards for hazardous air pollutants from oil and natural gas production facilities. The facility is a major source of HAPs and meets the definition of a natural gas processing plant. The dehydrators will have a natural gas flow rate equal to or greater than 85 thousand standard cubic feet. The dehydrators that comply with the 1 tpy control option under 63.765(b)(1)(ii) are considered large dehydrators under MACT HH. The units will comply with applicable closed vent and control requirements, along with monitoring, recordkeeping, and reporting requirements, as applicable.</p> <p>Fugitive components must comply with requirements under NSPS Subpart OOOO or OOOOa but there are still some reporting requirements that may apply under MACT Subpart HH. The owner will comply with any applicable requirements under Subpart HH for this site.</p>
MACT 40 CFR 63 Subpart HHH	National Emissions Standards for Hazardous Air Pollutants from Natural Gas Transmission and Storage facilities	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 regulation does not apply because this facility is not a natural gas transmission or storage facility as defined in this regulation [40 CFR Part 63.1270(a)].
MACT 40 CFR 63 Subpart DDDDD	National Emission Standards for Hazardous Air Pollutants for Major Industrial, Commercial, and Institutional	Yes	1-EP-1, 1.5-EP-1g, 4-EP-1g, 2-EP-1a, 2-EP-1b, 2-EP-1e, 2-EP-1h, 2a-EP-1d,	The facility is a major source of HAPS. The units listed will be subject to MACT 40 CFR 63 Subpart DDDDD as they will be constructed after the June 4, 2010 applicability date. The boilers and process heaters will be combusting natural gas. The owner will comply with all applicable MACT DDDDD requirements

<u>Federal Regulation Citation</u>	<b>Title</b>	<b>Applies? Enter Yes or No</b>	<b>Unit(s) or Facility</b>	<b>Justification:</b>
	Boilers & Process Heaters		2.5-EP-1d, 3-EP-1a, 3-EP-1b, 3-EP-1e, 4-EP-1a, 4-EP-1b, 4-EP-1d, 4-EP-1e, 4-EP-1h, 5-EP-1a, 5-EP-1b, 5-EP-1c, 5-EP-1d, 5.5-EP-1a, 6-EP-1a, 6-EP-1b, 6-EP-1c, 6-EP-1d, 7-EP-1c, 7-EP-1d	
MACT 40 CFR 63 Subpart UUUUU	National Emission Standards for Hazardous Air Pollutants Coal & Oil Fire Electric Utility Steam Generating Unit	No	N/A	See 63.9980 (known as the MATs rule)
MACT 40 CFR 63 Subpart ZZZZ	National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (RICE MACT)	Yes	1-Gen-1	The generator engine (1-Gen-1) at this facility is subject to ZZZZ as new stationary RICE located at a major source. The engine must meet the requirements of MACT ZZZZ by meeting the requirements of NSPS JJJJ. No other requirements under this part apply.
40 CFR 64	Compliance Assurance Monitoring	Yes	2-EP-4, 3-EP-4, 4-EP-4, 5-EP-1f, 6-EP-1f, 1-EP-3, 2a-EP-3, 3-EP-3, 4-EP-3, 5-EP-1e, 6-EP-1e, 3-LOAD, 2.5-EP-4	<p>This regulation defines compliance assurance monitoring (CAM). This regulation applies to the listed amine units and glycol dehydration units because the units have potential pre-control device emissions that are equal to or greater than 100 percent of the amount, in tons per year, required for a source to be classified as a major source. The units currently in operation are included in the site's CAM plan, which is being updated with this application, and can be found in Section 19.</p> <p>The owner will comply with all applicable requirements under 40 CFR Part 64.</p>
40 CFR 68	Chemical Accident Prevention	Yes	Facility	The facility is an affected facility, as it will use flammable process chemicals such as propane at quantities greater than the thresholds. The facility will develop and maintain an RMP for these chemicals.
Title IV – Acid Rain	Acid Rain	No	N/A	This regulation does not apply as this facility does not generate commercial electric power or electric power for sale.

<b><u>Federal Regulation Citation</u></b>	<b>Title</b>	<b>Applies? Enter Yes or No</b>	<b>Unit(s) or Facility</b>	<b>Justification:</b>
40 CFR 72				
Title IV – Acid Rain 40 CFR 73	Sulfur Dioxide Allowance Emissions	No	N/A	This regulation does not apply as this facility does not generate commercial electric power or electric power for sale.
Title IV-Acid Rain 40 CFR 75	Continuous Emissions Monitoring	No	N/A	This regulation does not apply as this facility 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	This regulation does not apply as this facility does not generate commercial electric power or electric power for sale.
Title VI – 40 CFR 82	Protection of Stratospheric Ozone	No	N/A	<p>Not applicable as this facility does not meet any of the following:</p> <p>(40 CFR 82.1 and 82.100) produce, transform, destroy, import, or export a controlled substance or import or export a controlled product;</p> <p>(40 CFR 82.30) if you perform service on a motor vehicle for consideration when this service involves the refrigerant in the motor vehicle air conditioner;</p> <p>(40 CFR 82.80) if you are a department, agency, and instrumentality of the United States subject to Federal procurement requirements;</p> <p>(82.150) if you service, maintain, or repair appliances, dispose of appliances, refrigerant reclaimers, if you are an owner or operator of an appliance, if you are a manufacturer of appliances or of recycling and recovery equipment, if you are an approved recycling and recovery equipment testing organization, and/or if you sell or offer for sell or purchase class I or class I refrigerants.</p>

