New Mexico 20.2.70.300.B.(2) NMAC

Renewal Application for

Title V Operating Permit P118-R3

Val Verde Gas Treatment Plant

Harvest Four Corners, LLC
P.O. Box 217
Bloomfield, New Mexico 87413

August 2022

Prepared By:

Clara Vista
environmental

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

Universal Air Quality Permit Application

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

Use this application for: the initial application, modifications, technical revisions, and renewals. For technical revisions, complete Sections, 1-A, 1-B, 2-E, 3, 9 and any other sections that are relevant to the requested action; coordination with the Air Quality Bureau permit staff prior to submittal is encouraged to clarify submittal requirements and to determine if more or less than these sections of the application are needed. Use this application for streamline permits as well. See Section 1-I for submittal in1structions for other permits.

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

Acknowledgements:

☒ I acknowledge that a pre-application meeting is available to me upon request. ☒ Title V Operating, Title IV Acid Rain, and NPR applications have no fees.

☐ $500 NSR application Filing Fee enclosed OR ☐ The full permit fee associated with 10 fee points (required w/ streamline applications).

☐ Check No.: in the amount of

☐ I acknowledge the required submittal format for the hard copy application is printed double sided 'head-to-toe', 2-hole punched (except the Sect. 2 landscape tables is printed 'head-to-head'), numbered tab separators. Incl. a copy of the check on a separate page.

☐ I acknowledge there is an annual fee for permits in addition to the permit review fee: www.env.nm.gov/air-quality/permit-fees-2/.

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

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

Section 1 – Facility Information

Section 1-A: Company Information

		AI # if known (see 1st 3 to 5 #s of permit IDEA ID No.): **1182**	Updating Permit/NOI #: **P118-R3**
1	Facility Name: **Val Verde Gas Treatment Plant**	Plant primary SIC Code (4 digits): **1321**	
		Plant NAIC code (6 digits): **211112**	
a	Facility Street Address (If no facility street address, provide directions from a prominent landmark): **See driving directions**		
2	Plant Operator Company Name: **Harvest Four Corners, LLC**	Phone/Fax: **(505) 632-4600 / 505-632-4782**	
a	Plant Operator Address: **P.O. Box 217, Bloomfield, NM 87413**		

b	Plant Operator's New Mexico Corporate ID or Tax ID:	
3	Plant Owner(s) name(s): **Harvest Four Corners, LLC**	Phone/Fax: **(505) 632-4600 / 505-632-4782**
a	Plant Owner(s) Mailing Address(s): **1755 Arroyo Drive, Bloomfield NM 87413**	
4	Bill To (Company): **Harvest Four Corners, LLC**	Phone/Fax: **(505) 632-4600 / 505-632-4782**
a	Mailing Address: **1755 Arroyo Drive, Bloomfield NM 87413**	E-mail: **N/A**
5	☐ Preparer: ☒ Consultant: **Carlin Roney, Clara Vista Environmental**	Phone/Fax: **281-460-4283**
a	Mailing Address: **3431 Rayford Rd., Suite 200-135, Spring, TX 77386**	E-mail: **croney@clara-vista.com**
6	Plant Operator Contact: **Jennifer Deal, Environmental Specialist**	Phone/Fax: **(505) 324-5128 / (505)-632-4782**
a	Address: **1755 Arroyo Drive, Bloomfield, NM 87413**	E-mail: **jdeal@harvestmidstream.com**
7	Air Permit Contact: **Jennifer Deal**	Title: **Environmental Specialist**
a	E-mail: **jdeal@harvestmidstream.com**	Phone/Fax: **(505) 324-5128 / (505)-632-4782**
b	Mailing Address: **1755 Arroyo Drive, Bloomfield, NM 87413**	
c	The designated Air permit Contact will receive all official correspondence (i.e. letters, permits) from the Air Quality Bureau.	

Section 1-B: Current Facility Status

1.a	Has this facility already been constructed? ☒ Yes ☐ No	1.b If yes to question 1.a, is it currently operating in New Mexico? ☒ Yes ☐ No
2	If yes to question 1.a, was the existing facility subject to a Notice of Intent (NOI) (20.2.73 NMAC) before submittal of this application? ☐ Yes ☒ No	If yes to question 1.a, was the existing facility subject to a construction permit (20.2.72 NMAC) before submittal of this application? ☒ Yes ☐ No
3	Is the facility currently shut down? ☐ Yes ☒ No	If yes, give month and year of shut down (MM/YY):
4	Was this facility constructed before 8/31/1972 and continuously operated since 1972? ☐ Yes ☒ No	
5	If Yes to question 3, has this facility been modified (see 20.2.72.7.P NMAC) or the capacity increased since 8/31/1972? ☐Yes ☐No ☒N/A	
6	Does this facility have a Title V operating permit (20.2.70 NMAC)? ☒ Yes ☐ No	If yes, the permit No. is: **P-118-R3**
7	Has this facility been issued a No Permit Required (NPR)? ☐ Yes ☒ No	If yes, the NPR No. is: **N/A**
8	Has this facility been issued a Notice of Intent (NOI)? ☐ Yes ☒ No	If yes, the NOI No. is: **N/A**
9	Does this facility have a construction permit (20.2.72/20.2.74 NMAC)? ☒ Yes ☐ No	If yes, the permit No. is: **0728-M11**
10	Is this facility registered under a General permit (GCP-1, GCP-2, etc.)? ☐ Yes ☒ 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: **20.98 mmscf**	Daily: **503.5 mmscf**	Annually: **183.78 bscf**
b	Proposed	Hourly: **20.98 mmscf**	Daily: **503.5 mmscf**	Annually: **183.78 bscf**
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: **20.98 mmscf**	Daily: **503.5 mmscf**	Annually: **183.78 bscf**
b	Proposed	Hourly: **20.98 mmscf**	Daily: **503.5 mmscf**	Annually: **183.78 bscf**

Section 1-D: Facility Location Information

1	Section: **14**	Range: **11W**	Township: **29N**	County: **San Juan**	Elevation (ft): **5607**
2	UTM Zone: ☐ 12 or ☒ 13			Datum: ☒ NAD 27 ☐ NAD 83 ☐ WGS 84	
a	UTM E (in meters, to nearest 10 meters): **236,020 m**			UTM N (in meters, to nearest 10 meters): **4,068,970 m**	
b	**AND** Latitude (deg., min., sec.): **36°43'47"**			Longitude (deg., min., sec.): **-107°57'22"**	
3	Name and zip code of nearest New Mexico town: **Bloomfield 87413**				
4	Detailed Driving Instructions from nearest NM town (attach a road map if necessary): **From Hwy 64 and N. 1st Street, travel north for approx. 1.5 miles to Arizona Dr (County Rd. 4900). Turn right and travel approx. 1.2 miles. Facility is on the right.**				
5	The facility is **2 miles northeast of Bloomfield, NM.**				
6	Status of land at facility (check one): ☒ Private ☐ Indian/Pueblo ☐ Federal BLM ☐ Federal Forest Service ☐ Other (specify)				
7	List all municipalities, Indian tribes, and counties within a ten (10) mile radius (20.2.72.203.B.2 NMAC) of the property on which the facility is proposed to be constructed or operated: **Municipalities - Bloomfield, NM; Aztec, NM; Farmington, NM: Indian tribe - Navajo Nation; County - San Juan County**				
8	**20.2.72** NMAC applications **only**: Will the property on which the facility is proposed to be constructed or operated be closer than 50 km (31 miles) to other states, Bernalillo County, or a Class I area (see www.env.nm.gov/aqb/modeling/class1areas.html)? ☐ Yes ☐ No (20.2.72.206.A.7 NMAC) If yes, list all with corresponding distances in kilometers: **N/A - Application is being submitted under 20.2.70 NMAC.**				
9	Name nearest Class I area: **Mesa Verde National Park**				
10	Shortest distance (in km) from facility boundary to the boundary of the nearest Class I area (to the nearest 10 meters): **64.1 km**				
11	Distance (meters) from the perimeter of the Area of Operations (AO is defined as the plant site inclusive of all disturbed lands, including mining overburden removal areas) to nearest residence, school or occupied structure: **~275 m**				
12	Method(s) used to delineate the Restricted Area: "**Restricted Area**" is an area to which public entry is effectively precluded. Effective barriers include continuous fencing, continuous walls, or other continuous barriers approved by the Department, such as rugged physical terrain with steep grade that would require special equipment to traverse. If a large property is completely enclosed by fencing, a restricted area within the property may be identified with signage only. Public roads cannot be part of a Restricted Area.				
13	Does the owner/operator intend to operate this source as a portable stationary source as defined in 20.2.72.7.X NMAC? ☐ Yes ☒ No A portable stationary source is not a mobile source, such as an automobile, but a source that can be installed permanently at one location or that can be re-installed at various locations, such as a hot mix asphalt plant that is moved to different job sites.				
14	Will this facility operate in conjunction with other air regulated parties on the same property? ☒ No ☐ Yes If yes, what is the name and permit number (if known) of the other facility?				

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

1	Facility **maximum** operating ($\frac{\text{hours}}{\text{day}}$): **24**	($\frac{\text{days}}{\text{week}}$): **7**		($\frac{\text{weeks}}{\text{year}}$): **52**	($\frac{\text{hours}}{\text{year}}$): **8760**		
2	Facility's maximum daily operating schedule (if less than 24 $\frac{\text{hours}}{\text{day}}$)? Start: **N/A**		☐AM ☐PM	End: **N/A**		☐AM ☐PM	
3	Month and year of anticipated start of construction: **N/A**						
4	Month and year of anticipated construction completion: **N/A**						
5	Month and year of anticipated startup of new or modified facility: **N/A**						
6	Will this facility operate at this site for more than one year? ☒ Yes ☐ No						

Section 1-F: Other Facility Information

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

Section 1-G: Streamline Application

(This section applies to 20.2.72.300 NMAC Streamline applications only)

1	☐ I have filled out Section 18, "Addendum for Streamline Applications." ☒ N/A (This is not a Streamline application.)

Section 1-H: Current Title V Information - Required for all applications from TV Sources

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

1	Responsible Official (R.O.) (20.2.70.300.D.2 NMAC): **Travis Jones**	Phone: **713-289-2630**
a	R.O. Title: **EHS Manager, Harvest Midstream**	R.O. e-mail: **trjones@harvestmidstream.com**
b	R. O. Address: **1111 Travis Street, Houston, TX 77002**	
2	Alternate Responsible Official (20.2.70.300.D.2 NMAC): **TBD**	Phone: **TBD**
a	A. R.O. Title: **TBD**	A. R.O. e-mail: **TBD**
b	A. R. O. Address: **TBD**	
3	Company's Corporate or Partnership Relationship to any other Air Quality Permittee (List the names of any companies that have operating (20.2.70 NMAC) permits and with whom the applicant for this permit has a corporate or partnership relationship): **N/A**	

4	Name of Parent Company ("Parent Company" means the primary name of the organization that owns the company to be permitted wholly or in part.): **Hilcorp Energy Company**
a	Address of Parent Company: **1111 Travis Street, Houston, TX 77002**
5	Names of Subsidiary Companies ("Subsidiary Companies" means organizations, branches, divisions or subsidiaries, which are owned, wholly or in part, by the company to be permitted.): **N/A**
6	Telephone numbers & names of the owners' agents and site contacts familiar with plant operations: **N/A**
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: **Other states: Colorado 31 km; Local pollution control programs: None; Indian tribes and pueblos: Navajo Nation 10 km**

Section 1-I – Submittal Requirements

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

Hard Copy Submittal Requirements:

1) One hard copy **original signed and notarized application package** **printed double sided** **'head-to-toe'** **2-hole punched** as we bind the document on top, not on the side; except Section 2 (landscape tables), which should be head-to-head. Please use **numbered tab separators** in the hard copy submittal(s) as this facilitates the review process. For NOI submittals only, hard copies of UA1, Tables 2A, 2D & 2F, Section 3 and the signed Certification Page are required. Please include a copy of the check on a separate page.

2) If the application is for a minor NSR, PSD, NNSR, or Title V application, include one working hard **copy** for Department use. This copy should be printed in book form, 3-hole punched, and **must be double sided**. Note that this is in addition to the head-to-to 2-hole punched copy required in 1) above. Minor NSR Technical Permit revisions (20.2.72.219.B NMAC) only need to fill out Sections 1-A, 1-B, 3, and should fill out those portions of other Section(s) relevant to the technical permit revision. TV Minor Modifications need only fill out Sections 1-A, 1-B, 1-H, 3, and those portions of other Section(s) relevant to the minor modification. NMED may require additional portions of the application to be submitted, as needed.

3) The entire NOI or Permit application package, including the full modeling study, should be submitted electronically. Electronic files for applications for NOIs, any type of General Construction Permit (GCP), or technical revisions to NSRs must be submitted with compact disk (CD) or digital versatile disc (DVD). For these permit application submittals, **two** CD copies are required (in sleeves, not crystal cases, please), with additional CD copies as specified below. NOI applications require only a single CD submittal. Electronic files for other New Source Review (construction) permits/permit modifications or Title V permits/permit modifications can be submitted on CD/DVD or sent through AQB's secure file transfer service.

Electronic files sent by (check one):

☒ CD/DVD attached to paper application

☐ secure electronic transfer. Air Permit Contact Name_____

Email_____

Phone number _____

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

4) Optionally, the applicant may submit the files with the application on compact disk (CD) or digital versatile disc (DVD) following the instructions above and the instructions in 5 for applications subject to PSD review.

5) If **air dispersion modeling** is required by the application type, include the **NMED Modeling Waiver** and/or electronic air dispersion modeling report, input, and output files. The dispersion modeling ***summary report only*** should be submitted as hard copy(ies) unless otherwise indicated by the Bureau.

6) If the applicant submits the electronic files on CD and the application is subject to PSD review under 20.2.74 NMAC (PSD) or NNSR under 20.2.79 NMC include,
   a. one additional CD copy for US EPA,
   b. one additional CD copy for each federal land manager affected (NPS, USFS, FWS, USDI) and,
   c. one additional CD copy for each affected regulatory agency other than the Air Quality Bureau.

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

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

1) All required electronic documents shall be submitted as 2 separate CDs or submitted through the AQB secure file transfer service. Submit a single PDF document of the entire application as submitted and the individual documents comprising the application.

2) The documents should also be submitted in Microsoft Office compatible file format (Word, Excel, etc.) allowing us to access the text and formulas in the documents (copy & paste). Any documents that cannot be submitted in a Microsoft Office compatible

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

3) It is preferred that this application form be submitted as 4 electronic files (3 MSWord docs: Universal Application section 1 [UA1], Universal Application section 3-19 [UA3], and Universal Application 4, the modeling report [UA4]) and 1 Excel file of the tables (Universal Application section 2 [UA2]). Please include as many of the 3-19 Sections as practical in a single MS Word electronic document. Create separate electronic file(s) if a single file becomes too large or if portions must be saved in a file format other than MS Word.

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

Table of Contents

Table 2-A: Regulated Emission Sources

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

Unit Number[1]	Source Description	Make	Model #	Serial #	Manufacturer's Rated Capacity[3] (Specify Units)	Requested Permitted Capacity[3] (Specify Units)	Date of Manufacture[2] / Date of Construction/ Reconstruction[2]	Controlled by Unit # / Emissions vented to Stack #	Source Classification Code (SCC)	For Each Piece of Equipment, Check One	RICE Ignition Type (CI, SI, 4SLB, 4SRB, 2SLB)[4]	Replacing Unit No.
7	Amine Reboiler (Train 4)	Loveco/ Zeeco	H4701	C89-284	73 MMBtu/hr	673.1 MMscf/yr	1/1/1990 / Unknown	N/A / 7	31000228	☒ Existing (unchanged) ☐ To be Removed ☐ New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced	N/A	N/A
8	Amine Reboiler (Train 4)	Loveco/ Zeeco	H4702	C89-285	73 MMBtu/hr	673.1 MMscf/yr	1/1/1990 / Unknown	N/A / 8	31000228	☒ Existing (unchanged) ☐ To be Removed ☐ New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced	N/A	N/A
11	Amine Reboiler (Train 5)	Loveco/ Zeeco	H5702	C89-290-1	73 MMBtu/hr	673.1 MMscf/yr	1/1/1990 / Unknown	N/A / 11	31000228	☒ Existing (unchanged) ☐ To be Removed ☐ New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced	N/A	N/A
12	Amine Reboiler (Train 5)	Loveco/ Zeeco	H5701	C89-290-2	73 MMBtu/hr	673.1 MMscf/yr	1/1/1990 / Unknown	N/A / 12	31000228	☒ Existing (unchanged) ☐ To be Removed ☐ New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced	N/A	N/A
15	Amine Reboiler (Train 6)	Loveco/ Zeeco	H6702	577-1	73 MMBtu/hr	673.1 MMscf/yr	1/1/1990 / Unknown	N/A / 15	31000228	☒ Existing (unchanged) ☐ To be Removed ☐ New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced	N/A	N/A
16	Amine Reboiler (Train 6)	Loveco/ Zeeco	H6701	577-2	73 MMBtu/hr	673.1 MMscf/yr	1/1/1990 / Unknown	N/A / 16	31000228	☒ Existing (unchanged) ☐ To be Removed ☐ New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced	N/A	N/A
9	Glycol Reboiler (Train 4)	T.H. Russel/ Eclipse	H4771	4771-427	3.8 MMBtu/hr	35.0 MMscf/yr	1/1/1989 / Unknown	N/A / 9	31000228	☒ Existing (unchanged) ☐ To be Removed ☐ New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced	N/A	N/A
13	Glycol Reboiler (Train 5)	T.H. Russel/ Eclipse	H5771	5771-433	3.8 MMBtu/hr	35.0 MMscf/yr	1/1/1989 / Unknown	N/A / 13	31000228	☒ Existing (unchanged) ☐ To be Removed ☐ New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced	N/A	N/A
17	Glycol Reboiler (Train 6)	T.H. Russel/ Eclipse	H6771	6771-438	3.8 MMBtu/hr	35.0 MMscf/yr	1/1/1989 / Unknown	N/A / 17	31000228	☒ Existing (unchanged) ☐ To be Removed ☐ New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced	N/A	N/A
22	Glycol Reboiler (Train 7)	T.H. Russel/ Eclipse	H7771	7771-490	3.8 MMBtu/hr	35.0 MMscf/yr	1/1/1989 / Unknown	N/A / 22	31000228	☒ Existing (unchanged) ☐ To be Removed ☐ New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced	N/A	N/A
28	Glycol Reboiler (Train 8)	T.H. Russel/ Eclipse	H8771	8771-445	3.8 MMBtu/hr	35.0 MMscf/yr	1/1/1990 / Unknown	N/A / 28	31000228	☒ Existing (unchanged) ☐ To be Removed ☐ New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced	N/A	N/A
20	Water Heater (Train 7)	OPF/Zinc	H7752	J-43-552	61.8 MMBtu/hr	569.9 MMscf/yr	1/1/1993 / Unknown	N/A / 20	31000404	☒ Existing (unchanged) ☐ To be Removed ☐ New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced	N/A	N/A
21	Water Heater (Train 7)	OPF/Zinc	H7751	J-43-551	61.8 MMBtu/hr	569.9 MMscf/yr	1/1/1993 / Unknown	N/A / 21	31000404	☒ Existing (unchanged) ☐ To be Removed ☐ New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced	N/A	N/A
25	Water Heater (Train 8)	OPF/Zinc	H8752	J-90-494	61.8 MMBtu/hr	569.9 MMscf/yr	1/1/1993 / Unknown	N/A / 25	31000404	☒ Existing (unchanged) ☐ To be Removed ☐ New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced	N/A	N/A

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

[2] Specify dates required to determine regulatory applicability.