# Section 14

## Operational Plan to Mitigate Emissions

(Submitting under 20.2.70, 20.2.72, 20.2.74 NMAC)

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

# Section 15

## Alternative Operating Scenarios

(Submitting under 20.2.70, 20.2.72, 20.2.74 NMAC)

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

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

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

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There are no alternative operating scenarios being proposed with this application.



# 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](http://www.env.nm.gov/aqb/permit/app_form.html)) for more detailed instructions on SSM emissions modeling requirements.
- 3) Title V (20.2.70 NMAC) ambient impact analysis: Title V applications must specify the construction permit and/or Title V Permit number(s) for which air quality dispersion modeling was last approved. Facilities that have only a Title V permit, such as landfills and air curtain incinerators, are subject to the same modeling required for preconstruction permits required by 20.2.72 and 20.2.74 NMAC.

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

**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.

\*\*The air dispersion modeling waiver is being submitted at the same time as the application and has not yet been approved.

Air dispersion modeling was last performed in the July 2019 NSR revision application. In an internal audit, Targa subsequently discovered deficiencies in the July 2019 modeling and will provide updated dispersion modeling, facility-wide emissions, in a separate permit application currently being prepared. A modeling waiver is being submitted as part of this application.

# Section 17

## Compliance Test History

(Submitting under 20.2.70, 20.2.72, 20.2.74 NMAC)

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

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Compliance testing information will be made available upon request by the NMED.

## Section 20

### Other Relevant Information

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

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

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Targa Northern Delaware, LLC recently completed an audit under Appendix D: Voluntary Environmental Disclosure policy. During a review of the permit, it was discovered that a number of permit conditions were difficult, if not impossible, to comply with due to the custom nature of the equipment present at the facility. Detailed below are requested permit language changes that Targa would like to request that AQB consider with this modification. Proposed revisions to each applicable permit condition are identified in red text below. No language removal is requested.

Condition A107.D – Targa would like to request that an operator developed procedure be an option for compliance with the SSM Flare Gas Flow Monitoring and Gas Analysis condition below.

- A. SSM Flare Gas Flow Monitoring and Gas Analysis (Units 1-EP-2, 2-EP-2a, 2.5-EP-5, 3-EP-2a, 4-EP-2a, 5-EP-2, 7-EP-2, 5.5-EP-1b)

**Requirement:** Compliance with the flare allowable emission limits in Table 107.A shall be demonstrated by completing the monitoring, recordkeeping, and reporting required by this condition and Condition A107.E. All flow meters and inline chemical composition analyzers shall be installed, calibrated, operated and maintained in accordance with the requirements of Condition B108.H.

**Monitoring:**

(1) Gas Flow:

- (a) One or more gas flowmeters equipped with a chart recorder or data logger (electronic storage) shall be installed to continuously monitor the flow (scf) of gas sent to the flare.
- (b) Pilot, purge, and assist gas, if applicable, shall be monitored using a gas flowmeter under (a) or determined using manufacturer's specifications or engineering estimates.

(2) Gas Analysis:

- (a) Once per calendar year, the permittee shall perform a gas analysis, including measurement of the H<sub>2</sub>S content, total sulfur content, VOC content, and heating value (BTU/scf) of gas sent to the flare for combustion. Gas analyses shall be separated by a minimum of six (6) months.
- (b) Alternatively, for H<sub>2</sub>S only, in lieu of an annual analysis, H<sub>2</sub>S may be measured quarterly using a stain tube(s) of the appropriate size range or with an inline chemical composition analyzer.

- (3) Calibration: In addition to the requirements of Condition B108.H, flow meters and inline chemical composition analyzers shall be operated, calibrated, and maintained as specified by the site-specific operations and maintenance plan, if applicable.

**Recordkeeping:** The following records shall be maintained in accordance with Condition B109.

(1) Gas Flow:

- (a) Records of continuous flowmeter measurements and the hourly flow rate in scf/hr calculated by averaging a minimum of four (4) equally spaced readings for each hour.
- (b) Manufacturer's specifications or engineering estimates used for pilot, purge, and assist (if applicable) gas flow rates.

- (2) Gas Analysis: All sample documentation received from the laboratory or testing service company, including H<sub>2</sub>S content, the total sulfur content, the VOC content, and the heating value (BTU/scf), analysis method utilized, and sample chain of custody. If stain tubes are used for measuring H<sub>2</sub>S content, records of the results, including size range of stain tubes used, the date of the test, and the name of the person conducting the test.

- (3) Calibration: Records of all flowmeter and inline monitor certifications, calibrations, data capture calculations and documentation as specified by Condition B108.H, as well as any breakdowns, reasons for the breakdown, and corrective actions. The permittee shall also maintain a copy of the manufacturer specifications for operation and calibration or the site-specific operations and maintenance plan for flowmeters and inline monitors.

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

Condition A107.F – Targa would like to request the ability to sample a stream deemed representative of the gas vented during SSM/M activities, since sampling during a venting SSM/M event would be infeasible.

- B. Combined SSM/M (Malfunction) of VOC Emission Limit (Unit SSM/M, excludes venting from Cryogenic Trains and Unit EP-11 for ECD down time)

**Requirement:**

**(1) Compliance Method**

The permittee shall perform a gas analysis once every year based on a calendar year of a gas stream deemed representative of the gas vented during each SSM/M event.

On a monthly basis, the permittee shall complete the following monitoring and recordkeeping to demonstrate compliance with the allowable emission limits in Table 107.A for routine or predictable startup, shutdown, and maintenance (SSM); and/or malfunctions (M) herein referred to as SSM/M.

**(2) Emissions included in Permit Limit and/or Reported as Excess Emissions**

- (a) All emissions due to routine or predictable startup, shutdown, and/or maintenance (SSM), other than venting from Cryogenic trains or EP-11, must be included under and shall not exceed the SSM/M emission limit in table 107.A in this permit. For emissions due to malfunctions, the permittee has the option to report these as excess emissions of the pound per hour limits in Table 106.A (or the pound per hour limits in condition B110F, if applicable), in accordance with 20.2.7 NMAC, or include the emissions under the limit in table 107.A.
- (b) Once emissions from a malfunction event are submitted in the final report (due no later than ten days after the end of the excess emissions event) per 20.2.7.110.A(2) NMAC, the event is considered an excess emission and cannot be applied toward the SSM/M limit in table 107.A. in this permit.

**(3) Emissions Exceeding the Permit Limit**

If the monthly rolling 12-month total of SSM/M exceeds the emission limit in table 107.A, the permittee shall report the emissions as excess emissions in accordance with 20.2.7.110 NMAC.

**(4) Emissions Due to Preventable Events**

Emissions that are due entirely or in part to poor maintenance, careless operation, or any other preventable equipment breakdown shall not be included under the SSM/M emission limit in table 107.A. These emissions shall be reported as excess emissions of the pound per hour limits in Table 106.A (or the pound per hour limits in condition B110F, if applicable) in accordance with 20.2.7 NMAC.

**Monitoring:** The permittee shall monitor all SSM/M events.

**Recordkeeping:**

**(1) Compliance Method**

- (a) Each month records shall be kept of the cumulative total of all VOC emissions related to SSM/M during the first 12 months and, thereafter of the monthly rolling 12-month total of SSM/M VOC emissions. Any malfunction emissions that have been reported in a final excess emissions report per 20.2.7.110.A(2) NMAC, shall be excluded from this total.
- (b) Records shall also be kept of the inlet gas analysis, the weight percent VOC of the gas based on the most recent gas analysis, and of the volume of total gas vented in MMscf used to calculate the VOC emissions.

(c) The permittee shall identify the equipment or activity and shall describe the event that is the source of emissions.

**(2) Emissions included Under Permit Limit or Reported as Excess Emissions**

The permittee shall record whether emissions are included under the emission limit for SSM/M in table 107.A or if the event is included in a final excess emissions report per 20.2.7.110.A(2) NMAC.

**(3) Condition B109 Records**

The permittee shall keep records in accordance with Condition B109 of this permit except for the following:

- (a) The requirement to record the start and end times of SSM/M events shall not apply to venting of known quantities of VOCs as long as the emissions do not exceed the SSM/M emission limit.
- (b) The requirement to record a description of the cause of the event shall not apply to SSM/M events as long as the emissions do not exceed the SSM/M emission limit.

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



Condition A202.B – Targa would like to request the ability to utilize Targa-specific procedures when manufacturer recommendations are not available.

B. Control Requirements and Operation (Units 1-EP-3, 2a-EP-3, 3-EP-3, 4-EP-3, 5-EP-1e, and 6-EP-1e)

**Requirement:** The permittee shall meet the control requirements in Table 105 to demonstrate compliance with the allowable VOC emission limits in Table 106.A.