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

[4] "4SLB" means four stroke lean burn engine, "4SRB" means four stroke rich burn engine, "2SLB" means two stroke lean burn engine, "CI" means compression ignition, and "SI" means spark ignition

Unit Number[1]	Source Description	Make	Model #	Serial #	Manufacturer's Rated Capacity[3] (Specify Units)	Requested Permitted Capacity[3] (Specify Units)	Date of Manufacture[2] / Date of Construction/ Reconstruction[2]	Controlled by Unit # / Emissions vented to Stack #	Source Classification Code (SCC)	For Each Piece of Equipment, Check One	RICE Ignition Type (CI, SI, 4SLB, 4SRB, 2SLB)[4]	Replacing Unit No.
26	Water Heater (Train 8)	OPF/Zinc	H8751	J-90-493	61.8 MMBtu/hr	569.9 MMscf/yr	1/1/1993 Unknown	N/A 26	31000404	☒ Existing (unchanged) ☐ To be Removed ☐ New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced	N/A	N/A
10	Glycol Still Vent/Flash Tank (Train 4)	T.H. Russel	V4571	4571-427	3.8 MMBtu/hr	N/A	4/1/1990 Unknown	10 10	31000227	☒ Existing (unchanged) ☐ To be Removed ☐ New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced	N/A	N/A
14	Glycol Still Vent/Flash Tank (Train 5)	T.H. Russel	V5571	5571-433	3.8 MMBtu/hr	N/A	5/1/1990 Unknown	14 14	31000227	☒ Existing (unchanged) ☐ To be Removed ☐ New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced	N/A	N/A
18	Glycol Still Vent/Flash Tank (Train 6)	T.H. Russel	V6571	6571-438	3.8 MMBtu/hr	N/A	9/1/1990 Unknown	18 18	31000227	☒ Existing (unchanged) ☐ To be Removed ☐ New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced	N/A	N/A
24	Glycol Still Vent/Flash Tank (Train 7)	T.H. Russel	V7571	7571-490	3.8 MMBtu/hr	N/A	10/1/1993 Unknown	24 24	31000227	☒ Existing (unchanged) ☐ To be Removed ☐ New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced	N/A	N/A
27	Glycol Still Vent/Flash Tank (Train 8)	T.H. Russel	V8571	8571-445	3.8 MMBtu/hr	N/A	7/1/1991 Unknown	27 27	31000227	☒ Existing (unchanged) ☐ To be Removed ☐ New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced	N/A	N/A
19 and 30	Amine Still (CO2 Vent/Flash tank (Train 4-6) / (Trains 7-8)	Not repoted	V4420(19) V4820 (30)	Unknown	700 mmscfd each	N/A	4/1/1990 (19) 7/1/1991 (30) Unknown	19/30 19/30	31000227	☒ Existing (unchanged) ☐ To be Removed ☐ New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced	N/A	N/A
FUG	Fugitives (Facility-wide)	N/A	N/A	N/A	N/A	N/A	N/A N/A	N/A FUG	31000299	☒ Existing (unchanged) ☐ To be Removed ☐ New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced	N/A	N/A
MALF	Malfunctions	N/A	N/A	N/A	N/A	N/A	N/A N/A	N/A MALF	31000299	☒ Existing (unchanged) ☐ To be Removed ☐ New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced	N/A	N/A
SSM	Startup, Shutdown, Maintenance	N/A	N/A	N/A	N/A	N/A	N/A N/A	N/A SSM	31000299	☒ Existing (unchanged) ☐ To be Removed ☐ New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced	N/A	N/A

[1] Unit numbers must correspond to unit numbers in the previous permit unless a complete cross reference table of all units in both permits is provided.
[2] Specify dates required to determine regulatory applicability.
[3] To properly account for power conversion efficiencies, generator set rated capacity shall be reported as the rated capacity of the engine in horsepower, not the kilowatt capacity of the generator set.
[4] "4SLB" means four stroke lean burn engine, "4SRB" means four stroke rich burn engine, "2SLB" means two stroke lean burn engine, "CI" means compression ignition, and "SI" means spark ignition

Table 2-B: Insignificant Activities[1] (20.2.70 NMAC) OR Exempted Equipment (20.2.72 NMAC)

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

Unit Number	Source Description	Manufacturer	Model No. / Serial No.	Max Capacity / Capacity Units	List Specific 20.2.72.202 NMAC Exemption (e.g. 20.2.72.202.B.5) / Insignificant Activity citation (e.g. IA List Item #1.a)	Date of Manufacture /Reconstruction[2] / Date of Installation /Construction[2]	For Each Piece of Equipment, Check Onc
T-1	Water Tank	N/A	N/A	210	20.2.72.202.B.5	<8/23/2011	☒ Existing (unchanged) ☐ To be Removed ☐ New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced
			N/A	Bbl	N/A	<8/23/2011	
T-2	Fresh Amine Tank	N/A	N/A	210	20.2.72.202.B.5	<8/23/2011	☒ Existing (unchanged) ☐ To be Removed ☐ New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced
			N/A	Bbl	N/A	<8/23/2011	
T-10	Fresh Amine Tank	N/A	N/A	400	20.2.72.202.B.5	<8/23/2011	☒ Existing (unchanged) ☐ To be Removed ☐ New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced
			N/A	Bbl	N/A	<8/23/2011	
T-11	Fresh Amine Tank	N/A	N/A	400	20.2.72.202.B.5	<8/23/2011	☒ Existing (unchanged) ☐ To be Removed ☐ New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced
			N/A	Bbl	N/A	<8/23/2011	
T-12	Solvent Tank (Dowtherm J)	N/A	N/A	25	20.2.72.202.B.5	<8/23/2011	☒ Existing (unchanged) ☐ To be Removed ☐ New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced
			N/A	Bbl	N/A	<8/23/2011	
T-13	Spent Amine Tank	N/A	N/A	210	20.2.72.202.B.5	<8/23/2011	☒ Existing (unchanged) ☐ To be Removed ☐ New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced
			N/A	Bbl	N/A	<8/23/2011	
T-14	Spent Amine Tank	N/A	N/A	400	20.2.72.202.B.5	<8/23/2011	☒ Existing (unchanged) ☐ To be Removed ☐ New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced
			N/A	Bbl	N/A	<8/23/2011	
T-15	Spent Amine Tank	N/A	N/A	100	20.2.72.202.B.5	<8/23/2011	☒ Existing (unchanged) ☐ To be Removed ☐ New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced
			N/A	Bbl	N/A	<8/23/2011	
T-16	Spent Amine Tank	N/A	N/A	100	20.2.72.202.B.5	<8/23/2011	☒ Existing (unchanged) ☐ To be Removed ☐ New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced
			N/A	Bbl	N/A	<8/23/2011	
T-21	Spent TEG Tank	N/A	N/A	112	20.2.72.202.B.5	<8/23/2011	☒ Existing (unchanged) ☐ To be Removed ☐ New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced
			N/A	Bbl	N/A	<8/23/2011	
T-31	Diesel Tank	N/A	N/A	8	20.2.72.202.B.5	<8/23/2011	☒ Existing (unchanged) ☐ To be Removed ☐ New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced
			N/A	Bbl	N/A	<8/23/2011	
T-32	Unleaded Gasoline Tank	N/A	N/A	7	20.2.72.202.B.5	<8/23/2011	☒ Existing (unchanged) ☐ To be Removed ☐ New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced
			N/A	Bbl	N/A	<8/23/2011	
T-33	Kerosene Tank	N/A	N/A	12	20.2.72.202.B.5	<8/23/2011	☒ Existing (unchanged) ☐ To be Removed ☐ New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced
			N/A	Bbl	N/A	<8/23/2011	
T-34	Spent Lube Oil Tank	N/A	N/A	13	20.2.72.202.B.5	<8/23/2011	☒ Existing (unchanged) ☐ To be Removed ☐ New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced
			N/A	Bbl	N/A	<8/23/2011	
T-35	Amine Tank (Antifoam)	N/A	N/A	12	20.2.72.202.B.5	<8/23/2011	☒ Existing (unchanged) ☐ To be Removed ☐ New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced
			N/A	Bbl	N/A	<8/23/2011	

Unit Number	Source Description	Manufacturer	Model No. / Serial No.	Max Capacity / Capacity Units	List Specific 20.2.72.202 NMAC Exemption (e.g. 20.2.72.202.B.5) / Insignificant Activity citation (e.g. IA List Item #1.a)	Date of Manufacture /Reconstruction[2] / Date of Installation /Construction[2]	For Each Piece of Equipment, Check Onc
T-36	Amine Tank (Antifoam)	N/A	N/A N/A	12 Bbl	20.2.72.202.B.5 N/A	<8/23/2011 <8/23/2011	☒ Existing (unchanged) ☐ To be Removed ☐ New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced
T-37	Amine Tank (Antifoam)	N/A	N/A N/A	12 Bbl	20.2.72.202.B.5 N/A	<8/23/2011 <8/23/2011	☒ Existing (unchanged) ☐ To be Removed ☐ New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced
T-38	Amine Tank (Antifoam)	N/A	N/A N/A	12 Bbl	20.2.72.202.B.5 N/A	<8/23/2011 <8/23/2011	☒ Existing (unchanged) ☐ To be Removed ☐ New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced
T-39	Amine Tank (Antifoam)	N/A	N/A N/A	12 Bbl	20.2.72.202.B.5 N/A	<8/23/2011 <8/23/2011	☒ Existing (unchanged) ☐ To be Removed ☐ New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced
T-40	Amine Tank (Antifoam)	N/A	N/A N/A	12 Bbl	20.2.72.202.B.5 N/A	<8/23/2011 <8/23/2011	☒ Existing (unchanged) ☐ To be Removed ☐ New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced
T-41	Spent Lube Oil Tank	N/A	N/A N/A	13 Bbl	20.2.72.202.B.5 N/A	<8/23/2011 <8/23/2011	☒ Existing (unchanged) ☐ To be Removed ☐ New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced
La Jara Waste Tank	Produced Water Tank	N/A	N/A N/A	100 Bbl	20.2.72.202.B.5 N/A	<8/23/2011 <8/23/2011	☒ Existing (unchanged) ☐ To be Removed ☐ New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced
T-4475	Fresh TEG Tank	N/A	N/A N/A	90 Bbl	20.2.72.202.B.5 N/A	<8/23/2011 <8/23/2011	☒ Existing (unchanged) ☐ To be Removed ☐ New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced
T-4417	Amine Tank (CS+ Rundown)	N/A	N/A N/A	210 Bbl	20.2.72.202.B.5 N/A	<8/23/2011 <8/23/2011	☒ Existing (unchanged) ☐ To be Removed ☐ New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced
T-5415	DI Water Tank	N/A	N/A N/A	210 Bbl	20.2.72.202.B.5 N/A	<8/23/2011 <8/23/2011	☒ Existing (unchanged) ☐ To be Removed ☐ New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced
T-5416	Amine Tank (CS+)	N/A	N/A N/A	90 Bbl	20.2.72.202.B.5 N/A	<8/23/2011 <8/23/2011	☒ Existing (unchanged) ☐ To be Removed ☐ New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced
T-5417	Amine Tank (CS+)	N/A	N/A N/A	210 Bbl	20.2.72.202.B.5 N/A	<8/23/2011 <8/23/2011	☒ Existing (unchanged) ☐ To be Removed ☐ New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced
T-5418	Wastewater Tank	N/A	N/A N/A	500 Bbl	20.2.72.202.B.5 N/A	<8/23/2011 <8/23/2011	☒ Existing (unchanged) ☐ To be Removed ☐ New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced
T-5419	Spent Oil/Wastewater Tank	N/A	N/A N/A	14 Bbl	20.2.72.202.B.5 N/A	<8/23/2011 <8/23/2011	☒ Existing (unchanged) ☐ To be Removed ☐ New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced
T-5475	Fresh TEG Tank	N/A	N/A N/A	90 Bbl	20.2.72.202.B.5 N/A	<8/23/2011 <8/23/2011	☒ Existing (unchanged) ☐ To be Removed ☐ New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced
T-6417	Amine Tank (CS+ Rundown)	N/A	N/A N/A	210 Bbl	20.2.72.202.B.5 N/A	<8/23/2011 <8/23/2011	☒ Existing (unchanged) ☐ To be Removed ☐ New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced
T-6475	Fresh TEG Tank	N/A	N/A N/A	90 Bbl	20.2.72.202.B.5 N/A	<8/23/2011 <8/23/2011	☒ Existing (unchanged) ☐ To be Removed ☐ New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced

Unit Number	Source Description	Manufacturer	Model No. / Serial No.	Max Capacity / Capacity Units	List Specific 20.2.72.202 NMAC Exemption (e.g. 20.2.72.202.B.5) / Insignificant Activity citation (e.g. IA List Item #1.a)	Date of Manufacture /Reconstruction[2] / Date of Installation /Construction[2]	For Each Piece of Equipment, Check Onc
T-7475	Fresh TEG Tank	N/A	N/A	90	20.2.72.202.B.5	<8/23/2011	☒ Existing (unchanged) ☐ To be Removed ☐ New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced
			N/A	Bbl	N/A	<8/23/2011	
T-7419	Wastewater Tank	N/A	N/A	210	20.2.72.202.B.5	<8/23/2011	☒ Existing (unchanged) ☐ To be Removed ☐ New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced
			N/A	Bbl	N/A	<8/23/2011	
T-7417	Amine Tank (CS+ Rundown)	N/A	N/A	210	20.2.72.202.B.5	<8/23/2011	☒ Existing (unchanged) ☐ To be Removed ☐ New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced
			N/A	Bbl	N/A	<8/23/2011	
T-8415	Makeup Water Tank	N/A	N/A	210	20.2.72.202.B.5	<8/23/2011	☒ Existing (unchanged) ☐ To be Removed ☐ New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced
			N/A	Bbl	N/A	<8/23/2011	
T-8416	Amine Tank (CS+)	N/A	N/A	90	20.2.72.202.B.5	<8/23/2011	☒ Existing (unchanged) ☐ To be Removed ☐ New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced
			N/A	Bbl	N/A	<8/23/2011	
T-8417	Amine Tank (CS+ Rundown)	N/A	N/A	210	20.2.72.202.B.5	<8/23/2011	☒ Existing (unchanged) ☐ To be Removed ☐ New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced
			N/A	Bbl	N/A	<8/23/2011	
T-8418	Wastewater Tank	N/A	N/A	500	20.2.72.202.B.5	<8/23/2011	☒ Existing (unchanged) ☐ To be Removed ☐ New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced
			N/A	Bbl	N/A	<8/23/2011	
T-8419	Wastewater Tank	N/A	N/A	210	20.2.72.202.B.5	<8/23/2011	☒ Existing (unchanged) ☐ To be Removed ☐ New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced
			N/A	Bbl	N/A	<8/23/2011	
T-8426	Spent Oil/Wastewater Tank	N/A	N/A	14	20.2.72.202.B.5	<8/23/2011	☒ Existing (unchanged) ☐ To be Removed ☐ New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced
			N/A	Bbl	N/A	<8/23/2011	
T-8475	Fresh TEG Tank	N/A	N/A	90	20.2.72.202.B.5	<8/23/2011	☒ Existing (unchanged) ☐ To be Removed ☐ New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced
			N/A	Bbl	N/A	<8/23/2011	
V-5412	Closed Drain Knockout	N/A	N/A	877	20.2.72.202.B.5	<8/23/2011	☒ Existing (unchanged) ☐ To be Removed ☐ New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced
			N/A	Gal	N/A	<8/23/2011	
V-8412	Closed Drain Knockout	N/A	N/A	877	20.2.72.202.B.5	<8/23/2011	☒ Existing (unchanged) ☐ To be Removed ☐ New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced
			N/A	Gal	N/A	<8/23/2011	
Inlet Filter Separator	Produced Water Tank	N/A	N/A	58	20.2.72.202.B.5	<8/23/2011	☒ Existing (unchanged) ☐ To be Removed ☐ New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced
			N/A	Bbl	N/A	<8/23/2011	

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

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

Table 2-C: Emissions Control Equipment

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

Control Equipment Unit No.	Control Equipment Description	Date Installed	Controlled Pollutant(s)	Controlling Emissions for Unit Number(s)[1]	Efficiency (% Control by Weight)	Method used to Estimate Efficiency
10	Condenser and flash tank with non-condensibles routed to the amine fuel systems.	2012	VOC and HAPs	10	~99%	Engineering Estimate
14	Condenser and flash tank with non-condensibles routed to the amine fuel systems.	2012	VOC and HAPs	14	~99%	Engineering Estimate
18	Condenser and flash tank with non-condensibles routed to the amine fuel systems.	2012	VOC and HAPs	18	~99%	Engineering Estimate
24	Condenser and flash tank with non-condensibles routed to the amine fuel systems.	2012	VOC and HAPs	24	~99%	Engineering Estimate
27	Condenser and flash tank with non-condensibles routed to the amine fuel systems.	2012	VOC and HAPs	27	~99%	Engineering Estimate
19	Gas Routing - High pressure amine flash gas is routed to fuel	2012	VOC and HAPs	19	~99%	Engineering Estimate
30	Gas Routing - High pressure amine flash gas is routed to fuel	2012	VOC and HAPs	30	~99%	Engineering Estimate

[1] List each control device on a separate line. For each control device, list all emission units controlled by the control device.