At all times dehydrator emissions shall be controlled as follows.

- (1) Still vent emissions shall be routed to a condenser and then routed to a thermal oxidizer for combustion.
- (2) Flash tank emissions shall be routed to a process point that allows the off-gas to be recycled and recompressed, and not vented to the atmosphere.
- (3) At no time shall still vent or flash tank emissions be vented directly to the atmosphere except as allowed by Section 107.

**Monitoring:** The permittee shall inspect the glycol dehydrator and the control equipment semi-annually to ensure it is operating as initially designed and in accordance with the manufacturer's recommended procedures **or owner/operator procedures**. The permittee shall also inspect that the reboiler is operating as initially designed and in accordance with the manufacturer's recommended procedures **or the owner/operator procedures**.

**Recordkeeping:** The permittee shall record the inspection and the results of all equipment and control device inspections chronologically, noting any maintenance or repairs needed to bring the dehydrator into compliance. The permittee shall maintain a copy of the manufacturer's maintenance recommendations **or the owner/operator maintenance recommendations**.

Condition A208.E – Targa would like to request the ability to utilize Targa-specific procedures when manufacturer recommendations are not available.

- 1) Control Requirement for Flares (EP-9 controlling units 2-T and 2-Load, and EP-13 controlling units 4-T, and 4-Load)

**Requirement:**

The permittee shall ensure that all emissions from the Tanks and loadout are routed to a flare as required by Table 105.

At no time shall emissions be vented directly to the atmosphere except as authorized by Section A107.

**Monitoring:** The permittee shall inspect the tanks and the control equipment semi-annually to ensure they are operating in accordance with the manufacturer's recommended operating and maintenance procedures **or owner/operator operating and maintenance procedure**. The permittee shall inspect the control device during condensate stabilization system downtime to ensure that it is operating as designed.

**Recordkeeping:**

The permittee shall record the results of all equipment and control device inspections chronologically, noting any maintenance or repairs needed to bring the tanks into compliance. The permittee shall maintain a copy of the manufacturer's **or owner/operator** maintenance recommendations.

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

New Mexico Environment Department  
Air Quality Bureau  
Modeling Section  
525 Camino de Los Marquez - Suite 1  
Santa Fe, NM 87505

Phone: (505) 476-4300  
Fax: (505) 476-4375  
[www.env.nm.gov/aqb/](http://www.env.nm.gov/aqb/)



**For Department use only:**

Approved by:

Date:

## Air Dispersion Modeling Waiver Request Form

This form must be completed and submitted with all air dispersion modeling waiver requests.

If an air permit application requires air dispersion modeling, in some cases the demonstration that ambient air quality standards and Prevention of Significant Deterioration (PSD) increments will not be violated can be satisfied with a discussion of previous modeling. The purpose of this form is to document and streamline requests to certify that previous modeling satisfies all or some of the current modeling requirements. The criteria for requesting and approving modeling waivers is found in the Air Quality Bureau Modeling Guidelines. Typically, only construction permit applications submitted per 20.2.72, 20.2.74, or 20.2.79 NMAC require air dispersion modeling. However, modeling is sometimes also required for a Title V permit application.

A waiver may be requested by e-mailing this completed form in **MS Word** format to the modeling manager, [sufi.mustafa@state.nm.us](mailto:sufi.mustafa@state.nm.us).

This modeling waiver is not valid if the emission rates in the application are higher than those listed in the approved waiver request.

### Section 1 and Table 1: Contact and facility information:

Contact name	Jaimy Karacaoglu
E-mail Address:	<a href="mailto:Jaimy.karacaoglu@trinityconsultants.com">Jaimy.karacaoglu@trinityconsultants.com</a>
Phone	(505) 266-6611
Facility Name	Red Hills Gas Processing Plant
Air Quality Permit Number(s)	4310-M5-R3
Agency Interest Number (if known)	29885
Latitude and longitude of facility (decimal degrees)	32.210556, -103.523889

**General Comments:** (Add introductory remarks or comments here, including the purpose of and type of permit application.)

Targa Northern Delaware, LLC (Targa) owns and operates the Red Hills Gas Processing Plant (Red Hills) in Lea County, NM. The Red Hills Gas Processing Plant dehydrates and removes CO<sub>2</sub> and natural gas liquids from field gas for transportation via a sales pipeline. With this application, Targa Northern Delaware, LLC is seeking to add flaring malfunction emissions for NO<sub>x</sub>, CO, VOC, H<sub>2</sub>S, and SO<sub>2</sub>; methanol tanks; exempt gasoline and diesel storage tanks; haul road emissions; and pigging emissions to Construction Permit 4310-M5-R3. Additionally, Targa seeks to update the language for various permit conditions. Pursuant 20.2.72.219.D(1) NMAC, this application is being submitted as a Significant Revision to the Construction Permit.

The New Mexico Environment Department, Air Quality Bureau's *Implementation Guidance for Permitting SSM Emissions and Excess Emissions* (version 7 June 2012), item 2.d) states "Emissions that result from upsets and malfunctions may be permitted up to 10 tons per year per pollutant per facility, provided they are included in applicable air dispersion modeling and demonstrate compliance with State and Federal ambient air quality standards (20.2.72.203.A(4) NMAC). Unpermitted emissions from upsets/malfunctions must be reported according to 20.2.7



NMAC.” Pursuant to this guidance, Targa seeks to add malfunction emissions for NO<sub>x</sub>, CO, VOC, and SO<sub>2</sub> at 10 tons per year for each pollutant and at 9 tons per year for H<sub>2</sub>S.

SSM emissions for individual emission units at the Red Hills Gas Processing Plant were incorporated in previous permit modifications, including SSM flaring at the maximum hourly capacity of each flare. These individual unit emissions remain unchanged in this permit application. SSM/M emission were previously permitted for VOC only. This application seeks to incorporate Malfunction emissions for all aforementioned pollutants.

Modeling was previously performed and submitted for the units Targa is requesting Malfunction emissions for in this application. As the maximum capacity of each flare was modeled, the previous modeling would satisfy the requirement to demonstrate compliance with the NAAQS and NMAAQs.

A combined limit that would apply to 1-EP-2, 2-EP-2a, 3-EP-2a, 4-EP-2a, 5-EP-2, 7-EP-2, 2.5-EP-5, and 5.5-EP-1b is requested for NO<sub>x</sub>, CO, VOC, and SO<sub>2</sub> at 10 tons per year for each pollutant and at 9 tons per year for H<sub>2</sub>S. As the nature of malfunction emissions can be unpredictable, Targa is requesting that the combined limit be usable by each flare identified. Targa is requesting an individual lb/hr limit for each pollutant for each flare and a combined tpy limit that can be used at any of the flares but will not be exceeded. Hourly emission calculations for each flare are provided with this application.

Targa Northern Delaware, LLC recently completed an audit under Appendix D: Voluntary Environmental Disclosure policy. The following items, although related to the units involved with this project, are not being updated with this application. The information regarding the compliance status for each applicable permit requirement has been disclosed to the NMED’s Compliance and Enforcement Division and a schedule has been implemented for compliance demonstration.

Existing Permitted Fugitive Emissions (FUG and FUG-1): The existing fugitive emissions permitted in NSR 4310-M5 reflect VOC emissions totaling 27.31 tpy (FUG) and 26.15 tpy (FUG-1). This does not conform with the fugitive emissions represented in Title V P-278, which reflected VOC emissions totaling 103.61 tpy (FUG) and 96.41 tpy VOC. The existing emissions represented herein for both FUG and FUG-1 have been updated to align with the most recent permitting action but are not considered part of this permitting action.

Acid Gas Fugitive Components for Train 2.5 & 5.5: The site currently does not have any fugitives in acid gas service permitted. All other fugitive emissions that should have previously been permitted will be authorized in a subsequent application.

Flare Stack Height: The flare that was installed (unit 5.5-EP-1b) is 145 feet tall, instead of 300 feet as represented in previous modeling. The flare height will be corrected in modeling to be submitted with a subsequent application.

Assist Gas Flaring Requirements: The flare (unit 5.5-EP-1b) requires 122.64 hours of assist gas flaring to operate at a high enough BTU for combustion but is only authorized for 61.32 hours of assist gas flaring. This will be corrected in a subsequent application.

Facility Boundary: The modeling completed for a previous permit application had an incorrect representation for the facility’s boundary. Combustion emission sources are located closer to the fence line than represented in the most recent modeling submitted to the NMED. This will be corrected in a subsequent application.

Flare Effective Diameter: The effective diameters for the facility flares were based on the flare maximum design capacity as provided by the manufacturer, rather than the facility-specific operating conditions determined in the calculations, thereby representing a larger effective diameter than would be seen with the facility-specific operating conditions. This will be corrected in a subsequent application.

Heater and Reboiler Emissions: The previous permitting of most heaters and reboilers at this facility was based on the heat release value of each unit, rather than the heat input, resulting in lower emissions from all criteria pollutants. The emissions from all heaters and reboilers will be updated in a subsequent application.

Haul Road Emissions: The routes permitted with previous permitting actions utilized a route that is not physically accessible due to the fencing around the facility and strict check-in requirements for all vehicles. The updated haul routes are being represented in this application. Modeling is not being submitted with this application but is instead being

submitted in a subsequent application. Targa is implementing a strict speed limit on all on-site roads in conjunction with base coarse application in order to reduce emissions.