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

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

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

Unit No.	NOx		CO		VOC		SOx		PM[1]		PM10[1]		PM2.5[1]		H_2S		Lead	
	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr
7	4.60	20.20	4.50	19.71	0.42	1.85	1.10	4.81	0.58	2.56	0.58	2.56	0.58	2.56	--	--	--	--
8	4.60	20.20	4.50	19.71	0.42	1.85	1.10	4.81	0.58	2.56	0.58	2.56	0.58	2.56	--	--	--	--
11	4.60	20.20	4.50	19.71	0.42	1.85	1.10	4.81	0.58	2.56	0.58	2.56	0.58	2.56	--	--	--	--
12	4.60	20.20	4.50	19.71	0.42	1.85	1.10	4.81	0.58	2.56	0.58	2.56	0.58	2.56	--	--	--	--
15	4.60	20.20	4.50	19.71	0.42	1.85	1.10	4.81	0.58	2.56	0.58	2.56	0.58	2.56	--	--	--	--
16	4.60	20.20	4.50	19.71	0.42	1.85	1.10	4.81	0.58	2.56	0.58	2.56	0.58	2.56	--	--	--	--
9	0.70	3.07	0.091	0.40	0.022	0.10	0.057	0.25	0.03	0.13	0.03	0.13	0.03	0.13	--	--	--	--
13	0.70	3.07	0.091	0.40	0.022	0.10	0.057	0.25	0.03	0.13	0.03	0.13	0.03	0.13	--	--	--	--
17	0.70	3.07	0.091	0.40	0.022	0.10	0.057	0.25	0.03	0.13	0.03	0.13	0.03	0.13	--	--	--	--
22	0.70	3.07	0.091	0.40	0.022	0.10	0.057	0.25	0.03	0.13	0.03	0.13	0.03	0.13	--	--	--	--
28	0.70	3.07	0.091	0.40	0.022	0.10	0.057	0.25	0.03	0.13	0.03	0.13	0.03	0.13	--	--	--	--
20	4.90	21.70	3.10	13.50	0.36	1.6	0.93	4.10	0.50	2.20	0.50	2.20	0.50	2.20	--	--	--	--
21	4.90	21.70	3.10	13.50	0.36	1.6	0.93	4.10	0.50	2.20	0.50	2.20	0.50	2.20	--	--	--	--
25	4.90	21.70	3.10	13.50	0.36	1.6	0.93	4.10	0.50	2.20	0.50	2.20	0.50	2.20	--	--	--	--
26	4.90	21.70	3.10	13.50	0.36	1.6	0.93	4.10	0.50	2.20	0.50	2.20	0.50	2.20	--	--	--	--
10	--	--	--	--	3.95	17.28	--	--	--	--	--	--	--	--	--	--	--	--
14	--	--	--	--	11.21	49.11	--	--	--	--	--	--	--	--	--	--	--	--
18	--	--	--	--	11.21	49.11	--	--	--	--	--	--	--	--	--	--	--	--
24	--	--	--	--	3.95	17.28	--	--	--	--	--	--	--	--	--	--	--	--
27	--	--	--	--	3.95	17.28	--	--	--	--	--	--	--	--	--	--	--	--
19 & 30	--	--	--	--	255.00	182.30	--	--	--	--	--	--	--	--	0.95	4.17	--	--
FUG	--	--	--	--	0.23	1.00	--	--	--	--	--	--	--	--	--	--	--	--
MALF	--	--	--	--	--	10.00	--	--	--	--	--	--	--	--	--	--	--	--
Totals	51.0	223.4	39.8	174.4	293.4	361.3	10.6	46.4	5.6	24.7	5.6	24.7	5.6	24.7	1.0	4.2	#######	0.00E+00

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

Table 2-E: Requested Allowable Emissions

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

Unit No.	NOx		CO		VOC		SOx		PM[1]		PM10[1]		PM2.5[1]		H_2S		Lead	
	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr
7	4.60	20.20	4.50	19.71	0.42	1.85	1.10	4.81	0.58	2.56	0.58	2.56	0.58	2.56	--	--	--	--
8	4.60	20.20	4.50	19.71	0.42	1.85	1.10	4.81	0.58	2.56	0.58	2.56	0.58	2.56	--	--	--	--
11	4.60	20.20	4.50	19.71	0.42	1.85	1.10	4.81	0.58	2.56	0.58	2.56	0.58	2.56	--	--	--	--
12	4.60	20.20	4.50	19.71	0.42	1.85	1.10	4.81	0.58	2.56	0.58	2.56	0.58	2.56	--	--	--	--
15	4.60	20.20	4.50	19.71	0.42	1.85	1.10	4.81	0.58	2.56	0.58	2.56	0.58	2.56	--	--	--	--
16	4.60	20.20	4.50	19.71	0.42	1.85	1.10	4.81	0.58	2.56	0.58	2.56	0.58	2.56	--	--	--	--
9	0.70	3.07	0.091	0.40	0.022	0.10	0.057	0.25	0.03	0.13	0.03	0.13	0.03	0.13	--	--	--	--
13	0.70	3.07	0.091	0.40	0.022	0.10	0.057	0.25	0.03	0.13	0.03	0.13	0.03	0.13	--	--	--	--
17	0.70	3.07	0.091	0.40	0.022	0.10	0.057	0.25	0.03	0.13	0.03	0.13	0.03	0.13	--	--	--	--
22	0.70	3.07	0.091	0.40	0.022	0.10	0.057	0.25	0.03	0.13	0.03	0.13	0.03	0.13	--	--	--	--
28	0.70	3.07	0.091	0.40	0.022	0.10	0.057	0.25	0.03	0.13	0.03	0.13	0.03	0.13	--	--	--	--
20	4.90	21.70	3.10	13.50	0.36	1.6	0.93	4.10	0.50	2.20	0.50	2.20	0.50	2.20	--	--	--	--
21	4.90	21.70	3.10	13.50	0.36	1.6	0.93	4.10	0.50	2.20	0.50	2.20	0.50	2.20	--	--	--	--
25	4.90	21.70	3.10	13.50	0.36	1.6	0.93	4.10	0.50	2.20	0.50	2.20	0.50	2.20	--	--	--	--
26	4.90	21.70	3.10	13.50	0.36	1.6	0.93	4.10	0.50	2.20	0.50	2.20	0.50	2.20	--	--	--	--
10	--	--	--	--	0.00	0.00	--	--	--	--	--	--	--	--	--	--	--	--
14	--	--	--	--	0.00	0.00	--	--	--	--	--	--	--	--	--	--	--	--
18	--	--	--	--	0.00	0.00	--	--	--	--	--	--	--	--	--	--	--	--
24	--	--	--	--	0.00	0.00	--	--	--	--	--	--	--	--	--	--	--	--
27	--	--	--	--	0.00	0.00	--	--	--	--	--	--	--	--	--	--	--	--
19 & 30	--	--	--	--	255.00	182.30	--	--	--	--	--	--	--	--	0.95	4.17	--	--
FUG	--	--	--	--	0.23	1.00	--	--	--	--	--	--	--	--	--	--	--	--
MALF	--	--	--	--	--	10.00	--	--	--	--	--	--	--	--	--	--	--	--
Totals	51.0	223.4	39.8	174.4	259.3	211.2	10.6	46.4	5.6	24.7	5.6	24.7	5.6	24.7	1.0	4.2	0.0	0.0

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

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

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

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

Unit No.	NOx		CO		VOC		SOx		PM[2]		PM10[2]		PM2.5[2]		H_2S		Lead	
	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr
SSM	--	--	--	--	--	32.20	--	--	--	--	--	--	--	--	--	--	--	--
Totals																		

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

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

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

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

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

Stack No.	Serving Unit Number(s) from Table 2-A	NOx		CO		VOC		SOx		PM		PM10		PM2.5		☐ H_2S or ☐ Lead	
		lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr
Totals:																	

Table 2-H: Stack Exit Conditions

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

Stack Number	Serving Unit Number(s) from Table 2-A	Orientation (H-Horizontal V=Vertical)	Rain Caps (Yes or No)	Height Above Ground (ft)	Temp. (F)	Flow Rate		Moisture by Volume (%)	Velocity (ft/sec)	Inside Diameter (ft)
						(acfs)	(dscfs)			
7	7	V	No	58	784	212	74		16	4.13
8	8	V	No	58	784	212	74		16	4.13
11	11	V	No	58	730	212	77		16	4.13
12	12	V	No	58	730	212	77		16	4.13
15	15	V	No	57	695	212	79		16	4.13
16	16	V	No	57	727	212	77		16	4.13
9	9	V	No	19	465	24	11		23	1.15
13	13	V	No	19	465	24	11		23	1.15
17	17	V	No	19	475	24	11		23	1.15
22	22	V	No	22	470	24	11		23	1.15
28	28	V	No	19	475	24	11		23	1.15
20	20	V	No	90	554	176	75		16	3.72
21	21	V	No	90	549	176	75		16	3.72
25	25	V	No	90	612	176	71		16	3.72
26	26	V	No	90	570	176	74		16	3.7
10	10	V	No	40	215	4	3		23	0.49
14	14	V	No	40	215	4	3		23	0.49
18	18	V	No	40	215	4	3		23	0.49
24	24	V	No	40	215	4	3		23	0.49
27	27	V	No	40	215	4.00	3		23	0.49
19*	19	V	No	40	125	674	498		142	2.46
30*	30	V	No	40	125	649	480		137	2.46

*A combined limit for Stacks 19 and 30 is being requested. Stack paramenters are provided for each stack.

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		Methanol ☒ HAP or ☐ TAP		n-Hexane ☒ HAP or ☐ TAP		Benzene ☒ HAP or ☐ TAP		Toluene ☒ HAP or ☐ TAP		Ethylbenzene ☒ HAP or ☐ TAP		Xylene ☒ HAP or ☐ TAP		Provide Pollutant Name Here ☐ HAP or ☐ TAP		Provide Pollutant Name Here ☐ HAP or ☐ TAP	
		lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr
7	7	0.19	0.83	0.032	0.14	0.13	0.56	1.60E-04	7.00E-04	2.50E-04	1.10E-03	--	--	6.80E-05	3.00E-04	--	--	--	--
8	8	0.19	0.83	0.032	0.14	0.13	0.56	1.60E-04	7.00E-04	2.50E-04	1.10E-03	--	--	6.80E-05	3.00E-04	--	--	--	--
11	11	0.19	0.83	0.032	0.14	0.13	0.56	1.60E-04	7.00E-04	2.50E-04	1.10E-03	--	--	6.80E-05	3.00E-04	--	--	--	--
12	12	0.19	0.83	0.032	0.14	0.13	0.56	1.60E-04	7.00E-04	2.50E-04	1.10E-03	--	--	6.80E-05	3.00E-04	--	--	--	--
15	15	0.19	0.83	0.032	0.14	0.13	0.56	1.60E-04	7.00E-04	2.50E-04	1.10E-03	--	--	6.80E-05	3.00E-04	--	--	--	--
16	16	0.19	0.83	0.032	0.14	0.13	0.56	1.60E-04	7.00E-04	2.50E-04	1.10E-03	--	--	6.80E-05	3.00E-04	--	--	--	--
9	9	0.010	0.043	0.0016	0.0072	0.0067	0.029	--	--	2.30E-05	1.00E-04	--	--	--	--	--	--	--	--
13	13	0.010	0.043	0.0016	0.0072	0.0067	0.029	--	--	2.30E-05	1.00E-04	--	--	--	--	--	--	--	--
17	17	0.010	0.043	0.0016	0.0072	0.0067	0.029	--	--	2.30E-05	1.00E-04	--	--	--	--	--	--	--	--
22	22	0.010	0.043	0.0016	0.0072	0.0067	0.029	--	--	2.30E-05	1.00E-04	--	--	--	--	--	--	--	--
28	28	0.010	0.043	0.0016	0.0072	0.0067	0.029	--	--	2.30E-05	1.00E-04	--	--	--	--	--	--	--	--
20	20	0.16	0.70	0.027	0.12	0.11	0.48	1.40E-04	6.00E-04	2.10E-04	9.00E-04	--	--	6.80E-05	3.00E-04	--	--	--	--
21	21	0.16	0.70	0.027	0.12	0.11	0.48	1.40E-04	6.00E-04	2.10E-04	9.00E-04	--	--	6.80E-05	3.00E-04	--	--	--	--
25	25	0.16	0.70	0.027	0.12	0.11	0.48	1.40E-04	6.00E-04	2.10E-04	9.00E-04	--	--	6.80E-05	3.00E-04	--	--	--	--
26	26	0.16	0.70	0.027	0.12	0.11	0.48	1.40E-04	6.00E-04	2.10E-04	9.00E-04	--	--	6.80E-05	3.00E-04	--	--	--	--
19 & 30	19 & 30	227	161.8	--	--	0.42	0.10	45.8	25.1	134.5	60.5	3.9	4.9	42.4	71.3	--	--	--	--
FUG	FUG	1.43E-03	6.30E-03	--	--	3.50E-04	1.50E-03	7.30E-05	3.20E-04	1.30E-04	5.80E-04	1.50E-05	6.40E-05	1.20E-04	5.10E-04				
SSM	SSM	201.1	19.8	--	--	19.9	1.7	15.4	0.96	47.3	3.1	6.8	0.44	71.0	4.8				
Totals:		429.9	189.6	0.31	1.34	21.5	7.2	61.2	26.0	181.8	63.6	10.7	5.3	113.4	76.0	0.00	0.00	0.00	0.00

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
7	Pipeline Quality Natural Gas	Pipeline Quality Natural Gas	950 btu/scf	76.84 Mscf/hr	673.14 MMscf/yr	5 gr/100 scf	Negligible
8	Pipeline Quality Natural Gas	Pipeline Quality Natural Gas	950 btu/scf	76.84 Mscf/hr	673.14 MMscf/yr	5 gr/100 scf	Negligible
11	Pipeline Quality Natural Gas	Pipeline Quality Natural Gas	950 btu/scf	76.84 Mscf/hr	673.14 MMscf/yr	5 gr/100 scf	Negligible
12	Pipeline Quality Natural Gas	Pipeline Quality Natural Gas	950 btu/scf	76.84 Mscf/hr	673.14 MMscf/yr	5 gr/100 scf	Negligible
15	Pipeline Quality Natural Gas	Pipeline Quality Natural Gas	950 btu/scf	76.84 Mscf/hr	673.14 MMscf/yr	5 gr/100 scf	Negligible
16	Pipeline Quality Natural Gas	Pipeline Quality Natural Gas	950 btu/scf	76.84 Mscf/hr	673.14 MMscf/yr	5 gr/100 scf	Negligible
9	Pipeline Quality Natural Gas	Pipeline Quality Natural Gas	950 btu/scf	4 Mscf/hr	35.04 MMscf/yr	5 gr/100 scf	Negligible
13	Pipeline Quality Natural Gas	Pipeline Quality Natural Gas	950 btu/scf	4 Mscf/hr	35.04 MMscf/yr	5 gr/100 scf	Negligible
17	Pipeline Quality Natural Gas	Pipeline Quality Natural Gas	950 btu/scf	4 Mscf/hr	35.04 MMscf/yr	5 gr/100 scf	Negligible
22	Pipeline Quality Natural Gas	Pipeline Quality Natural Gas	950 btu/scf	4 Mscf/hr	35.04 MMscf/yr	5 gr/100 scf	Negligible
28	Pipeline Quality Natural Gas	Pipeline Quality Natural Gas	950 btu/scf	4 Mscf/hr	35.04 MMscf/yr	5 gr/100 scf	Negligible
20	Pipeline Quality Natural Gas	Pipeline Quality Natural Gas	950 btu/scf	65.05 Mscf/hr	569.86 MMscf/yr	5 gr/100 scf	Negligible
21	Pipeline Quality Natural Gas	Pipeline Quality Natural Gas	950 btu/scf	65.05 Mscf/hr	569.86 MMscf/yr	5 gr/100 scf	Negligible
25	Pipeline Quality Natural Gas	Pipeline Quality Natural Gas	950 btu/scf	65.05 Mscf/hr	569.86 MMscf/yr	5 gr/100 scf	Negligible
26	Pipeline Quality Natural Gas	Pipeline Quality Natural Gas	950 btu/scf	65.05 Mscf/hr	569.86 MMscf/yr	5 gr/100 scf	Negligible

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)
NA - There are no regulated tanks at Val Verde Gas Treatment Plant									

Table 2-L: Tank Data

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

Tank No.	Date Installed	Materials Stored	Seal Type (refer to Table 2-LR below)	Roof Type (refer to Table 2-LR below)	Capacity		Diameter (M)	Vapor Space (M)	Color (from Table VI-C)		Paint Condition (from Table VI-C)	Annual Throughput (gal/yr)	Turn-overs (per year)
					(bbl)	(M^3)			Roof	Shell			
NA - There are no regulated tanks at Val Verde Gas Treatment Plant													

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

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

Note: 1.00 bbl = 0.159 M^3 = 42.0 gal

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

Material Processed				Material Produced			
Description	**Chemical Composition**	**Phase (Gas, Liquid, or Solid)**	**Quantity (specify units)**	**Description**	**Chemical Composition**	**Phase**	**Quantity (specify units)**
Field Natural Gas	Hydrocarbons, water, CO_2 and H_2S	Gas	503.5 MMscf/day	Treated Field Gas	Hydrocarbons	Gas	503.5 MMscf/day

Table 2-N: CEM Equipment

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

Stack No.	Pollutant(s)	Manufacturer	Model No.	Serial No.	Sample Frequency	Averaging Time	Range	Sensitivity	Accuracy
NA - There is no CEM equipment at the 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
NA - There is no PEM equipment at the facility.								

Table 2-P: Greenhouse Gas Emissions

Applications submitted under 20.2.70, 20.2.72, & 20.2.74 NMAC are required to complete this Table. Power plants, Title V major sources, and PSD major sources must report and calculate all GHG emissions for each unit. Applicants must report potential emission rates in short tons per year (see Section 6.a for assistance). Include GHG emissions during Startup, Shutdown, and Scheduled Maintenance in this table. For minor source facilities that are not power plants, are not Title V, or are not PSD, there are three options for reporting GHGs 1) report GHGs for each individual piece of equipment; 2) report all GHGs from a group of unit types, for example report all combustion source GHGs as a single unit and all venting GHG as a second separate unit; OR 3) check the following box ☐ By checking this box, the applicant acknowledges the total CO2e emissions are less than 75,000 tons per year.

		CO_2 ton/yr	N_2O ton/yr	CH_4 ton/yr	SF_6 ton/yr	PFC/HFC ton/yr[2]									**Total GHG** Mass Basis ton/yr[4]	**Total CO_2e** ton/yr[5]
Unit No.	**GWPs [1]**	**1**	**298**	**25**	**22,800**	**footnote 3**										
7	**mass GHG**	37,374.07	0.07	0.70											37,374.84	
	CO_2e	37,374.07	21.85	14.80												37,410.72
8	**mass GHG**	37,374.07	0.07	0.70											37,374.84	
	CO_2e	37,374.07	21.85	14.80												37,410.72
9	**mass GHG**	1,945.50	0.00	0.04											1,945.54	
	CO_2e	1,945.50	1.14	0.77												1,947.41
10 (SSM)	**mass GHG**	0.02	0.00	22.66											22.68	
	CO_2e	0.02	0.00	475.92												475.94
11	**mass GHG**	37,374.07	0.07	0.70											37,374.84	
	CO_2e	37,374.07	21.85	14.80												37,410.72
12	**mass GHG**	37,374.07	0.07	0.70											37,374.84	
	CO_2e	37,374.07	21.85	14.80												37,410.72
13	**mass GHG**	1,945.50	0.00	0.04											1,945.54	
	CO_2e	1,945.50	1.14	0.77												1,947.41
14 (SSM)	**mass GHG**	0.05	0.00	51.69											51.74	
	CO_2e	0.05	0.00	1,085.41												1,085.46
15	**mass GHG**	37,374.07	0.07	0.70											37,374.84	
	CO_2e	37,374.07	21.85	14.80												37,410.72
16	**mass GHG**	37,374.07	0.07	0.70											37,374.84	
	CO_2e	37,374.07	21.85	14.80												37,410.72
17	**mass GHG**	1,945.50	0.00	0.04											1,945.54	
	CO_2e	1,945.50	1.14	0.77												1,947.41
18 (SSM)	**mass GHG**	0.05	0.00	51.69											51.74	
	CO_2e	0.05	0.00	1,085.41												1,085.46
19 & 30	**mass GHG**	1,293,921.3	0	1964.9											##########	
	CO_2e	1,293,921.3	0.00	41262.5												##########
20	**mass GHG**	31,639.97	0.06	0.60											31,640.63	
	CO_2e	31,639.97	18.50	12.53												31,671.00
21	**mass GHG**	31,639.97	0.06	0.60											31,640.57	
	CO2e	31,639.97	18.50	12.53												31,652.50

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

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

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

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

[5] **CO_2e** means Carbon Dioxide Equivalent and is calculated by multiplying the TPY mass emissions of the green house gas by its GWP.

22	**mass GHG**	1,945.50	0.00	0.04											1,945.54	
	CO_2e	1,945.50	1.14	0.77												1,947.41
24 (SSM)	**mass GHG**	0.02	0.00	22.66											22.68	
	CO2e	0.02	0.00	475.92												475.94
25	**mass GHG**	31,639.97	0.06	0.60											31,640.63	
	CO_2e	31,639.97	18.50	12.53												31,671.00
26	**mass GHG**	31,639.97	0.06	0.60											31,640.57	
	CO2e	31,639.97	18.50	12.53												31,652.50
27 (SSM)	**mass GHG**	0.02	0.00	22.66											22.68	
	CO_2e	0.02	0.00	475.92												475.94
28	**mass GHG**	1,945.50	0.00	0.04											1,945.54	
	CO2e	1,945.50	1.14	0.77												1,946.27
SSM	**mass GHG**	274.10	0.00	416.13											690.23	
	CO_2e	274.10	0.00	8,738.74												9,012.84
FUG	**mass GHG**	274.1	0.00	63.32											337.42	
	CO2e	274.1	0.00	1,329.73												1,603.83
Total	**mass GHG**	1,655,001.4	0.7	2,599.9											##########	
	CO_2e	1,655,001.4	210.8	54,596.4												##########

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

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

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

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

[5] **CO_2e** means Carbon Dioxide Equivalent and is calculated by multiplying the TPY mass emissions of the green house gas by its GWP.