## Section 2 – List All Regulated Pollutants from the Entire Facility - Required

In Table 2, below, list all regulated air pollutants emitted from your facility, except for New Mexico Toxic Air Pollutants, which are listed in Table 6 of this form. All pollutants emitted from the facility must be listed regardless if a modeling waiver is requested for that pollutant or if the pollutant emission rate is subject to the proposed permit changes.

**Table 2: Air Pollutant summary table (Check all that apply. Include all pollutants emitted by the facility):**

Pollutant	Pollutant is not emitted at the facility and modeling or waiver are not required.	Pollutant does not increase in emission rate at any emission unit (based on levels currently in the permit) and stack parameters are unchanged. Modeling or waiver are not required.	Stack parameters or stack location has changed.	Pollutant is new to the permit, but already emitted at the facility.	Pollutant is increased at any emission unit (based on levels currently in the permit).	A modeling waiver is being requested for this pollutant.	Modeling for this pollutant will be included in the permit application.
CO						X	
NO <sub>2</sub>						X	
SO <sub>2</sub>						X	
PM <sub>10</sub>						X	
PM <sub>2.5</sub>						X	
H <sub>2</sub> S						X	
Reduced S	X						
O <sub>3</sub> (PSD only)	X						
Pb	X						

## Section 3: Facility wide pollutants, other than NMTAPs, with very low emission rates

The Air Quality Bureau has performed generic modeling to demonstrate that small sources, as listed in Appendix 2 of this form, do not need computer modeling. After comparing the facility's emission rates for various pollutants to Appendix 2, please list in Table 3 the pollutants that do not need to be modeled because of very low emission rates.

Section 3 Comments. (If you are not requesting a waiver for any pollutants based on their low emission rate, then note that here. You do not need to complete the rest of Section 3 or Table 3.)

N/A – a waiver is not being requested for very small emission rates.

**Table 3: List of Pollutants with very low facility-wide emission rates**

Pollutant	Requested Allowable Emission Rate From Facility (pounds/hour)	Release Type (select “all from stacks >20 ft” or “other”)	Waiver Threshold (from appendix 2) (lb/hr)

#### Section 4: Pollutants that have previously been modeled at equal or higher emission rates

List the pollutants and averaging periods in Table 4 for which you are requesting a modeling waiver based on previous modeling for this facility. The previous modeling reports that apply to the pollutant must be submitted with the modeling waiver request. Request previous modeling reports from the Modeling Section of the Air Quality Bureau if you do not have them and believe they exist in the AQB modeling file archive or in the permit folder.

Section 4 Comments. (If you are not asking for a waiver based on previously modeled pollutants, note that here. You do not need to complete the rest of section 4 or table 4.)

Targa Northern Delaware, LLC is requesting a modeling waiver for H<sub>2</sub>S, PM<sub>2.5</sub>, and PM<sub>10</sub> based on previously submitted modeling. A ratio based on the proposed emission rate and the previously modeled emission rate, as shown in Table 4, was used to scale each pollutant and averaging period's modeled percent of standard or increment.

H<sub>2</sub>S ½ hour (AQCR 155) - The ratio of emissions is 1.19. When the modeled percent of standard or increment is adjusted for this ratio, it can be assumed that the resultant modeled percent of standard would be approximately 17.85%.

PM<sub>10</sub> 24-hr NAAQS - The ratio of emissions is 1.03. When the modeled percent of standard or increment is adjusted for this ratio, it can be assumed that the resultant modeled percent of standard would be approximately 32.11%.

PM<sub>10</sub> 24-hr PSD Class II - The ratio of emissions is 1.03. When the modeled percent of standard or increment is adjusted for this ratio, it can be assumed that the resultant modeled percent of standard would be approximately 31.49%.

PM<sub>10</sub> Annual NMAAQs - The ratio of emissions is 1.03. When the modeled percent of standard or increment is adjusted for this ratio, it can be assumed that the resultant modeled percent of standard would be approximately 15.38%.

PM<sub>2.5</sub> 24-hr NAAQS - The ratio of emissions is 0.81. When the modeled percent of standard or increment is adjusted for this ratio, it can be assumed that the resultant modeled percent of standard would be approximately 79.43%.

PM<sub>2.5</sub> 24-hr PSD Class II - The ratio of emissions is 0.81. When the modeled percent of standard or increment is adjusted for this ratio, it can be assumed that the resultant modeled percent of standard would be approximately 49.98%.

PM<sub>2.5</sub> Annual NAAQS - The ratio of emissions is 0.81. When the modeled percent of standard or increment is adjusted for this ratio, it can be assumed that the resultant modeled percent of standard would be approximately 53.54%.

PM<sub>2.5</sub> Annual PSD Class II - The ratio of emissions is 0.81. When the modeled percent of standard or increment is adjusted for this ratio, it can be assumed that the resultant modeled percent of standard would be approximately 34.91%.