Section 3

Application Summary

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

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

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

The Val Verde Gas Treatment Plant (Val Verde) is owned by Hilcorp Energy Company (Hilcorp) and operated by Harvest Four Corners, LLC (Harvest). The facility is located approximately 1.7 miles north of Bloomfield, New Mexico in San Juan County. Val Verde facility removes carbon dioxide (CO_2) and water from field natural gas. Natural gas is received by pipeline and then treated by one of the five treating trains. Each train removes CO2 using an amine unit and water using a glycol dehydration unit. After treatment, the gas is removed from the facility by pipeline. This application is a Title V renewal, submitted in accordance with 20.2.70.300.B(2) NMAC.

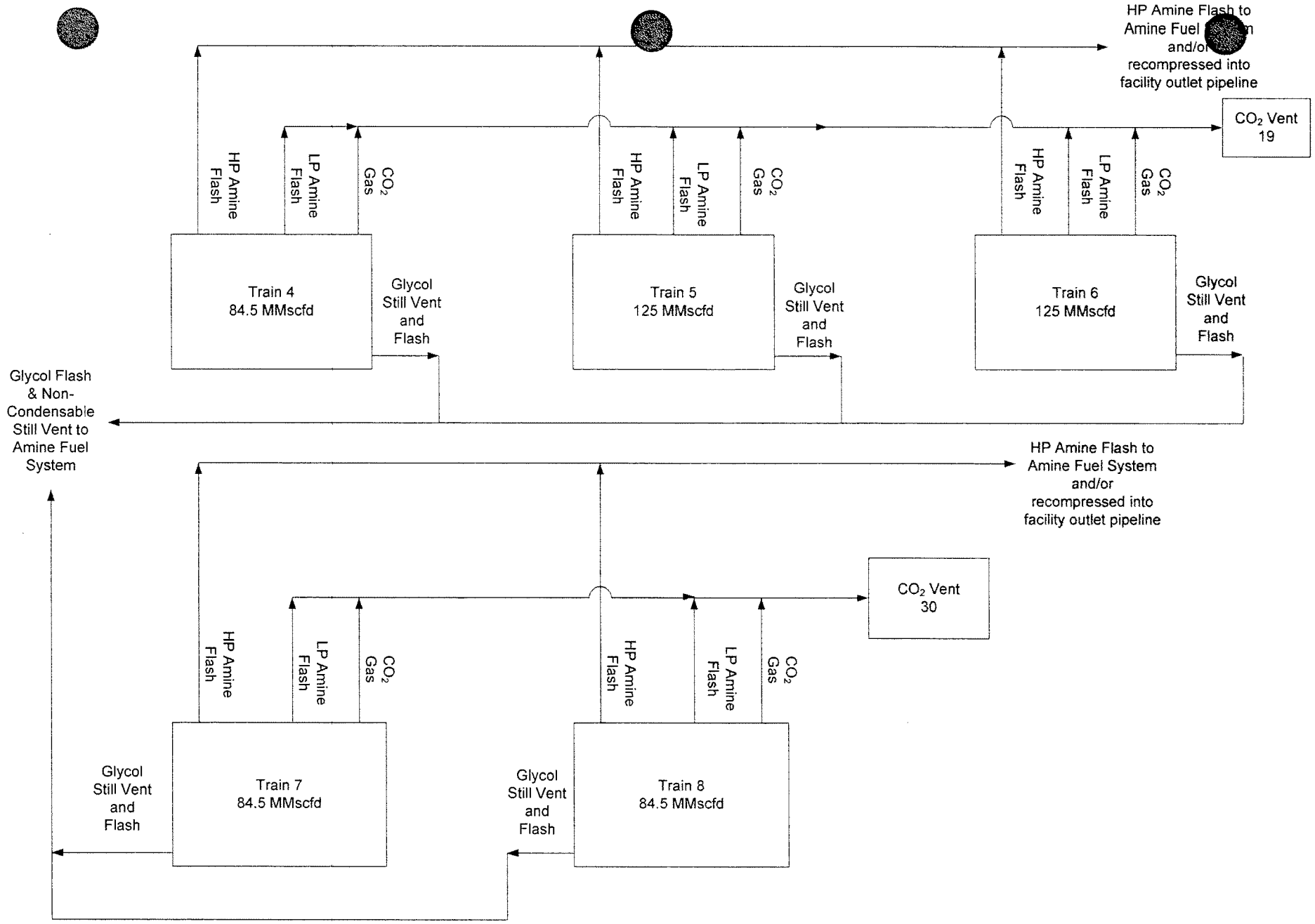
Prior to this permitting action, Val Verde is a major source of greenhouse gases (GHG) under Prevention of Significant Deterioration (PSD) rules, as it has the potential to emit more than 100,000 tons of carbon dioxide equivalent (CO_2e) per year. The facility is not an "anyway source", as it is not currently a PSD major source for any criteria pollutants. The emissions represented in this Title V renewal application would not change the PSD status of the facility, as all criteria pollutants will remain below the 250 tons per year threshold.

Section 4

Process Flow Sheet

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

A process flow sheet is attached. There are no changes to the process flow sheets from previously submitted applications. Therefore, the same process flow sheet is attached.



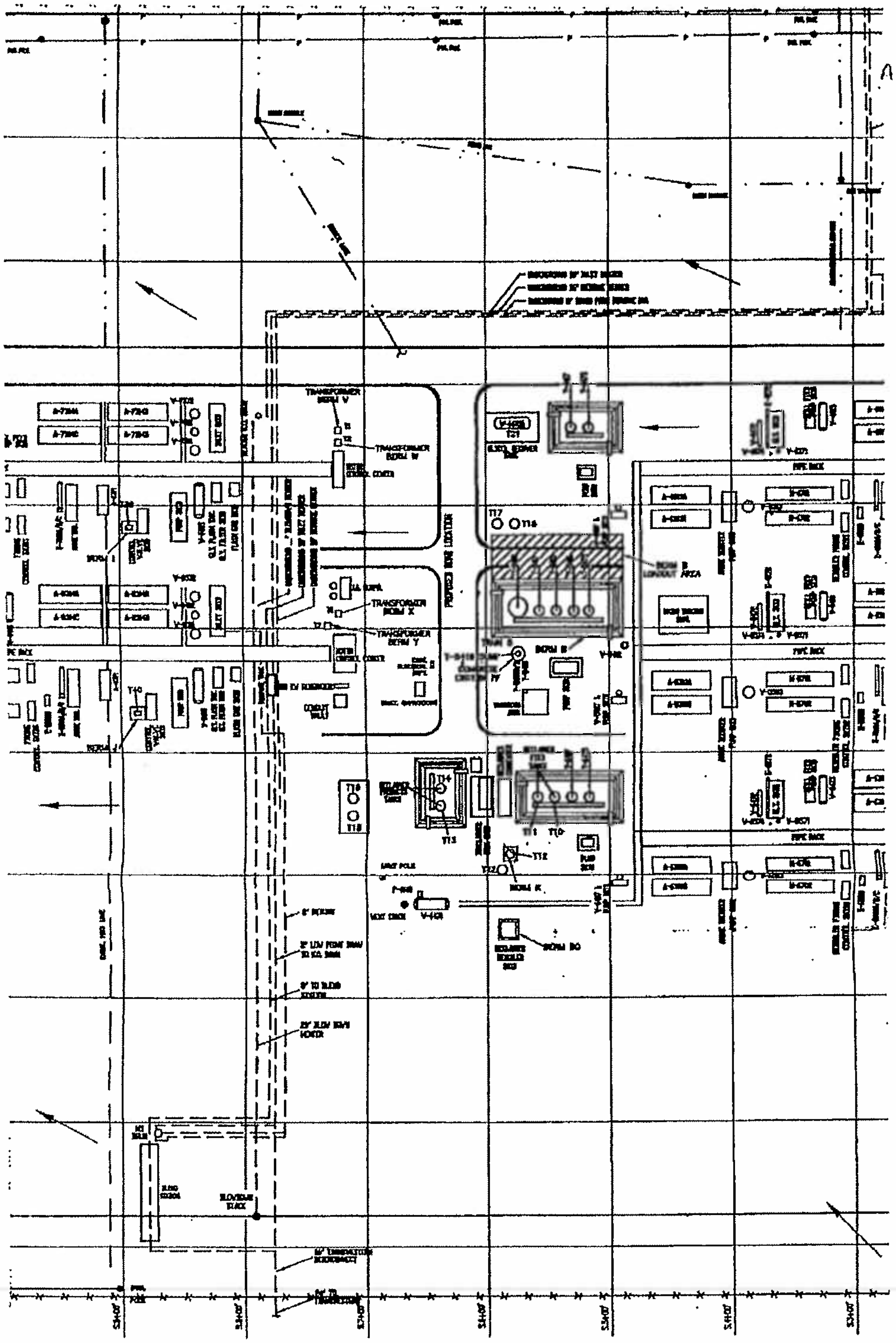
Block Flow Diagram
Val Verde Treater
Bloomfield, NM

Section 5

Plot Plan Drawn To Scale

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

A plot plan is attached. There are no changes to the plot plan from previously submitted applications. Therefore, the same plot plan is attached.



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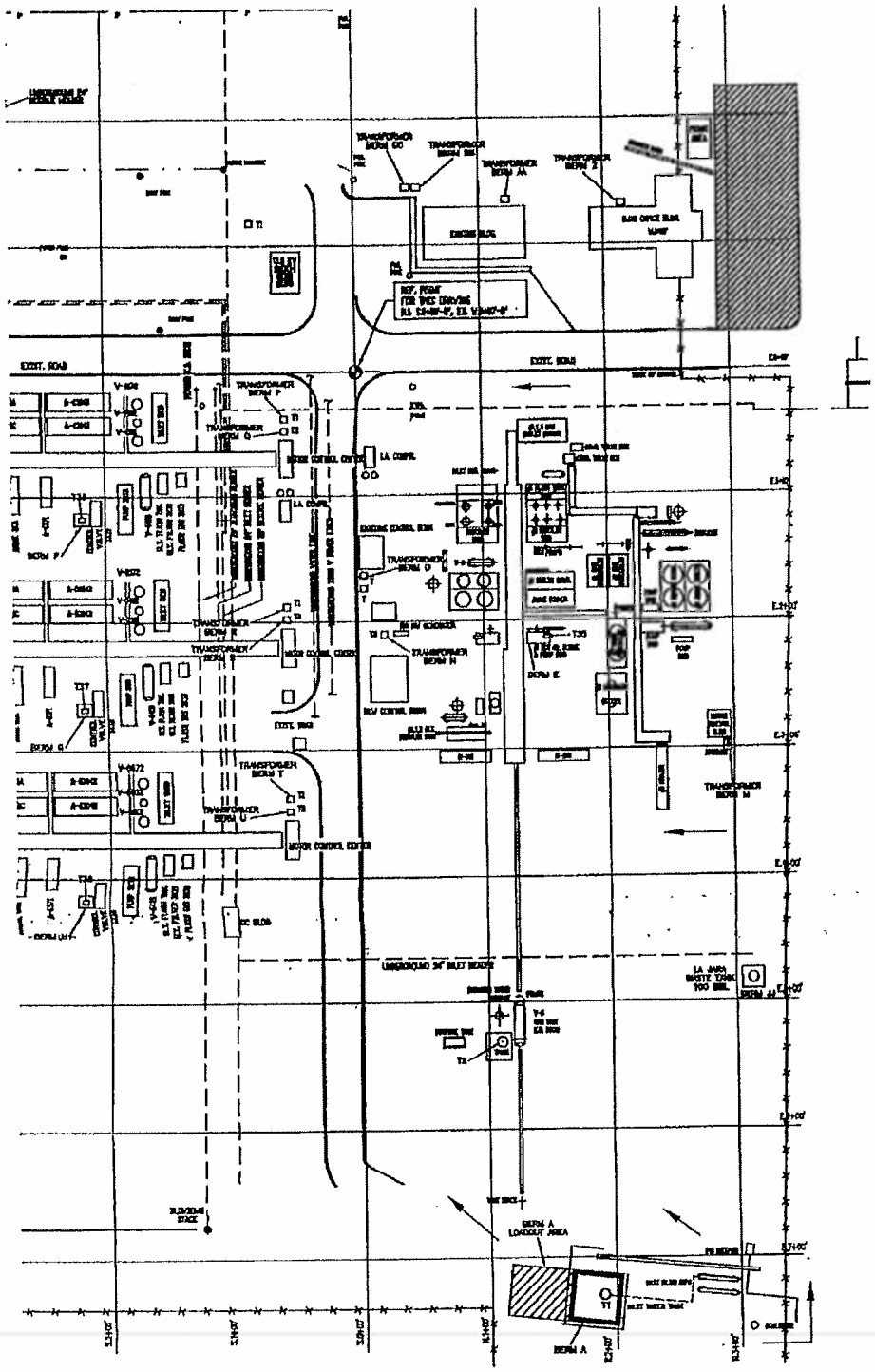

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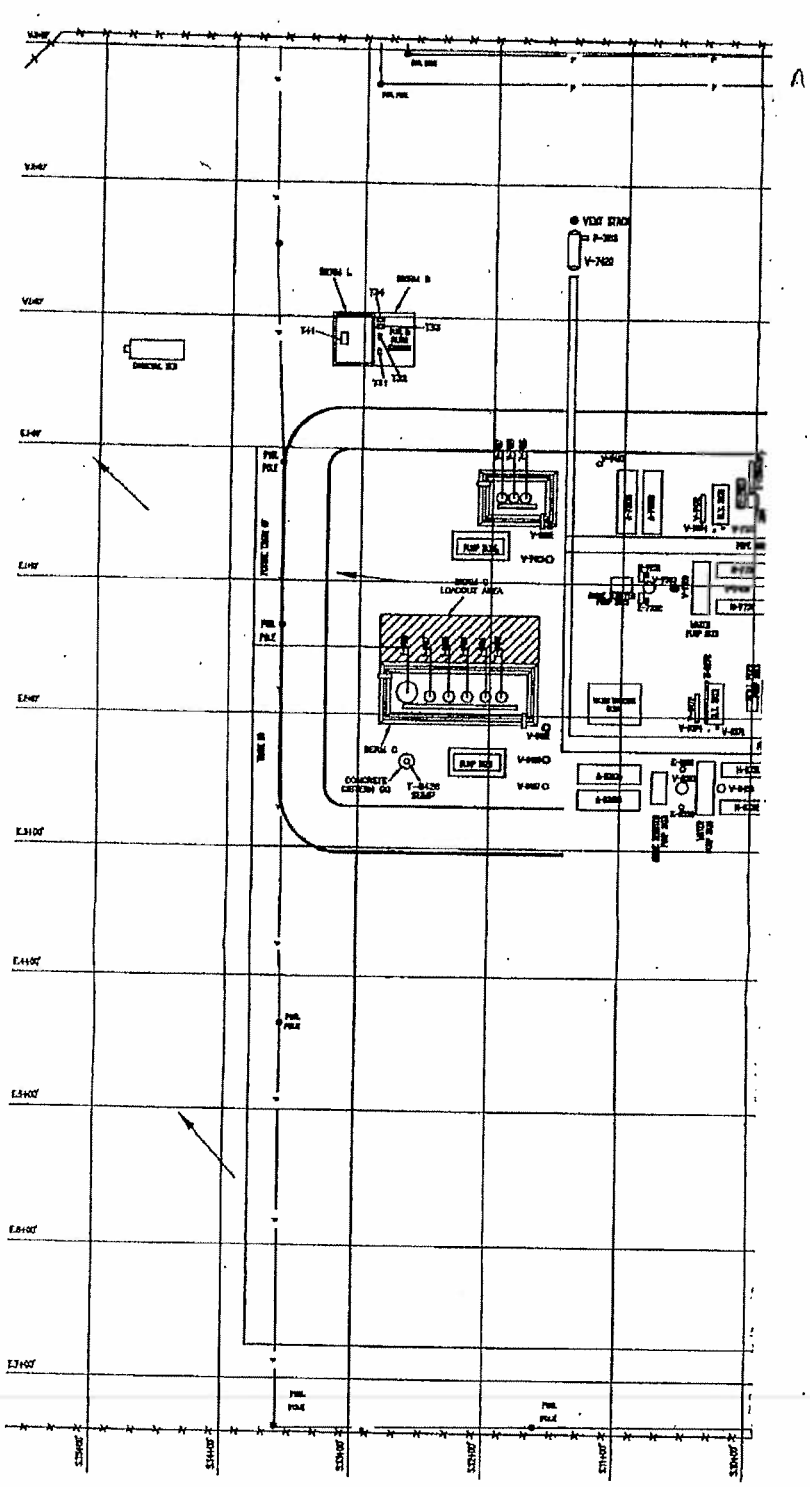
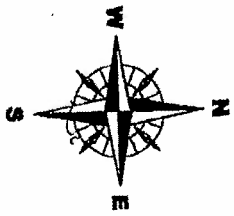


LEGEND:

——X——	FENCE
— — — —	APPROXIMATE PROPERTY BOUNDA
— — — —	OIL CONTAINING PIPE
◄——	SURFACE WATER DRAINAGE DIREC
☐	SECONDARY CONTAINMENT BERM



Oil Storage Containers

AMS Name	Field Name	Contents Description	Capacity
None	T1	Wastewater	210 bbl
T-8418	T-8418	Wastewater	500 bbl
T-8418	T-8418	Wastewater	500 bbl
None	T31	Diesel	317 gal
None	T32	Unleaded Gasoline	303 gal
None	T33	Kerosene	499 gal
None	T34	Used Oil	528 gal
None	T35	Antifoam	500 gal
None	T36	Antifoam	500 gal
None	T37	Antifoam	500 gal
None	T38	Antifoam	500 gal
None	T39	Antifoam	500 gal
None	T40	Antifoam	500 gal
None	T12	Dowtherm J	25 bbl
None	T41 (Trailer-mounted)	Used Oil	529 gal
None	Drum Storage Area	Various 55-gallon drums	NA
None	La Jara Sys. Waste Tank	Produced Water	100 bbl

Process Equipment Containing Oils

AMS Name	Field Name	Contents Description	Capacity
None	Amine Reclaimer Reboiler	Hot Oil	550 gal
T-8419	T-8419 (Sump)	Used Oil, Wastewater	568 gal
T-8426	T-8426 (Sump)	Used oil, Wastewater	568 gal
None	Inlet Filter Separator	Produced Water	68 bbl
None	Amine Reclaimer Hot Oil Surge Tank	Hot Oil	100 bbl

Oil Containing Equipment

AMS Name	Field Name	Contents Description	Capacity
None	Train 3	Transformer Oil	481gal
None	Control Room	Transformer Oil	240 gal
None	Train 1&2	Transformer Oil	500 gal
None	Train 4 West	Transformer Oil	360 gal
None	Train 4 East	Transformer Oil	360 gal
None	Train 5 West	Transformer Oil	360 gal
None	Train 5 East	Transformer Oil	360 gal
None	Train 6 West	Transformer Oil	360 gal
None	Train 6 East	Transformer Oil	360 gal
None	Train 7 West	Transformer Oil	360 gal
None	Train 7 East	Transformer Oil	360 gal
None	Train 8 West	Transformer Oil	360 gal
None	Train 8 East	Transformer Oil	360 gal
None	Office Building	Transformer Oil	150 gal
None	Spare Transformer North	Transformer Oil	360 gal
None	Spare Transformer South	Transformer Oil	355 gal

Non-Oil Storage Containers

AMS Name	Field Name	Contents Description
None	T2	Amine
T-8475	T-8475	Glycol
T-8416	T-8416	CS+
T-8415	T-8415	DI Water
T8417	T8417	CS+ Rundown
T-8475	T-8475	Glycol
T-8417	T-8417	CS+ Rundown
None	T10	Gas Spec CS+
None	T11	Gas Spec CS+
None	T13	Used CS+
None	T14	Used CS+
None	T15	Used CS+
None	T16	Used CS+
T-4475	T-4475	Glycol
T-4417	T-4417	CS+ Rundown
None	T21	Used TEG
T-7416	T-7416	Glycol
T-7419	T-7419	CS+ Rundown
T-7417	T-7417	Hot Wastewater Rundown
T-8475	T-8475	Glycol
T-8416	T-8416	CS+
T-8415	T-8415	Makeup Water
T-8419	T-8419	Hot Wastewater Rundown
T-8417	T-8417	CS+ Rundown

NOT TO SCALE

Note: This drawing is based on a field sketch and depicts the location and contents of each oil containing container, equipment, and piping (as required by 40 CFR 112.7(3)). This drawing should only be used for Spill Prevention Control and Countermeasure Plan(SPCC) purposes. As drawing is not to scale, actual containers, equipment, or piping may vary in size and position from those represented here.

SPCC PLOT PLAN

050772

Section 6

All Calculations

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

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

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

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

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

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

Significant Figures:

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

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

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

(1) If the first digit to be discarded is less than the number 5, the last digit retained shall not be changed;

(2) If the first digit discarded is greater than the number 5, or if it is the number 5 followed by at least one digit other than the number zero, the last figure retained shall be increased by one unit; **and**

(3) If the first digit discarded is exactly the number 5, followed only by zeros, the last digit retained shall be rounded upward if it is an odd number, but no adjustment shall be made if it is an even number.

(4) The final result of the calculation shall be expressed in the units of the standard.

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

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

Amine Sweeting Units - (Units: 19 & 30)

Unit 19 corresponds with Trains 4, 5, & 6, while Unit 30 corresponds with Trains 7 & 8. The hourly VOC emissions are based on the maximum short-term on-loading of rich gas, estimated using ProMax 3.1. Annual emissions for units 19 and 30 were calculated using a maximum annual average of rich gas on-loading.

Glycol Dehydrators - (Units: 10, 14, 18, 24, 27)

Dehydrator emissions are estimated using the ProMax 3.1 simulation program. Emissions from these units are controlled 99% by the condenser and flash tank. Non-condensable vapors are routed to the amine fuel systems. Controlled emissions are negligible.

Fugitives (Unit: FUG)

The facility-wide fugitive emissions are based on a worst-case gas analysis (maximum of each component, totaling over 100%) and a facility component count. Emission factors are from Table 2-4 of EPA Protocol for Equipment Leak Emission Estimates, 1995. These emission factors are for TOC; to convert from TOC to other components, the ratio of mole percent of each component in the inlet gas was used.

Startup, Shutdown, and Maintenance (SSM) Emissions (Unit: SSM)

Faciliy-Wide SSM
This site is expected to experience planned maintenance and unscheduled emergency shutdowns. SSM event volumes and frequencies are based on historical event data and process knowledge. The Val Verde worst-case gas analysis was used along with the event volumes and frequencies to estimate emission rates.

Dehydrator SSM
The dehydrator SSM emissions (Units 10, 14, 18, 24, 27) were calculated assuming a maximum of 500 hours/year of startup, shutdown or maintenance time. During these 500 hours, the emissions from the dehydrator still vent and flash tank would not be routed to the amine and dehydrator reboilers and, instead, vented to the atmosphere.

Amine SSM
The startup, shutdown, maintenance emissions for Units 19 and 30 were calculated assuming a maximum downtime of 500 hours/year, where the high-pressure flash tank and dehydrator still vent of gasses are not routed to the reboilers and, thereby, would be vented to the atmosphere.

These emission calculations were submitted with the September 2013, NSR significant revision application and were approved by NMED with the issuance of permit number 0728-M10 on January 22, 2014.

Amine Reboilers (Units: 7, 8, 11, 12, 15, 16)

The amine reboiler NO_X and CO emissions are as permitted. These emissions have been previously reviewed and approved. Particulate and VOC emissions are based on AP-42 Table 1.4-2 emission factors. SO_2 emissions are based on fuel usage rates and a maximum fuel sulfur content of 5 gr Total Sulfur/100 scf. HAP emissions were calculated using GRI-HAPCalc 3.01. GHG emissions from natural gas combustion were calculated using methodology and emission factors from 40 CFR 98 Subpart C, Tables C-1 and C-2.

Glycol Reboilers (Units: 9, 13, 17, 22, 28)

The glycol reboiler NO_X and CO emissions are as permitted. These emissions have been previously reviewed and approved. Particulate and VOC emissions are based on AP-42 Table 1.4-2 emission factors. SO_2 emissions are based on fuel usage rates and a maximum fuel sulfur content of 5 gr Total Sulfur/100 scf. HAP emissions were calculated using GRI-HAPCalc 3.01. GHG emissions from natural gas combustion were calculated using methodology and emission factors from 40 CFR 98 Subpart C, Tables C-1 and C-2.

Heaters (Units: 20, 21, 25, 26)

The heater NO_X and CO emissions are as permitted. These emissions have been previously reviewed and approved. Particulate and VOC emissions are based on AP-42 Table 1.4-2 emission factors. SO_2 emissions are based on fuel usage rates and a maximum fuel sulfur content of 5 gr Total Sulfur/100 scf. HAP emissions were calculated using GRI-HAPCalc 3.01. GHG emissions from natural gas combustion were calculated using methodology and emission factors from 40 CFR 98 Subpart C, Tables C-1 and C-2.

Malfunction Emissions (Unit: MALF)

This site is expected to experience malfunction emissions from various units. Accordingly, 10 tons per year of malfunction emissions are requested pursuant to the Implementation Guidance for Permitting SSM Emissions and Excess Emissions, June 7, 2012.

Table 6-1a
Project Emissions Summary (Criteria Pollutants)
Val Verde Gas Treatment Plant
Harvest Four Corners, LLC

ID	Emissions Source	Description	NO_X		CO		VOC		PM10		SO_2		H_2S		Comments
			lb/hr	tpy	lb/hr	tpy	lb/hr	tpy	lb/hr	tpy	lb/hr	tpy	lb/hr	tpy	
7	Reboiler	Amine Reboiler (Train 4)	4.60	20.15	4.50	19.71	0.42	1.85	0.58	2.56	1.10	4.81	--	--	
8	Reboiler	Amine Reboiler (Train 4)	4.60	20.15	4.50	19.71	0.42	1.85	0.58	2.56	1.10	4.81	--	--	
9	Reboiler	Glycol Reboiler (Train 4)	0.70	3.07	0.09	0.40	0.02	0.10	0.03	0.13	0.06	0.25	--	--	
10	Dehy	Glycol Still (Train 4)	--	--	--	--	3.95	17.28	--	--	--	--	--	--	Emissions shown are controlled. See Table 2C for control details.
		Glycol Still (Train 4) - SSM	--	--	--	--	9.15	2.29	--	--	--	--	--	--	
11	Reboiler	Amine Reboiler (Train 5)	4.60	20.15	4.50	19.71	0.42	1.85	0.58	2.56	1.10	4.81	--	--	
12	Reboiler	Amine Reboiler (Train 5)	4.60	20.15	4.50	19.71	0.42	1.85	0.58	2.56	1.10	4.81	--	--	
13	Reboiler	Glycol Reboiler (Train 5)	0.70	3.07	0.09	0.40	0.02	0.10	0.03	0.13	0.06	0.25	--	--	
14	Dehy	Glycol Still (Train 5)	--	--	--	--	11.21	49.11	--	--	--	--	--	--	Emissions shown are controlled. See Table 2C for control details.
		Glycol Still (Train 5) - SSM	--	--	--	--	3.52	0.88	--	--	--	--	--	--	
15	Reboiler	Amine Reboiler (Train 6)	4.60	20.15	4.50	19.71	0.42	1.85	0.58	2.56	1.10	4.81	--	--	
16	Reboiler	Amine Reboiler (Train 6)	4.60	20.15	4.50	19.71	0.42	1.85	0.58	2.56	1.10	4.81	--	--	
17	Reboiler	Glycol Reboiler (Train 6)	0.70	3.07	0.09	0.40	0.02	0.10	0.03	0.13	0.06	0.25	--	--	
18	Dehy	Glycol Still (Train 6)	--	--	--	--	11.21	49.11	--	--	--	--	--	--	Emissions shown are controlled. See Table 2C for control details.
		Glycol Still (Train 6) - SSM	--	--	--	--	3.52	0.88	--	--	--	--	--	--	
19/30	Amine	Amine Vent Stacks - Routine	--	--	--	--	255.00	182.30	--	--	--	--	--	--	
		Amine Vent Stacks - SSM	--	--	--	--	42.76	9.76	--	--	--	--	0.95	4.17	
20	Heater	Water Heater (Train 7)	4.90	21.70	3.10	13.50	0.40	1.60	0.50	2.20	0.93	4.10	--	--	
21	Heater	Water Heater (Train 7)	4.90	21.70	3.10	13.50	0.40	1.60	0.50	2.20	0.93	4.10	--	--	
22	Reboiler	Glycol Reboiler (Train 7)	0.70	3.07	0.09	0.40	0.02	0.10	0.03	0.13	0.06	0.25	--	--	
24	Dehy	Glycol Still (Train 7)	--	--	--	--	3.95	17.28	--	--	--	--	--	--	Emissions shown are controlled. See Table 2C for control details.
		Glycol Still (Train 7) - SSM	--	--	--	--	9.15	2.29	--	--	--	--	--	--	
25	Heater	Water Heater (Train 8)	4.90	21.70	3.10	13.50	0.40	1.60	0.50	2.20	0.93	4.10	--	--	
26	Heater	Water Heater (Train 8)	4.90	21.70	3.10	13.50	0.40	1.60	0.50	2.20	0.93	4.10	--	--	
27	Dehy	Glycol Still (Train 8)	--	--	--	--	3.95	17.28	--	--	--	--	--	--	Emissions shown are controlled. See Table 2C for control details.
		Glycol Still (Train 8) - SSM	--	--	--	--	9.15	2.29	--	--	--	--	--	--	
28	Reboiler	Glycol Reboiler (Train 8)	0.70	3.07	0.09	0.40	0.02	0.10	0.03	0.13	0.06	0.25	--	--	
FUG	Fugitives	Fugitive Component Emissions	--	--	--	--	0.23	1.00	--	--	--	--	--	--	
SSM	SSM	Blowdown SSM	--	--	--	--	1385.48	13.59	--	--	--	--	--	--	
MALF	MALF	Malfunctions	--	--	--	--	--	10.00	--	--	--	--	--	--	
Facility-wide Potential Emissions (Table 2D)			50.70	223.02	39.86	174.25	1756.47	393.32	5.66	24.81	10.59	46.50	0.95	4.17	Totals include SSM, and 10 tpy MALF.
Facility-wide Controlled Emissions (Table 2E)			50.70	223.02	39.86	174.25	1722.21	243.26	5.66	24.81	10.59	46.50	0.95	4.17	SSM emissions are reported on Table 2-F

* In order to assure compliance with permit representations, lb/hr and tpy emissions which are less than 0.01 are represented as 0.01.
1) See Section 6 for emission calculation details.
2) See Section 7 for program output reports.
3) Malfunction emissions are included at the allowed rate of 10 tpy per NMED Guidance, IMPLEMENTATION GUIDANCE FOR PERMITTING SSM EMISSIONS AND EXCESS EMISSIONS (1.10.11).

Table 6-1b
Project Emissions Summary (HAP Emissions)
Val Verde Gas Treatment Plant
Harvest Four Corners, LLC

EPN	Source Description	Acetaldehyde		Benzene		Ethylbenzene		Formaldehyde		Hexane		Methanol		Toluene		Xylene		Total HAPS		Comments
		lb/hr	tpy	lb/hr	tpy	lb/hr	tpy	lb/hr	tpy	lb/hr	tpy	lb/hr	tpy	lb/hr	tpy	lb/hr	tpy	lb/hr	tpy	
7	Amine Reboiler (Train 4)	0.02	0.09	<0.01	<0.01	--	--	<0.01	0.02	0.13	0.56	0.03	0.14	<0.01	<0.01	<0.01	<0.01	0.19	0.83	
8	Amine Reboiler (Train 4)	0.02	0.09	<0.01	<0.01	--	--	<0.01	0.02	0.13	0.56	0.03	0.14	<0.01	<0.01	<0.01	<0.01	0.19	0.83	
9	Glycol Reboiler (Train 4)	<0.01	<0.01	<0.01	<0.01	--	--	<0.01	<0.01	<0.01	0.03	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.04	
10	Glycol Still (Train 4)	--	--	0.21	0.92	<0.01	<0.01	--	--	0.08	0.35	--	--	0.54	2.38	<0.01	<0.01	0.83	3.65	This Unit ID is controlled
	Glycol Still (Train 4) - SSM	--	--	0.54	0.13	0.08	0.02	--	--	0.21	0.05	--	--	1.55	0.39	0.14	0.03	2.51	0.63	
11	Amine Reboiler (Train 5)	0.02	0.09	<0.01	<0.01	--	--	<0.01	0.02	0.13	0.56	0.03	0.14	<0.01	<0.01	<0.01	<0.01	0.19	0.83	
12	Amine Reboiler (Train 5)	0.02	0.09	<0.01	<0.01	--	--	<0.01	0.02	0.13	0.56	0.03	0.14	<0.01	<0.01	<0.01	<0.01	0.19	0.83	
13	Glycol Reboiler (Train 5)	<0.01	<0.01	<0.01	<0.01	--	--	<0.01	<0.01	<0.01	0.03	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.04	
14	Glycol Still (Train 5)	--	--	0.39	1.72	0.01	0.06	--	--	0.23	0.99	--	--	1.14	4.98	<0.01	0.02	1.77	7.77	This Unit ID is controlled
	Glycol Still (Train 5) - SSM	--	--	0.20	0.05	<0.01	<0.01	--	--	0.07	0.05	--	--	0.54	0.13	<0.01	<0.01	0.82	0.20	
15	Amine Reboiler (Train 6)	0.02	0.09	<0.01	<0.01	--	--	<0.01	0.02	0.13	0.56	0.03	0.14	<0.01	<0.01	<0.01	<0.01	0.19	0.83	
16	Amine Reboiler (Train 6)	0.02	0.09	<0.01	<0.01	--	--	<0.01	0.02	0.13	0.56	0.03	0.14	<0.01	<0.01	<0.01	<0.01	0.19	0.83	
17	Glycol Reboiler (Train 6)	<0.01	<0.01	<0.01	<0.01	--	--	<0.01	<0.01	<0.01	0.03	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.04	
18	Glycol Still (Train 6)	--	--	0.39	1.72	0.01	0.06	--	--	0.23	0.99	--	--	1.14	4.98	<0.01	0.02	1.77	7.77	This Unit ID is controlled
	Glycol Still (Train 6) - SSM	--	--	0.20	0.05	<0.01	<0.01	--	--	0.07	0.05	--	--	0.54	0.13	<0.01	<0.01	0.82	0.20	
19/30	Amine Vent Stacks - Routine	--	--	45.80	25.10	3.90	4.90	--	--	0.42	0.10	--	--	134.50	60.50	42.40	71.30	227.00	161.80	
	Amine Vent Stacks - SSM	--	--	19.90	1.01	0.19	0.05	--	--	0.06	0.02	--	--	11.95	2.99	0.93	0.08	16.20	4.05	
20	Water Heater (Train 7)	0.02	0.08	<0.01	<0.01	--	--	<0.01	0.02	0.11	0.48	0.03	0.12	<0.01	<0.01	0.63	0.17	0.16	0.70	
21	Water Heater (Train 7)	0.02	0.08	<0.01	<0.01	--	--	<0.01	0.02	0.11	0.48	0.03	0.12	<0.01	<0.01	<0.01	<0.01	0.16	0.70	
22	Glycol Reboiler (Train 7)	<0.01	<0.01	<0.01	<0.01	--	--	<0.01	<0.01	<0.01	0.03	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.04	
24	Glycol Still (Train 7)	--	--	0.21	0.92	<0.01	<0.01	--	--	0.08	0.35	--	--	0.54	2.38	<0.01	<0.01	0.83	3.65	This Unit ID is controlled
	Glycol Still (Train 7) - SSM	--	--	0.54	0.13	0.08	0.02	--	--	0.21	0.05	--	--	1.55	0.39	0.14	0.03	2.51	0.63	
25	Water Heater (Train 8)	0.02	0.08	<0.01	<0.01	--	--	<0.01	0.02	0.11	0.48	0.03	0.12	<0.01	<0.01	<0.01	<0.01	0.16	0.70	
26	Water Heater (Train 8)	0.02	0.08	<0.01	<0.01	--	--	<0.01	0.02	0.11	0.48	0.03	0.12	<0.01	<0.01	<0.01	<0.01	0.16	0.70	
27	Glycol Still (Train 8)	--	--	0.21	0.92	<0.01	<0.01	--	--	0.08	0.35	--	--	0.54	2.38	<0.01	<0.01	0.83	3.65	This Unit ID is controlled
	Glycol Still (Train 8) - SSM	--	--	0.54	0.13	0.08	0.02	--	--	0.21	0.05	--	--	1.55	0.39	0.14	0.03	2.51	0.63	
28	Glycol Reboiler (Train 8)	<0.01	<0.01	<0.01	<0.01	--	--	<0.01	<0.01	<0.01	0.03	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.04	
FUG	Fugitive Component Emissions	--	--	<0.01	<0.01	--	--	--	--	<0.01	<0.01	--	--	<0.01	<0.01	--	--	<0.01	0.01	
SSM	Blowdown SSM	--	--	15.40	0.96	--	--	--	--	19.90	1.90	--	--	47.30	3.10	71.00	4.80	153.60	10.56	
MALF	Malfunctions	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	There are no specific HAPs associated with MALF emissions.
TOTAL		0.18	0.78	84.54	33.78	4.37	5.13	0.00	0.20	22.91	9.92	0.27	1.16	203.36	85.10	115.38	76.49	413.60	212.39	Totals include emissions from controlled sources - see comments above.

Reporting threshold			1		1		1		1		1		1		1		1			
Report on UA2?				Report						Report		Report		Report						

1) In order to assure compliance with permit representations, lb/hr and tpy emissions which are less than 0.01 are represented as "<0.01"; however, those are being treated as 0.01 for purposes of estimating allowable emissions.
2) Not all HAPs are shown on the above table. Individual summaries for each source type show details of all HAPs calculated.
3) n-Hexane emissions for Unit IDs 19 and 30 were represented in the calculations in the most recent NSR application; however, there were not included on the Table 2-I and thus not included in Table 102.B of the NSR Permit.