Table 4: List of previously modeled pollutants (facility-wide emission rates)

Pollutant	Averaging period	Proposed emission rate (pounds/hour)	Previously modeled emission rate (pounds/hour)	Proposed minus modeled emissions (lb/hr)	Modeled percent of standard or increment	Year modeled
H <sub>2</sub> S	½ hour (AQCR 155)	89.39	74.77	14.62	15%	2019
PM <sub>10</sub>	24-hr	17.52	16.97	0.55	31.1%	2019
PM <sub>10</sub>	24-hr PSD Class II	17.52	16.97	0.55	30.5%	2019
PM <sub>10</sub>	Annual	17.52	16.97	0.55	14.9%	2019
PM <sub>2.5</sub>	24-hr	13.74	16.97	-3.23	98.1%	2019
PM <sub>2.5</sub>	24-hr PSD Class II	13.74	16.97	-3.23	61.7%	2019
PM <sub>2.5</sub>	Annual	13.74	16.97	-3.23	66.1%	2019
PM <sub>2.5</sub>	Annual PSD Class II	13.74	16.97	-3.23	43.1%	2019



**Section 4, Table 5: Questions about previous modeling:**

Question	Yes	No
Was AERMOD used to model the facility?	X	
Did previous modeling predict concentrations less than 95% of each air quality standard and PSD increment?		X
Were all averaging periods modeled that apply to the pollutants listed above?	X	
Were all applicable startup/shutdown/maintenance scenarios modeled?	X	
Did modeling include all sources within 1000 meters of the facility fence line that now exist?		X
Did modeling include background concentrations at least as high as current background concentrations?		X
If a source is changing or being replaced, is the following equation true for all pollutants for which the waiver is requested? (Attach calculations if applicable.)		
$\frac{[(g) \times (h1)] + [(v1)^2/2] + [(c) \times (T1)]}{q1} \leq \frac{[(g) \times (h2)] + [(v2)^2/2] + [(c) \times (T2)]}{q2}$ <p>Where  g = gravitational constant = 32.2 ft/sec<sup>2</sup>  h1 = existing stack height, feet  v1 = exhaust velocity, existing source, feet per second  c = specific heat of exhaust, 0.28 BTU/lb-degree F  T1 = absolute temperature of exhaust, existing source = degree F + 460  q1 = emission rate, existing source, lbs/hour  h2 = replacement stack height, feet  v2 = exhaust velocity, replacement source, feet per second  T2 = absolute temperature of exhaust, replacement source = degree F + 460  q2 = emission rate, replacement source, lbs/hour</p>		X

If you checked “no” for any of the questions, provide an explanation for why you think the previous modeling may still be used to demonstrate compliance with current ambient air quality standards.

The previously modeled PM<sub>2.5</sub> background concentrations were 13.4 µg/m<sup>3</sup> and 5.9 µg/m<sup>3</sup> for 24-hr and annual averaging periods, respectively. The same monitor, the 5ZS at Hobbs – 2320 N. Jefferson St., currently has background concentrations of 16.5 µg/m<sup>3</sup> and 7.1 µg/m<sup>3</sup> for 24-hr and annual averaging periods, respectively.

The previous modeling did not predict less than 95% of each air quality standard as the 24-hr PM<sub>2.5</sub> standard was predicted at 98.1%. After this modification, the facility will have a reduction in PM<sub>2.5</sub> emissions, therefore it is assumed that the facility’s impact will be reduced, rather than increased.

All high hits in the previous modeling were greater than 1000 meters from the facility, and therefore, sources within 1000 m are not expected to contribute to any significant changes.

**Section 5: Modeling waiver using scaled emission rates and scaled concentrations**

At times it may be possible to scale the results of modeling one pollutant and apply that to another pollutant. If the analysis for the waiver gets too complicated, then it becomes a modeling review rather than a modeling waiver, and applicable modeling fees will be charged for the modeling. Plume depletion, ozone chemical reaction modeling, post-processing, and unequal pollutant ratios from different sources are likely to invalidate scaling.

Scaling of previous results is being requested and is detailed in Section 4.

To demonstrate compliance with standards for a pollutant describe scenarios below that you wish the modeling section to consider for scaling results.

**Section 6: New Mexico Toxic air pollutants – 20.2.72.400 NMAC**

Modeling must be provided for any New Mexico Toxic Air Pollutant (NMTAP) with a facility-wide controlled emission rate in excess of the pound per hour emission levels specified in Tables A and B at **20.2.72.502 NMAC - Toxic Air Pollutants and Emissions**. An applicant may use a stack height correction factor based on the release height of the stack for the purpose of determining whether modeling is required. See Table C - Stack Height Correction Factor at 20.2.72.502 NMAC. Divide the emission rate for each release point of a NMTAP by the correction factor for that release height and add the total values together to determine the total adjusted pound per hour emission rate for that NMTAP. If the total adjusted pound per hour emission rate is lower than the emission rate screening level found in Tables A and B, then modeling is not required.