Table 6-1c
Project Emissions Summary (GHG Emissions)
Val Verde Gas Treatment Plant
Harvest Four Corners, LLC

ID	Emissions Source	Description	CO2		N2O		CH4		Comments
			lb/hr	tpy	lb/hr	tpy	lb/hr	tpy	
7	Reboiler	Amine Reboiler (Train 4)	8,533	37,374	0.02	0.07	0.20	0.70	
8	Reboiler	Amine Reboiler (Train 4)	8,533	37,374	0.02	0.07	0.20	0.70	
9	Reboiler	Glycol Reboiler (Train 4)	444	1,945	0.001	0.004	0.01	0.04	
10	Dehy	Glycol Still (Train 4)	0.4	1.7			242	1,059	details.
		Glycol Still (Train 4) - SSM	0.1	0			91	22.70	
11	Reboiler	Amine Reboiler (Train 5)	8,533	37,374	0.02	0.07	0.20	0.70	
12	Reboiler	Amine Reboiler (Train 5)	8,533	37,374	0.02	0.07	0.20	0.70	
13	Reboiler	Glycol Reboiler (Train 5)	444	1,945	0.001	0.004	0.01	0.04	
14	Dehy	Glycol Still (Train 5)	0.5	2			237	1,039	details.
		Glycol Still (Train 5) - SSM	0.2	0.05			207	51.7	
15	Reboiler	Amine Reboiler (Train 6)	8,533	37,374	0.02	0.07	0.20	0.70	
16	Reboiler	Amine Reboiler (Train 6)	8,533	37,374	0.02	0.07	0.20	0.70	
17	Reboiler	Glycol Reboiler (Train 6)	444	1,945	0.001	0.004	0.01	0.04	
18	Dehy	Glycol Still (Train 6)	0.5	2			237	1,039	details.
		Glycol Still (Train 6) - SSM	0.2	0.05			207	51.7	
19/30	Amine	Amine Vent Stacks - Routine	260,168	1,245,778			321	1,307	
		Amine Vent Stacks - SSM	192,577	48,144			1,189	297	
20	Heater	Water Heater (Train 7)	7,224	31,640	0.01	0.06	0.10	0.60	
21	Heater	Water Heater (Train 7)	7,224	31,640	0.01	0.06	0.10	0.60	
22	Reboiler	Glycol Reboiler (Train 7)	444	1,945	0.001	0.004	0.01	0.04	
24	Dehy	Glycol Still (Train 7)	0.4	1.7			242	1,059	details.
		Glycol Still (Train 7) - SSM	0.1	0			91	22.70	
25	Heater	Water Heater (Train 8)	7,224	31,640	0.01	0.06	0.10	0.60	
26	Heater	Water Heater (Train 8)	7,224	31,640	0.01	0.06	0.10	0.60	
27	Dehy	Glycol Still (Train 8)	0.4	1.7			242	1,059	details.
		Glycol Still (Train 8) - SSM	0.1	0			91	22.70	
28	Reboiler	Glycol Reboiler (Train 8)	444	1,945	0.001	0.004	0.01	0.04	
FUG	Fugitives	Fugitive Component Emissions	10	42			14.46	63.32	
SSM	SSM	Blowdown SSM	64,715	274			98,247	416	
MALF	MALF	Malfunctions		--					
		Total	599,783	1,654,769	0.16	1	100,459	2,262	Totals do not include emissions from controlled sources.
		CO2 Equivalent	599,783	1,654,769	48	211	2,109,645	47,498	See comments above

Total mass GHG	1,657,032 T/yr
Total CO2 Equivalent	1,702,476 T/yr

Table 6-2
Project Emission Changes
Val Verde Gas Treatment Plant
Harvest Four Corners, LLC

Pollutant	Existing Permit Emissions	Proposed Emissions	Delta
	tons/yr	tons/yr	tons/yr
NOx	223.4	223.4	0.0
CO	174.4	174.4	0.0
VOC	243.4	243.4	0.0
SO2	46.4	46.4	0.0
PM10/2.5	24.7	24.7	0.0
H2S	4.2	4.2	0.0
GHG as CO2e	1,710,052	1,710,052	0.0
HAPs	189.6	189.6	0.0

1) Emssions Permit emissions in the above table are taken from Title V Permit No. P118-R3 (dated 08/24/2018) Tables 102.A, 102.B, and 107.A.

Table 6-3a
Glycol Reboiler Emissions (IDs 9, 13, 17, 22, & 28) - Criteria Pollutants
Val Verede Gas Treatment Plant
Harvest Four Corners, LLC

Source No.	9	13	17	22	28
Manufacturer	T.H. Russel/Eclipse	T.H. Russel/Eclipse	T.H. Russel/Eclipse	T.H. Russel/Eclipse	T.H. Russel/Eclipse
Model	H4771	H5771	H6771	H7771	H8771
Heat Input Rate	3.8 MMBtu/hr	3.8 MMBtu/hr	3.8 MMBtu/hr	3.8 MMBtu/hr	3.8 MMBtu/hr
Fuel Heat Value	950 Btu/scf	950 Btu/scf	950 Btu/scf	950 Btu/scf	950 Btu/scf
Annual Hours	8,760 hours	8,760 hours	8,760 hours	8,760 hours	8,760 hours
NOx Factor	0.700 lb/hr (permit)	0.700 lb/hr (permit)	0.700 lb/hr (permit)	0.700 lb/hr (permit)	0.700 lb/hr (permit)
CO Factor	0.091 lb/hr (permit)	0.091 lb/hr (permit)	0.091 lb/hr (permit)	0.091 lb/hr (permit)	0.091 lb/hr (permit)
VOC Factor	5.500 lb/MMscf	5.500 lb/MMscf	5.500 lb/MMscf	5.500 lb/MMscf	5.500 lb/MMscf
PM10 Facotr	7.60 lb/MMscf	7.60 lb/MMscf	7.60 lb/MMscf	7.60 lb/MMscf	7.60 lb/MMscf
SO2 Factor	50.00 gr S/Mscf	50.00 gr S/Mscf	50.00 gr S/Mscf	50.00 gr S/Mscf	50.00 gr S/Mscf
CO2 Factor	53.02 kg/MMBtu	53.02 kg/MMBtu	53.02 kg/MMBtu	53.02 kg/MMBtu	53.02 kg/MMBtu
N2O Factor	0.0001 kg/MMBtu	0.0001 kg/MMBtu	0.0001 kg/MMBtu	0.0001 kg/MMBtu	0.0001 kg/MMBtu
CH4 Factor	0.001 kg/MMBtu	0.001 kg/MMBtu	0.001 kg/MMBtu	0.001 kg/MMBtu	0.001 kg/MMBtu

Source No	**9**		**13**		**17**		**22**		**28**	
Pollutant	**lb/hr**	**tpy**	**lb/hr**	**tpy**	**lb/hr**	**tpy**	**lb/hr**	**tpy**	**lb/hr**	**tpy**
NOx	0.70	3.07	0.70	3.07	0.70	3.07	0.70	3.07	0.70	3.07
CO	0.09	0.40	0.09	0.40	0.09	0.40	0.09	0.40	0.09	0.40
VOC	0.02	0.10	0.02	0.10	0.02	0.10	0.02	0.10	0.02	0.10
PM10	0.03	0.13	0.03	0.13	0.03	0.13	0.03	0.13	0.03	0.13
SO2	0.06	0.25	0.06	0.25	0.06	0.25	0.06	0.25	0.06	0.25
CO2	444.18	1945.50	444.18	1945.50	444.18	1945.50	444.18	1945.50	444.18	1945.50
N2O	0.001	0.004	0.001	0.004	0.001	0.004	0.001	0.004	0.001	0.004
CH4	0.01	0.04	0.01	0.04	0.01	0.04	0.01	0.04	0.01	0.04

SO2 (lb/hr) = 5 gr S / 100 scf fuel (spec) * 1 lb S / 7000 gr S * Q fuel flowrate (scf/hr) * 64 lb SO2 / 32 lb S

Notes:

1) Emission Factors for NOx and CO are as permitted in NSR Permit No. 728-M11.

2) VOC and PM emission factors are from AP-42, Table 1.4-2.

3) SO2 emissions are based on maximum sulfur content of fuel allowed under current contracts, 5 gr/100 scf.

4) CO2 factor is from 40 CFR 98, Table C-1

5) N2O and CH4 factors are from 40 CFR 98, Table C-2

Table 6-3b
Glycol Reboiler Emissions (IDs 9, 13, 17, 22, & 28) - HAPs
Val Verede Gas Treatment Plant
Harvest Four Corners, LLC

ID:		9		13		17		22		28	
Annual Operating Hours (hrs/yr):		8,760		8,760		8,760		8,760		8,760	
Fuel Input Rate (MMBtu/hr):		3.8		3.8		3.8		3.8		3.8	
Fuel Heat Value (Btu/scf):		950		950		950		950		950	
Pollutant	**Factor lb/MMBtu**	**lb/hr**	**tpy**	**lb/hr**	**tpy**	**lb/hr**	**tpy**	**lb/hr**	**tpy**	**lb/hr**	**tpy**
2-Methylnaphthalene	**2.35E-08**	8.94E-08	3.92E-07	8.94E-08	3.92E-07	8.94E-08	3.92E-07	8.94E-08	3.92E-07	8.94E-08	3.92E-07
3-Methylchloranthrene	**1.76E-09**	6.71E-09	2.94E-08	6.71E-09	2.94E-08	6.71E-09	2.94E-08	6.71E-09	2.94E-08	6.71E-09	2.94E-08
7,12-Dimethylbenz(a)anthracene	**1.57E-08**	5.96E-08	2.61E-07	5.96E-08	2.61E-07	5.96E-08	2.61E-07	5.96E-08	2.61E-07	5.96E-08	2.61E-07
Acenaphthene	**1.76E-09**	6.71E-09	2.94E-08	6.71E-09	2.94E-08	6.71E-09	2.94E-08	6.71E-09	2.94E-08	6.71E-09	2.94E-08
Acenaphthylene	**1.76E-09**	6.71E-09	2.94E-08	6.71E-09	2.94E-08	6.71E-09	2.94E-08	6.71E-09	2.94E-08	6.71E-09	2.94E-08
Anthracene	**2.35E-09**	8.94E-09	3.92E-08	8.94E-09	3.92E-08	8.94E-09	3.92E-08	8.94E-09	3.92E-08	8.94E-09	3.92E-08
Benz(a)anthracene	**1.76E-09**	6.71E-09	2.94E-08	6.71E-09	2.94E-08	6.71E-09	2.94E-08	6.71E-09	2.94E-08	6.71E-09	2.94E-08
Benzene	**2.06E-06**	7.82E-06	3.43E-05	7.82E-06	3.43E-05	7.82E-06	3.43E-05	7.82E-06	3.43E-05	7.82E-06	3.43E-05
Benzo(a)pyrene	**1.18E-09**	4.47E-09	1.96E-08	4.47E-09	1.96E-08	4.47E-09	1.96E-08	4.47E-09	1.96E-08	4.47E-09	1.96E-08
Benzo(b)fluoranthene	**1.76E-09**	6.71E-09	2.94E-08	6.71E-09	2.94E-08	6.71E-09	2.94E-08	6.71E-09	2.94E-08	6.71E-09	2.94E-08
Benzo(g,h,i)perylene	**1.18E-09**	4.47E-09	1.96E-08	4.47E-09	1.96E-08	4.47E-09	1.96E-08	4.47E-09	1.96E-08	4.47E-09	1.96E-08
Benzo(k)fluoranthene	**1.76E-09**	6.71E-09	2.94E-08	6.71E-09	2.94E-08	6.71E-09	2.94E-08	6.71E-09	2.94E-08	6.71E-09	2.94E-08
Chrysene	**1.76E-09**	6.71E-09	2.94E-08	6.71E-09	2.94E-08	6.71E-09	2.94E-08	6.71E-09	2.94E-08	6.71E-09	2.94E-08
Dibenzo(a,h)anthracene	**1.18E-09**	4.47E-09	1.96E-08	4.47E-09	1.96E-08	4.47E-09	1.96E-08	4.47E-09	1.96E-08	4.47E-09	1.96E-08
Dichlorobenzene	**1.18E-06**	4.47E-06	1.96E-05	4.47E-06	1.96E-05	4.47E-06	1.96E-05	4.47E-06	1.96E-05	4.47E-06	1.96E-05
Fluoranthene	**2.94E-09**	1.12E-08	4.90E-08	1.12E-08	4.90E-08	1.12E-08	4.90E-08	1.12E-08	4.90E-08	1.12E-08	4.90E-08
Fluorene	**2.75E-09**	1.04E-08	4.57E-08	1.04E-08	4.57E-08	1.04E-08	4.57E-08	1.04E-08	4.57E-08	1.04E-08	4.57E-08
Formaldehyde	**7.35E-05**	2.79E-04	1.22E-03	2.79E-04	1.22E-03	2.79E-04	1.22E-03	2.79E-04	1.22E-03	2.79E-04	1.22E-03
Hexane	**1.76E-03**	6.71E-03	2.94E-02	6.71E-03	2.94E-02	6.71E-03	2.94E-02	6.71E-03	2.94E-02	6.71E-03	2.94E-02
Indeno(1,2,3-cd)pyrene	**1.76E-09**	6.71E-09	2.94E-08	6.71E-09	2.94E-08	6.71E-09	2.94E-08	6.71E-09	2.94E-08	6.71E-09	2.94E-08
Naphthalene	**5.98E-07**	2.27E-06	9.95E-06	2.27E-06	9.95E-06	2.27E-06	9.95E-06	2.27E-06	9.95E-06	2.27E-06	9.95E-06
Phenanathrene	**1.67E-08**	6.33E-08	2.77E-07	6.33E-08	2.77E-07	6.33E-08	2.77E-07	6.33E-08	2.77E-07	6.33E-08	2.77E-07
Pyrene	**4.90E-09**	1.86E-08	8.16E-08	1.86E-08	8.16E-08	1.86E-08	8.16E-08	1.86E-08	8.16E-08	1.86E-08	8.16E-08
Toluene	**3.33E-06**	1.27E-05	5.55E-05	1.27E-05	5.55E-05	1.27E-05	5.55E-05	1.27E-05	5.55E-05	1.27E-05	5.55E-05

HAP Emission factors from AP-42, Table 1.4-3. Per AP-42 instructions, factors are divided by 1,020 to convert from 10^6 scf to lb/MMBtu.

ID:		9		13		17		22		28	
Annual Operating Hours (hrs/yr):		8,760		8,760		8,760		8,760		8,760	
Fuel Input Rate (MMBtu/hr):		3.8		3.8		3.8		3.8		3.8	
Fuel Heat Value (Btu/scf):		950		950		950		950		950	
Pollutant	**Factor lb/MMBtu**	**lb/hr**	**tpy**	**lb/hr**	**tpy**	**lb/hr**	**tpy**	**lb/hr**	**tpy**	**lb/hr**	**tpy**
Acetaldehyde	**2.91E-04**	1.11E-03	4.84E-03	1.11E-03	4.84E-03	1.11E-03	4.84E-03	1.11E-03	4.84E-03	1.11E-03	4.84E-03
Biphenyl	**1.15E-06**	4.37E-06	1.91E-05	4.37E-06	1.91E-05	4.37E-06	1.91E-05	4.37E-06	1.91E-05	4.37E-06	1.91E-05
Ethylbenzene	**7.20E-08**	2.74E-07	1.20E-06	2.74E-07	1.20E-06	2.74E-07	1.20E-06	2.74E-07	1.20E-06	2.74E-07	1.20E-06
Methanol	**4.33E-04**	1.65E-03	7.21E-03	1.65E-03	7.21E-03	1.65E-03	7.21E-03	1.65E-03	7.21E-03	1.65E-03	7.21E-03
Phenol	**9.50E-08**	3.61E-07	1.58E-06	3.61E-07	1.58E-06	3.61E-07	1.58E-06	3.61E-07	1.58E-06	3.61E-07	1.58E-06
Xylenes	**1.06E-07**	4.03E-07	1.76E-06	4.03E-07	1.76E-06	4.03E-07	1.76E-06	4.03E-07	1.76E-06	4.03E-07	1.76E-06
1,3-Butadiene	**1.83E-07**	6.95E-07	3.05E-06	6.95E-07	3.05E-06	6.95E-07	3.05E-06	6.95E-07	3.05E-06	6.95E-07	3.05E-06
2,2,4-Trimethylpentane	**3.23E-05**	1.23E-04	5.38E-04	1.23E-04	5.38E-04	1.23E-04	5.38E-04	1.23E-04	5.38E-04	1.23E-04	5.38E-04

HAP Emission factors from GRI Field - see copies of GRI-HAPCalc 3.01 Reports in Section 7.

Table 6-4a
Amine Reboiler Emissions (IDs 7, 8, 11, 12, 15 & 16) - Criteria Pollutants
Val Verede Gas Treatment Plant
Harvest Four Corners, LLC

Source No.	7	8	11	12	15	16
Manufacturer	Loveco/Zeeco	Loveco/Zeeco	Loveco/Zeeco	Loveco/Zeeco	Loveco/Zeeco	Loveco/Zeeco
Model	H4701	H4702	H5702	H5701	H6702	H6701
Heat Input Rate	73 MMBtu/hr	73 MMBtu/hr	73 MMBtu/hr	73 MMBtu/hr	73 MMBtu/hr	73 MMBtu/hr
Fuel Heat Value	950 Btu/scf	950 Btu/scf	950 Btu/scf	950 Btu/scf	950 Btu/scf	950 Btu/scf
Annual Hours	8,760 hours	8,760 hours	8,760 hours	8,760 hours	8,760 hours	8,760 hours
NOx Factor	4.600 lb/hr (permit)	4.600 lb/hr (permit)	4.600 lb/hr (permit)	4.600 lb/hr (permit)	4.600 lb/hr (permit)	4.600 lb/hr (permit)
CO Factor	4.500 lb/hr (permit)	4.500 lb/hr (permit)	4.500 lb/hr (permit)	4.500 lb/hr (permit)	4.500 lb/hr (permit)	4.500 lb/hr (permit)
VOC Factor	5.500 lb/MMscf	5.500 lb/MMscf	5.500 lb/MMscf	5.500 lb/MMscf	5.500 lb/MMscf	5.500 lb/MMscf
PM10 Facotr	7.60 lb/MMscf	7.60 lb/MMscf	7.60 lb/MMscf	7.60 lb/MMscf	7.60 lb/MMscf	7.60 lb/MMscf
SO2 Factor	50.00 gr S/Mscf	50.00 gr S/Mscf	50.00 gr S/Mscf	50.00 gr S/Mscf	50.00 gr S/Mscf	50.00 gr S/Mscf
CO2 Factor	53.02 kg/MMBtu	53.02 kg/MMBtu	53.02 kg/MMBtu	53.02 kg/MMBtu	53.02 kg/MMBtu	53.02 kg/MMBtu
N2O Factor	0.0001 kg/MMBtu	0.0001 kg/MMBtu	0.0001 kg/MMBtu	0.0001 kg/MMBtu	0.0001 kg/MMBtu	0.0001 kg/MMBtu
CH4 Factor	0.001 kg/MMBtu	0.001 kg/MMBtu	0.001 kg/MMBtu	0.001 kg/MMBtu	0.001 kg/MMBtu	0.001 kg/MMBtu

Source No	**7**		**8**		**11**		**12**		**15**		**16**	
Pollutant	**lb/hr**	**tpy**	**lb/hr**	**tpy**	**lb/hr**	**tpy**	**lb/hr**	**tpy**	**lb/hr**	**tpy**	**lb/hr**	**tpy**
NOx	4.60	20.15	4.60	20.15	4.60	20.15	4.60	20.15	4.60	20.15	4.60	20.15
CO	4.50	19.71	4.50	19.71	4.50	19.71	4.50	19.71	4.50	19.71	4.50	19.71
VOC	0.42	1.85	0.42	1.85	0.42	1.85	0.42	1.85	0.42	1.85	0.42	1.85
PM10	0.58	2.56	0.58	2.56	0.58	2.56	0.58	2.56	0.58	2.56	0.58	2.56
SO2	1.10	4.81	1.10	4.81	1.10	4.81	1.10	4.81	1.10	4.81	1.10	4.81
CO2	8532.89	37374.07	8532.89	37374.07	8532.89	37374.07	8532.89	37374.07	8532.89	37374.07	8532.89	37374.07
N2O	0.016	0.070	0.016	0.070	0.016	0.070	0.016	0.070	0.016	0.070	0.016	0.070
CH4	0.16	0.70	0.16	0.70	0.16	0.70	0.16	0.70	0.16	0.70	0.16	0.70

SO2 (lb/hr) = 5 gr S / 100 scf fuel (spec) * 1 lb S / 7000 gr S * Q fuel flowrate (scf/hr) * 64 lb SO2 / 32 lb S

Notes:
1) Emission Factors for NOx and CO are as permitted in NSR Permit No. 728-M11.
2) VOC and PM emission factors are from AP-42, Table 1.4-2.
3) SO2 emissions are based on maximum sulfur content of fuel allowed under current contracts, 5 gr/100 scf.
4) CO2 factor is from 40 CFR 98, Table C-1
5) N2O and CH4 factors are from 40 CFR 98, Table C-2

Table 6-4b
Amine Reboiler Emissions (IDs 7, 8, 11, 12, 15 & 16) - HAPs
Val Verede Gas Treatment Plant
Harvest Four Corners, LLC

ID:		7		8		11		12		15		16	
Annual Operating Hours (hrs/yr):		8,760		8,760		8,760		8,760		8,760		8,760	
Fuel Input Rate (MMBtu/hr):		73		73		73		73		73		73	
Fuel Heat Value (Btu/scf):		950		950		950		950		950		950	
Pollutant	**Factor lb/MMBtu**	**lb/hr**	**tpy**	**lb/hr**	**tpy**	**lb/hr**	**tpy**	**lb/hr**	**tpy**	**lb/hr**	**tpy**	**lb/hr**	**tpy**
2-Methylnaphthalene	**2.35E-08**	1.72E-06	7.52E-06	1.72E-06	7.52E-06	1.72E-06	7.52E-06	1.72E-06	7.52E-06	1.72E-06	7.52E-06	1.72E-06	7.52E-06
3-Methylchloranthrene	**1.76E-09**	1.29E-07	5.64E-07	1.29E-07	5.64E-07	1.29E-07	5.64E-07	1.29E-07	5.64E-07	1.29E-07	5.64E-07	1.29E-07	5.64E-07
7,12-Dimethylbenz(a)anthracene	**1.57E-08**	1.15E-06	5.02E-06	1.15E-06	5.02E-06	1.15E-06	5.02E-06	1.15E-06	5.02E-06	1.15E-06	5.02E-06	1.15E-06	5.02E-06
Acenaphthene	**1.76E-09**	1.29E-07	5.64E-07	1.29E-07	5.64E-07	1.29E-07	5.64E-07	1.29E-07	5.64E-07	1.29E-07	5.64E-07	1.29E-07	5.64E-07
Acenaphthylene	**1.76E-09**	1.29E-07	5.64E-07	1.29E-07	5.64E-07	1.29E-07	5.64E-07	1.29E-07	5.64E-07	1.29E-07	5.64E-07	1.29E-07	5.64E-07
Anthracene	**2.35E-09**	1.72E-07	7.52E-07	1.72E-07	7.52E-07	1.72E-07	7.52E-07	1.72E-07	7.52E-07	1.72E-07	7.52E-07	1.72E-07	7.52E-07
Benz(a)anthracene	**1.76E-09**	1.29E-07	5.64E-07	1.29E-07	5.64E-07	1.29E-07	5.64E-07	1.29E-07	5.64E-07	1.29E-07	5.64E-07	1.29E-07	5.64E-07
Benzene	**2.06E-06**	1.50E-04	6.58E-04	1.50E-04	6.58E-04	1.50E-04	6.58E-04	1.50E-04	6.58E-04	1.50E-04	6.58E-04	1.50E-04	6.58E-04
Benzo(a)pyrene	**1.18E-09**	8.59E-08	3.76E-07	8.59E-08	3.76E-07	8.59E-08	3.76E-07	8.59E-08	3.76E-07	8.59E-08	3.76E-07	8.59E-08	3.76E-07
Benzo(b)fluoranthene	**1.76E-09**	1.29E-07	5.64E-07	1.29E-07	5.64E-07	1.29E-07	5.64E-07	1.29E-07	5.64E-07	1.29E-07	5.64E-07	1.29E-07	5.64E-07
Benzo(g,h,i)perylene	**1.18E-09**	8.59E-08	3.76E-07	8.59E-08	3.76E-07	8.59E-08	3.76E-07	8.59E-08	3.76E-07	8.59E-08	3.76E-07	8.59E-08	3.76E-07
Benzo(k)fluoranthene	**1.76E-09**	1.29E-07	5.64E-07	1.29E-07	5.64E-07	1.29E-07	5.64E-07	1.29E-07	5.64E-07	1.29E-07	5.64E-07	1.29E-07	5.64E-07
Chrysene	**1.76E-09**	1.29E-07	5.64E-07	1.29E-07	5.64E-07	1.29E-07	5.64E-07	1.29E-07	5.64E-07	1.29E-07	5.64E-07	1.29E-07	5.64E-07
Dibenzo(a,h)anthracene	**1.18E-09**	8.59E-08	3.76E-07	8.59E-08	3.76E-07	8.59E-08	3.76E-07	8.59E-08	3.76E-07	8.59E-08	3.76E-07	8.59E-08	3.76E-07
Dichlorobenzene	**1.18E-06**	8.59E-05	3.76E-04	8.59E-05	3.76E-04	8.59E-05	3.76E-04	8.59E-05	3.76E-04	8.59E-05	3.76E-04	8.59E-05	3.76E-04
Fluoranthene	**2.94E-09**	2.15E-07	9.40E-07	2.15E-07	9.40E-07	2.15E-07	9.40E-07	2.15E-07	9.40E-07	2.15E-07	9.40E-07	2.15E-07	9.40E-07
Fluorene	**2.75E-09**	2.00E-07	8.78E-07	2.00E-07	8.78E-07	2.00E-07	8.78E-07	2.00E-07	8.78E-07	2.00E-07	8.78E-07	2.00E-07	8.78E-07
Formaldehyde	**7.35E-05**	5.37E-03	2.35E-02	5.37E-03	2.35E-02	5.37E-03	2.35E-02	5.37E-03	2.35E-02	5.37E-03	2.35E-02	5.37E-03	2.35E-02
Hexane	**1.76E-03**	1.29E-01	5.64E-01	1.29E-01	5.64E-01	1.29E-01	5.64E-01	1.29E-01	5.64E-01	1.29E-01	5.64E-01	1.29E-01	5.64E-01
Indeno(1,2,3-cd)pyrene	**1.76E-09**	1.29E-07	5.64E-07	1.29E-07	5.64E-07	1.29E-07	5.64E-07	1.29E-07	5.64E-07	1.29E-07	5.64E-07	1.29E-07	5.64E-07
Naphthalene	**5.98E-07**	4.37E-05	1.91E-04	4.37E-05	1.91E-04	4.37E-05	1.91E-04	4.37E-05	1.91E-04	4.37E-05	1.91E-04	4.37E-05	1.91E-04
Phenanathrene	**1.67E-08**	1.22E-06	5.33E-06	1.22E-06	5.33E-06	1.22E-06	5.33E-06	1.22E-06	5.33E-06	1.22E-06	5.33E-06	1.22E-06	5.33E-06
Pyrene	**4.90E-09**	3.58E-07	1.57E-06	3.58E-07	1.57E-06	3.58E-07	1.57E-06	3.58E-07	1.57E-06	3.58E-07	1.57E-06	3.58E-07	1.57E-06
Toluene	**3.33E-06**	2.43E-04	1.07E-03	2.43E-04	1.07E-03	2.43E-04	1.07E-03	2.43E-04	1.07E-03	2.43E-04	1.07E-03	2.43E-04	1.07E-03

HAP Emission factors from AP-42, Table 1.4-3. Per AP-42 instructions, factors are divided by 1,020 to convert from 10^6 scf to lb/MMBtu.

ID:		7		8		11		12		15		16	
Annual Operating Hours (hrs/yr):		8,760		8,760		8,760		8,760		8,760		8,760	
Fuel Input Rate (MMBtu/hr):		73		73		73		73		73		73	
Fuel Heat Value (Btu/scf):		950		950		950		950		950		950	
Pollutant	**Factor lb/MMBtu**	**lb/hr**	**tpy**	**lb/hr**	**tpy**	**lb/hr**	**tpy**	**lb/hr**	**tpy**	**lb/hr**	**tpy**	**lb/hr**	**tpy**
Acetaldehyde	**2.91E-04**	2.12E-02	9.30E-02	2.12E-02	9.30E-02	2.12E-02	9.30E-02	2.12E-02	9.30E-02	2.12E-02	9.30E-02	2.12E-02	9.30E-02
Biphenyl	**1.15E-06**	8.40E-05	3.68E-04	8.40E-05	3.68E-04	8.40E-05	3.68E-04	8.40E-05	3.68E-04	8.40E-05	3.68E-04	8.40E-05	3.68E-04
Ethylbenzene	**7.20E-08**	5.26E-06	2.30E-05	5.26E-06	2.30E-05	5.26E-06	2.30E-05	5.26E-06	2.30E-05	5.26E-06	2.30E-05	5.26E-06	2.30E-05
Methanol	**4.33E-04**	3.16E-02	1.38E-01	3.16E-02	1.38E-01	3.16E-02	1.38E-01	3.16E-02	1.38E-01	3.16E-02	1.38E-01	3.16E-02	1.38E-01
Phenol	**9.50E-08**	6.94E-06	3.04E-05	6.94E-06	3.04E-05	6.94E-06	3.04E-05	6.94E-06	3.04E-05	6.94E-06	3.04E-05	6.94E-06	3.04E-05
Xylenes	**1.06E-07**	7.74E-06	3.39E-05	7.74E-06	3.39E-05	7.74E-06	3.39E-05	7.74E-06	3.39E-05	7.74E-06	3.39E-05	7.74E-06	3.39E-05
1,3-Butadiene	**1.83E-07**	1.34E-05	5.85E-05	1.34E-05	5.85E-05	1.34E-05	5.85E-05	1.34E-05	5.85E-05	1.34E-05	5.85E-05	1.34E-05	5.85E-05
2,2,4-Trimethylpentane	**3.23E-05**	2.36E-03	1.03E-02	2.36E-03	1.03E-02	2.36E-03	1.03E-02	2.36E-03	1.03E-02	2.36E-03	1.03E-02	2.36E-03	1.03E-02

HAP Emission factors from GRI Field - see copies of GRI-HAPCalc 3.01 Reports in Section 7.

Table 6-5a
Water Heater Emissions (IDs 20, 21, 25 & 26) - Criteria Pollutants
Val Verede Gas Treatment Plant
Harvest Four Corners, LLC

Source No.	20	21	25	26
Manufacturer	OPF/Zink	OPF/Zink	OPF/Zink	OPF/Zink
Model	H7752	H7751	H8752	H8751
Heat Input Rate	61.8 MMBtu/hr	61.8 MMBtu/hr	61.8 MMBtu/hr	61.8 MMBtu/hr
Fuel Heat Value	950 Btu/scf	950 Btu/scf	950 Btu/scf	950 Btu/scf
Annual Hours	8,760 hours	8,760 hours	8,760 hours	8,760 hours
NOx Factor	4.940 lb/hr (permit)	4.940 lb/hr (permit)	4.940 lb/hr (permit)	4.940 lb/hr (permit)
CO Factor	3.090 lb/hr (permit)	3.090 lb/hr (permit)	3.090 lb/hr (permit)	3.090 lb/hr (permit)
VOC Factor	5.500 lb/MMscf	5.500 lb/MMscf	5.500 lb/MMscf	5.500 lb/MMscf
PM10 Facotr	7.60 lb/MMscf	7.60 lb/MMscf	7.60 lb/MMscf	7.60 lb/MMscf
SO2 Factor	50.00 gr S/Mscf	50.00 gr S/Mscf	50.00 gr S/Mscf	50.00 gr S/Mscf
CO2 Factor	53.02 kg/MMBtu	53.02 kg/MMBtu	53.02 kg/MMBtu	53.02 kg/MMBtu
N2O Factor	0.0001 kg/MMBtu	0.0001 kg/MMBtu	0.0001 kg/MMBtu	0.0001 kg/MMBtu
CH4 Factor	0.001 kg/MMBtu	0.001 kg/MMBtu	0.001 kg/MMBtu	0.001 kg/MMBtu

Source No	**20**		**21**		**25**		**26**	
Pollutant	**lb/hr**	**tpy**	**lb/hr**	**tpy**	**lb/hr**	**tpy**	**lb/hr**	**tpy**
NOx	4.94	21.64	4.94	21.64	4.94	21.64	4.94	21.64
CO	3.09	13.53	3.09	13.53	3.09	13.53	3.09	13.53
VOC	0.36	1.57	0.36	1.57	0.36	1.57	0.36	1.57
PM10	0.49	2.17	0.49	2.17	0.49	2.17	0.49	2.17
SO2	0.93	4.07	0.93	4.07	0.93	4.07	0.93	4.07
CO2	7223.74	31639.97	7223.74	31639.97	7223.74	31639.97	7223.74	31639.97
N2O	0.014	0.060	0.014	0.060	0.014	0.060	0.014	0.060
CH4	0.14	0.60	0.14	0.60	0.14	0.60	0.14	0.60

SO2 (lb/hr) = 5 gr S / 100 scf fuel (spec) * 1 lb S / 7000 gr S * Q fuel flowrate (scf/hr) * 64 lb SO2 / 32 lb S

Notes:

1) Emission Factors for NOx and CO are as permitted in NSR Permit No. 728-M11.

2) VOC and PM emission factors are from AP-42, Table 1.4-2.

3) SO2 emissions are based on maximum sulfur content of fuel allowed under current contracts, 5 gr/100 scf.

4) CO2 factor is from 40 CFR 98, Table C-1

5) N2O and CH4 factors are from 40 CFR 98, Table C-2

Table 6-5b
Water Heater Emissions (IDs 20, 21, 25 & 26) - HAPs
Val Verede Gas Treatment Plant
Harvest Four Corners, LLC

ID:		20		21		25		26	
Annual Operating Hours (hrs/yr):		8,760		8,760		8,760		8,760	
Fuel Input Rate (MMBtu/hr):		61.8		61.8		61.8		61.8	
Fuel Heat Value (Btu/scf):		950		950		950		950	
Pollutant	**Factor lb/MMBtu**	**lb/hr**	**tpy**	**lb/hr**	**tpy**	**lb/hr**	**tpy**	**lb/hr**	**tpy**
2-Methylnaphthalene	2.35E-08	1.45E-06	6.37E-06	1.45E-06	6.37E-06	1.45E-06	6.37E-06	1.45E-06	6.37E-06
3-Methylchloranthrene	1.76E-09	1.09E-07	4.78E-07	1.09E-07	4.78E-07	1.09E-07	4.78E-07	1.09E-07	4.78E-07
7,12-Dimethylbenz(a)anthracene	1.57E-08	9.69E-07	4.25E-06	9.69E-07	4.25E-06	9.69E-07	4.25E-06	9.69E-07	4.25E-06
Acenaphthene	1.76E-09	1.09E-07	4.78E-07	1.09E-07	4.78E-07	1.09E-07	4.78E-07	1.09E-07	4.78E-07
Acenaphthylene	1.76E-09	1.09E-07	4.78E-07	1.09E-07	4.78E-07	1.09E-07	4.78E-07	1.09E-07	4.78E-07
Anthracene	2.35E-09	1.45E-07	6.37E-07	1.45E-07	6.37E-07	1.45E-07	6.37E-07	1.45E-07	6.37E-07
Benz(a)anthracene	1.76E-09	1.09E-07	4.78E-07	1.09E-07	4.78E-07	1.09E-07	4.78E-07	1.09E-07	4.78E-07
Benzene	2.06E-06	1.27E-04	5.57E-04	1.27E-04	5.57E-04	1.27E-04	5.57E-04	1.27E-04	5.57E-04
Benzo(a)pyrene	1.18E-09	7.27E-08	3.18E-07	7.27E-08	3.18E-07	7.27E-08	3.18E-07	7.27E-08	3.18E-07
Benzo(b)fluoranthene	1.76E-09	1.09E-07	4.78E-07	1.09E-07	4.78E-07	1.09E-07	4.78E-07	1.09E-07	4.78E-07
Benzo(g,h,i)perylene	1.18E-09	7.27E-08	3.18E-07	7.27E-08	3.18E-07	7.27E-08	3.18E-07	7.27E-08	3.18E-07
Benzo(k)fluoranthene	1.76E-09	1.09E-07	4.78E-07	1.09E-07	4.78E-07	1.09E-07	4.78E-07	1.09E-07	4.78E-07
Chrysene	1.76E-09	1.09E-07	4.78E-07	1.09E-07	4.78E-07	1.09E-07	4.78E-07	1.09E-07	4.78E-07
Dibenzo(a,h)anthracene	1.18E-09	7.27E-08	3.18E-07	7.27E-08	3.18E-07	7.27E-08	3.18E-07	7.27E-08	3.18E-07
Dichlorobenzene	1.18E-06	7.27E-05	3.18E-04	7.27E-05	3.18E-04	7.27E-05	3.18E-04	7.27E-05	3.18E-04
Fluoranthene	2.94E-09	1.82E-07	7.96E-07	1.82E-07	7.96E-07	1.82E-07	7.96E-07	1.82E-07	7.96E-07
Fluorene	2.75E-09	1.70E-07	7.43E-07	1.70E-07	7.43E-07	1.70E-07	7.43E-07	1.70E-07	7.43E-07
Formaldehyde	7.35E-05	4.54E-03	1.99E-02	4.54E-03	1.99E-02	4.54E-03	1.99E-02	4.54E-03	1.99E-02
Hexane	1.76E-03	1.09E-01	4.78E-01	1.09E-01	4.78E-01	1.09E-01	4.78E-01	1.09E-01	4.78E-01
Indeno(1,2,3-cd)pyrene	1.76E-09	1.09E-07	4.78E-07	1.09E-07	4.78E-07	1.09E-07	4.78E-07	1.09E-07	4.78E-07
Naphthalene	5.98E-07	3.70E-05	1.62E-04	3.70E-05	1.62E-04	3.70E-05	1.62E-04	3.70E-05	1.62E-04
Phenanathrene	1.67E-08	1.03E-06	4.51E-06	1.03E-06	4.51E-06	1.03E-06	4.51E-06	1.03E-06	4.51E-06
Pyrene	4.90E-09	3.03E-07	1.33E-06	3.03E-07	1.33E-06	3.03E-07	1.33E-06	3.03E-07	1.33E-06
Toluene	3.33E-06	2.06E-04	9.02E-04	2.06E-04	9.02E-04	2.06E-04	9.02E-04	2.06E-04	9.02E-04

HAP Emission factors from AP-42, Table 1.4-3. Per AP-42 instructions, factors are divided by 1,020 to convert from 10^6 scf to lb/MMBtu.

ID:		20		21		25		26	
Annual Operating Hours (hrs/yr):		8,760		8,760		8,760		8,760	
Fuel Input Rate (MMBtu/hr):		61.8		61.8		61.8		61.8	
Fuel Heat Value (Btu/scf):		950		950		950		950	
Pollutant	**Factor lb/MMBtu**	**lb/hr**	**tpy**	**lb/hr**	**tpy**	**lb/hr**	**tpy**	**lb/hr**	**tpy**
Acetaldehyde	2.91E-04	1.80E-02	7.88E-02	1.80E-02	7.88E-02	1.80E-02	7.88E-02	1.80E-02	7.88E-02
Biphenyl	1.15E-06	7.11E-05	3.11E-04	7.11E-05	3.11E-04	7.11E-05	3.11E-04	7.11E-05	3.11E-04
Ethylbenzene	7.20E-08	4.45E-06	1.95E-05	4.45E-06	1.95E-05	4.45E-06	1.95E-05	4.45E-06	1.95E-05
Methanol	4.33E-04	2.68E-02	1.17E-01	2.68E-02	1.17E-01	2.68E-02	1.17E-01	2.68E-02	1.17E-01
Phenol	9.50E-08	5.87E-06	2.57E-05	5.87E-06	2.57E-05	5.87E-06	2.57E-05	5.87E-06	2.57E-05
Xylenes	1.06E-07	6.55E-06	2.87E-05	6.55E-06	2.87E-05	6.55E-06	2.87E-05	6.55E-06	2.87E-05
1,3-Butadiene	1.83E-07	1.13E-05	4.95E-05	1.13E-05	4.95E-05	1.13E-05	4.95E-05	1.13E-05	4.95E-05
2,2,4-Trimethylpentane	3.23E-05	2.00E-03	8.74E-03	2.00E-03	8.74E-03	2.00E-03	8.74E-03	2.00E-03	8.74E-03

HAP Emission factors from GRI Field - see copies of GRI-HAPCalc 3.01 Reports in Section 7.