In Table 6, below, list the total facility-wide emission rates for each New Mexico Toxic Air Pollutant emitted by the facility. The table is pre-populated with common examples. Extra rows may be added for NMTAPS not listed or for NMTAPS emitted from multiple stack heights. NMTAPS not emitted at the facility may be deleted, left blank, or noted as 0 emission rate. Toxics previously modeled may be addressed in Section 5 of this waiver form. For convenience, we have listed the stack height correction factors in Appendix 1 of this form.

Section 6 Comments. (If you are not requesting a waiver for any NMTAPs then note that here. You do not need to complete the rest of section 6 or Table 6.)

A waiver for NMTAPs is not being requested.

**Table 6: New Mexico Toxic Air Pollutants emitted at the facility**

If requesting a waiver for any NMTAP, all NMTAPs from this facility must be listed in Table 3 regardless if a modeling waiver is requested for that pollutant or if the pollutant emission rate is subject to the proposed permit changes.

Pollutant	Requested Allowable Emission Rate (pounds/hour)	Release Height (Meters)	Correction Factor	Allowable Emission Rate Divided by Correction Factor	Emission Rate Screening Level (pounds/hour)
Ammonia					1.20
Asphalt (petroleum) fumes					0.333
Carbon black					0.233
Chromium metal					0.0333
Glutaraldehyde					0.0467
Nickel Metal					0.0667
Wood dust (certain hard woods as beech & oak)					0.0667
Wood dust (soft wood)					0.333
(add additional toxics if they are present)					

**Section 7: Approval or Disapproval of Modeling Waiver**

The AQB air dispersion modeler should list each pollutant for which the modeling waiver is approved, the reasons why, and any other relevant information. If not approved, this area may be used to document that decision.

Appendix 1: Stack Height Release Correction Factor (adapted from 20.2.72.502 NMAC)

Release Height in Meters	Correction Factor
0 to 9.9	1
10 to 19.9	5
20 to 29.9	19
30 to 39.9	41
40 to 49.9	71
50 to 59.9	108
60 to 69.9	152
70 to 79.9	202
80 to 89.9	255
90 to 99.9	317
100 to 109.9	378
110 to 119.9	451
120 to 129.9	533
130 to 139.9	617
140 to 149.9	690
150 to 159.9	781
160 to 169.9	837
170 to 179.9	902
180 to 189.9	1002
190 to 199.9	1066
200 or greater	1161

Appendix 2. Very small emission rate modeling waiver requirements

Modeling is waived if emissions of a pollutant for the entire facility (including haul roads) are below the amount:

Pollutant	If all emissions come from stacks 20 feet or greater in height and there are no horizontal stacks or raincaps (lb/hr)	If not all emissions come from stacks 20 feet or greater in height, or there are horizontal stacks, raincaps, volume, or area sources (lb/hr)
CO	50	2
H <sub>2</sub> S (Pecos-Permian Basin)	0.1	0.02
H <sub>2</sub> S (Not in Pecos-Permian Basin)	0.01	0.002
Lead	No waiver	No waiver
NO <sub>2</sub>	2	0.025
PM <sub>2.5</sub>	0.3	0.015
PM <sub>10</sub>	1.0	0.05
SO <sub>2</sub>	2	0.025
Reduced sulfur (Pecos-Permian Basin)	0.033	No waiver
Reduced sulfur (Not in Pecos-Permian Basin)	No waiver	No waiver

## Section 22: Certification

Company Name: Targa Northern Delaware, LLC

I, Jimmy 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 6<sup>th</sup> day of March, 2024, upon my oath or affirmation, before a notary of the State of

Texas

\*Signature

Date

Jimmy Oxford  
Printed Name

Vice President of Operations  
Title

Scribed and sworn before me on this 6<sup>th</sup> day of March, 2024

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

8<sup>th</sup> day of February, 2025

Notary's Signature

Date

Notary's Printed Name



\*For Title V applications, the signature must be of the Responsible Official as defined in 202-707 AE NMAG



## Section 22: Certification

Company Name: Targa Northern Delaware, LLC

I, Jimmy 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.

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\*Signature

3/6/2024

Date

Jimmy Oxford  
Printed Name

Vice President of Operations  
Title

Scribed and sworn before me on this 6<sup>th</sup> day of March, 2024.

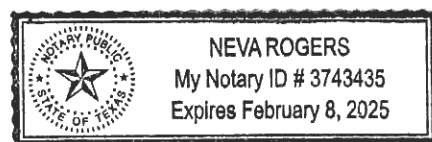
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8<sup>th</sup> day of February, 2025.

Notary's Signature

Date

Notary's Printed Name



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