Table 6-6a
Glycol Dehydrator Emissions (IDs 14 & 18)
Val Verde Gas Treatment Plant
Harvest Four Corners, LLC

Source Description: Glycol Still Vent and Flash Tank

Loading rates are based on ProMax 3.1 Simulation

Component	Glycol Still Vent (lb/hr)	Flash Tank (lb/hr)	Total (lb/hr)
CO2	0.14	0.31	0.45
Nitrogen	8.27E-03	0.18	0.19
Methane	33.28	203.98	237.26
Ethane	1.94	5.28	7.22
Propane	1.00	2.50	3.50
i-Butane	0.23	0.61	0.84
n-Butane	0.27	0.82	1.09
i-Pentane	0.11	0.46	0.58
n-Pentane	8.76E-02	0.41	0.50
n-Hexane	2.62E-02	0.2	0.23
n-Heptane	0.14	1.97	2.11
Octane	1.48E-02	0.35	0.37
Nonane	0	0	0
Decane	0	0	0
Benzene	3.57E-03	0.39	0.39
Toluene	5.96E-03	1.13	1.14
Ethylbenzene	5.25E-05	1.39E-02	1.40E-02
m-Xylene	1.30E-05	3.79E-03	3.80E-03
MDEA	1.71E-05	5.64E-02	5.65E-02
MEA	1.30E-06	2.36E-03	2.36E-03
DEA	2.18E-07	3.45E-04	3.45E-04
Triethylene Glycol	1.73E-03	0.39	0.39
Water	0.17	188.5	188.67

Uncontrolled VOC Emission Rate:	11.21	lb/hr
Uncontrolled VOC Emission Rate:	49.11	tpy

Table 6-6b
Glycol Dehydrator Emissions (IDs 10, 24, & 27)
Val Verde Gas Treatment Plant
Harvest Four Corners, LLC

Source Description: Glycol Still Vent and Flash Tank

Loading rates are based on ProMax 3.1 Simulation

Component	Glycol Still Vent (lb/hr)	Flash Tank (lb/hr)	Total (lb/hr)
CO2	0.12	0.27	0.39
Nitrogen	3.40E-03	6.93E-02	7.27E-02
Methane	35.02	206.73	241.75
Ethane	0.70	1.93	2.63
Propane	0.20	0.50	0.70
i-Butane	5.53E-02	0.15	0.21
n-Butane	8.98E-02	0.27	0.36
i-Pentane	3.05E-09	8.85E-09	1.19E-08
n-Pentane	4.33E-09	1.53E-08	1.96E-08
n-Hexane	9.71E-03	0.07	0.08
n-Heptane	5.66E-02	0.77	0.83
Octane	9.51E-03	0.22	0.23
Nonane	0	0	0
Decane	0	0	0
Benzene	1.88E-03	0.2	0.21
Toluene	2.78E-03	0.54	0.54
Ethylbenzene	1.30E-07	3.61E-05	3.62E-05
m-Xylene	3.53E-08	1.08E-05	1.08E-05
MDEA	1.82E-05	8.82E-02	8.82E-02
MEA	1.02E-06	2.66E-03	2.67E-03
DEA	2.23E-07	7.03E-04	7.04E-04
Triethylene Glycol	1.58E-03	0.69	0.70
Water	0.27	405.89	406.16

Uncontrolled VOC Emission Rate:	3.95	lb/hr
Uncontrolled VOC Emission Rate:	17.28	tpy

Table 6-7
Amine Still Vent Emissions (IDs 19 & 30)
Val Verde Gas Treatment Plant
Harvest Four Corners, LLC

Emission Summary - Routine Annual
Emissions Estimated Using Promax Model

	Train 4	Train 5	Train 6	Train 7	Train 8	
	tpy	tpy	tpy	tpy	tpy	
Capacity, MMSCFD	**84.50**	**125.00**	**125.00**	**84.50**	**84.50**	**Total**
Inlet CO2 Vol%	**19.10%**	**5.70%**	**5.70%**	**19.10%**	**19.10%**	**tpy**
Amine Circulation, gpm	**1,740**	**1,740**	**1,740**	**1,740**	**1,740**	
Glycol Circulation, gpm	**26.8**	**26.8**	**26.8**	**26.8**	**26.8**	
CO2	3.16E+05	1.48E+05	1.48E+05	3.16E+05	3.16E+05	1.25E+06
Nitrogen	1.18E-02	1.61E-02	1.61E-02	1.18E-02	1.18E-02	6.77E-02
Methane	1.65E+02	5.71E+02	5.71E+02	1.65E+02	1.65E+02	1.64E+03
Ethane	7.70E+00	1.03E+01	1.03E+01	7.70E+00	7.70E+00	4.38E+01
Propane	2.15E+00	1.58E+00	1.58E+00	2.15E+00	2.15E+00	9.60E+00
i-Butane	2.72E-01	2.44E-01	2.44E-01	2.72E-01	2.72E-01	1.31E+00
n-Butane	4.27E-01	5.92E-01	5.92E-01	4.27E-01	4.27E-01	2.46E+00
i-Pentane	2.94E-02	--	--	2.94E-02	2.94E-02	8.82E-02
n-Pentane	4.21E-02	--	--	4.21E-02	4.21E-02	1.26E-01
n-Hexane	1.44E-02	2.72E-02	2.72E-02	1.44E-02	1.44E-02	9.83E-02
n-Heptane	1.49E-02	4.16E-02	4.16E-02	1.49E-02	1.49E-02	1.28E-01
Octane	3.41E-02	1.24E-02	1.24E-02	3.41E-03	3.41E-03	3.50E-02
Nonane	--	--	--	--	--	--
Decane	--	--	--	--	--	--
Benzene	2.46E+00	2.75E+00	2.75E+00	2.46E+00	2.46E+00	1.29E+01
Toluene	5.10E+00	5.74E+00	5.74E+00	5.10E+00	5.10E+00	2.68E+01
Ethylbenzene	2.09E-01	--	--	2.09E-01	2.09E-01	6.28E-01
m-Xylene	6.81E-01	--	--	6.81E-01	6.81E-01	2.04E+00
MDEA	1.33E-05	6.73E-07	6.73E-07	1.33E-05	1.33E-05	4.12E-05
MEA	--	--	--	--	--	--
DEA	1.44E-08	9.88E-10	9.88E-10	1.44E-08	1.44E-08	4.51E-08
Triethylene Glycol	--	--	--	--	--	--
Water	1.49E+04	7.02E+03	7.02E+03	1.49E+04	1.49E+04	5.86E+04
					Total VOC	**56.2**
					Total HAPs	**42.4**

* Annual emissions are estimated based on a maximum potential of 6 months of worst-case (hourly basis) gas speciation basis for selected pollutants which were not present in the annual basis sample data.

Emission Summary - Routine Hourly
Emissions Estimated Using Promax Model

	Train 4	Train 5	Train 6	Train 7	Train 8	
	tpy	tpy	tpy	tpy	tpy	
Capacity, MMSCFD	**84.50**	**125.00**	**125.00**	**84.50**	**84.50**	**Total**
Inlet CO2 Vol%	**19.10%**	**5.70%**	**5.70%**	**19.10%**	**19.10%**	**tpy**
Amine Circulation, gpm	**1,613**	**1,740**	**1,740**	**1,613**	**1,613**	
Glycol Circulation, gpm	**12.0**	**26.8**	**26.8**	**12.0**	**12.0**	
CO2	6.42E+04	3.38E+04	3.38E+04	6.42E+04	6.42E+04	2.60E+05
Nitrogen	6.27E-03	3.68E-03	3.68E-03	6.27E-03	6.27E-03	2.62E-02
Methane	6.07E+01	1.30E+02	1.30E+02	6.07E+01	6.07E+01	4.43E+02
Ethane	4.06E+00	2.36E+00	2.36E+00	4.06E+00	4.06E+00	1.69E+01
Propane	1.25E+00	3.60E-01	3.60E-01	1.25E+00	1.25E+00	4.48E+00
i-Butane	1.59E-01	5.57E-02	5.57E-02	1.59E-01	1.59E-01	5.89E-01
n-Butane	3.25E-01	1.35E-01	1.35E-01	3.25E-01	3.25E-01	1.25E+00
i-Pentane	2.68E-02	--	--	2.68E-02	2.68E-02	8.04E-02
n-Pentane	3.82E-02	--	--	3.82E-02	3.82E-02	1.15E-01
n-Hexane	1.26E-02	6.28E-03	6.28E-03	1.26E-02	1.26E-02	5.04E-02
n-Heptane	1.60E-02	9.51E-03	9.51E-03	1.60E-02	1.60E-02	6.69E-02
Octane	3.45E-03	2.83E-03	2.83E-03	3.45E-03	3.45E-03	1.60E-02
Nonane	--	--	--	--	--	--
Decane	--	--	--	--	--	--
Benzene	1.83E+00	6.27E-01	6.27E-01	1.83E+00	1.83E+00	6.73E+00
Toluene	3.96E+00	1.31E+00	1.31E+00	3.96E+00	3.96E+00	1.45E+01
Ethylbenzene	9.55E-02	--	--	9.55E-02	9.55E-02	2.87E-01
m-Xylene	3.11E-01	--	--	3.11E-01	3.11E-01	9.32E-01
MDEA	2.27E-06	1.54E-07	1.54E-07	2.27E-06	2.27E-06	7.12E-06
MEA	--	--	--	--	--	--
DEA	2.47E-09	2.26E-10	2.26E-10	2.47E-09	2.47E-09	7.86E-09
Triethylene Glycol	--	--	--	--	--	--
Water	3.02E+03	1.60E+03	1.60E+03	3.02E+03	3.02E+03	1.23E+04
					Total VOC	**29.092**
					Total HAPs	**22.503**

* Hourly speciation basis assumes a combined speciation based on 160 MM VV Gas + 93.5 MM Middle Mesa Gas & Permit Case Red Cedar Throughputs. See details in Section 7.

Emission Summary - SSM
Emissions Estimated Using Promax Model (lb/hr)

Component	Train 4, 7, or 8 Untreated HP	Train 4, 7, or 8 Untreated Glycol	Train 5 or 6 Untreated HP	Train 5 or 6 Untreated Glycol
CO2	6.42E+04	9.55E-02	4.91E+01	1.94E-01
Nitrogen	6.27E-03	1.09E-01	6.15E-02	6.93E-02
Methane	6.07E+01	9.07E+01	5.64E+02	2.07E+02
Ethane	4.06E+00	3.31E+00	6.03E+00	1.93E+00
Propane	1.25E+00	1.81E+00	1.03E+00	5.04E-01
i-Butane	1.59E-01	4.56E-01	2.07E-01	1.51E-01
n-Butane	3.25E-01	7.26E-01	3.63E-01	2.75E-01
i-Pentane	2.68E-02	4.03E-01	--	8.85E-09
n-Pentane	3.82E-02	3.91E-01	--	1.53E-08
n-Hexane	1.26E-02	2.05E-01	2.28E-02	7.32E-02
n-Heptane	1.60E-02	2.17E+00	6.89E-02	7.72E-01
Octane	3.45E-03	4.29E-01	1.49E-02	2.17E-01
Nonane	--	--	--	--
Decane	--	--	--	--
Benzene	1.83E+00	5.37E-01	2.17E-02	2.04E-01
Toluene	3.96E+00	1.55E+00	3.68E-02	5.38E-01
Ethylbenzene	9.55E-02	8.26E-02	--	3.61E-05
m-Xylene	3.11E-01	1.39E-01	--	1.08E-05
MDEA	2.27E-06	2.34E-02	2.35E-02	8.82E-02
MEA	--	1.49E-04	--	2.66E-03
DEA	2.47E-09	1.70E-04	6.24E-04	7.03E-04
Triethylene Glycol	--	2.33E-01	--	6.93E-01
Water	3.02E+03	1.10E+02	2.65E+01	4.06E+02
Total VOC's	**8.03**	**9.15**	**1.79**	**3.52**
HAP's	**6.21**	**2.51**	**0.08**	**0.82**
Hours per year	**500**	**500**	**500**	**500**
Total VOC's tpy	**2.01**	**2.29**	**0.45**	**0.88**

Unit ID	Trains	Type	lb/hr	tpy
19	4, 5, & 6	HP Amine Flash	11.61	2.90
30	7 & 8	HP Amine Flash	16.05	4.01
10	4	Glycol Still	9.15	2.29
14	5	Glycol Still	3.52	0.88
18	6	Glycol Still	3.52	0.88
24	7	Glycol Still	9.15	2.29
27	8	Glycol Still	9.15	2.29

Sample SSM Calculation:

Train 4 (tpy) = 8.03 lb/hr Train 4 x 500 hrs/year / 2000 lb/ton = 2.01 tpy VOC

Unit 30 (lb/hr) = 8.03 lb/hr Train 7 + 8.03 lb/hr Train 8 = 16.05 lb/hr VOC

Unit 30 (tpy) = 2.01 tpy Train 7 + 2.01 tpy Train 8 = 4.01 tpy VOC

Table 6-8
Startup, Shutdown, & Maintenance (SSM) Emissions, ID SSM
Emissions from Scheduled/Routine & Predictable Events
Val Verde Gas Treatment Plant
Harvest Four Corners, LLC

Event	Volume Per Event (MCF)	Events per hour	Events per year	Hourly Volume (MCF)	Annual Volume (MMCF)	Material Vented	Standard scf/lbmol	Total lbmol/hr	Total lbmol/yr
Partial Blowdown (Average)	103.95	2.00	100.00	207.90	10.40	Nat. Gas	379.482	547.85	27,392.60
Full Blowdown (Average)	135.32	2.00	50.00	270.64	6.77	Nat. Gas	379.482	713.18	17,829.57
Filter Changes	5.82	2.00	50.00	11.64	0.29	Nat. Gas	379.482	30.67	766.83
Planned maintenance and unscheduled emergency shutdown	1215.45	2.00	6.00	2430.90	7.29	Nat. Gas	379.482	6,405.84	19,217.51

Speciated Emissions Based on Inlet Gas Analysis

Compound	Dry Basis Mole %	MW	lb/lb-mol	lb/hr	tons/yr
CO2	19.1030	44.01	8.4072	64,715.04	274.10
Nitrogen	0.0412	28.01	0.0115	88.84	0.38
Methane	79.5578	16.04	12.7635	98,247.30	416.13
Ethane	0.9457	30.07	0.2844	2,188.97	9.27
Propane	0.2384	44.10	0.1051	809.22	3.43
i-Butane	0.0386	58.12	0.0224	172.70	0.73
n-Butane	0.0398	58.12	0.0231	178.07	0.75
i-Pentane	0.0123	72.15	0.0089	68.31	0.29
n-Pentane	0.0091	72.15	0.0066	50.54	0.21
n-Hexane	0.0022	86.18	0.0019	14.59	0.06
n-Heptane	0.0101	100.20	0.0101	77.90	0.33
Octane	0.0010	114.23	0.0011	8.79	0.04
Benzene	0.0003	78.11	0.0002	1.80	0.01
Toluene	0.0005	92.14	0.0005	3.55	0.02
Total:	**100.00**	**Avg. MW = 19.54**			
			VOC Total:	1,385.48	5.87
			HAP Total:	19.94	0.08

1) See attached gas analysis in Section 7. The Val Verde speciation has conservatively been applied to all SSM emissions.
2) 379.482 cubic feet is the volume of a pound mole per the Ideal Gas Law.

Table 6-9
Equipment Leak Fugitives, ID FUG
Val Verde Gas Treatment Plant
Harvest Four Corners, LLC

Component Type	Service	Oil & Gas Production Operations Fugitive Emission Factors, lb/hr/component	Component Count	Total Loss (lb/hr)
Valves	Gas/Vapor	0.00992	2078	20.61
	Light Liquid	0.0055	0	0.00
	Heavy Liquid	0.00002	0	0.00
Compressors	Gas/Vapor	0.0194	5	0.10
	Light Liquid	0.0165	0	0.00
	Heavy Liquid	0.0000683	0	0.00
Relief Valves	Gas/Vapor	0.0194	78	1.51
	Light Liquid	0.0165	0	0.00
	Heavy Liquid	0.0000683	0	0.00
Open Ended Lines	Gas/Vapor	0.00441	2	0.01
	Light Liquid	0.00309	0	0.00
	Heavy Liquid	0.000309	0	0.00
Connectors	Gas/Vapor	0.00044	5195	2.29
	Light Liquid	0.000463	0	0.00
	Heavy Liquid	0.0000165	0	0.00
			Component Emission Total Losses (lb/hr):	24.52
			Gas/Vapor Emissions (lb/hr):	24.52
			Light Liquid Emissions (lb/hr):	0.00
			Heavy Liquid Emissions (lb/hr):	0.00

Sample Calculations:
Emissions (lb/hr) = Emission Factor (lb/hr/component) x Component Count
Emissions (tons/yr) = Emissions (lb/hr) x 8,760 hrs/yr / 2,000 lb/ton

Speciated Emissions Based on Inlet Gas Analysis

Compound	Dry Basis Mole %	lb/hr	tons/year
CO2	38.8391	9.5228	41.7098
Nitrogen	0.0533	0.0131	0.0572
Methane	58.9624	14.4567	63.3205
Ethane	1.3137	0.3221	1.4108
Propane	0.4856	0.1191	0.5215
i-Butane	0.1036	0.0254	0.1113
n-Butane	0.1069	0.0262	0.1148
i-Pentane	0.0410	0.0101	0.0440
n-Pentane	0.0303	0.0074	0.0325
n-Hexane	0.0088	0.0022	0.0095
n-Heptane	0.0468	0.0115	0.0503
Octane	0.0053	0.0013	0.0057
Benzene	0.0011	0.0003	0.0012
Toluene	0.0021	0.0005	0.0023
Total:	**100.00**		
	VOC Total:	**0.2039**	0.8930
	HAP Total:	**0.0029**	0.0129

1) Emission factors are from EPA's "Protocol for Equipment Leak Emission Estimates" EPA-453/R-95-017, 11/1995, Table 2-4.
2) See attached gas analysis in Section 7. The Va Verde speciation was conservatively applied to all fugitive component emissions.

Section 6.a

Green House Gas Emissions

(Submitting under 20.2.70, 20.2.72 20.2.74 NMAC)

Title V (20.2.70 NMAC), Minor NSR (20.2.72 NMAC), and PSD (20.2.74 NMAC) applicants must estimate and report greenhouse gas (GHG) emissions to verify the emission rates reported in the public notice, determine applicability to 40 CFR 60 Subparts, and to evaluate Prevention of Significant Deterioration (PSD) applicability. GHG emissions that are subject to air permit regulations consist of the sum of an aggregate group of these six greenhouse gases: carbon dioxide (CO_2), nitrous oxide (N_2O), methane (CH_4), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF_6).

Calculating GHG Emissions:

1. Calculate the ton per year (tpy) GHG mass emissions and GHG CO_2e emissions from your facility.
2. GHG mass emissions are the sum of the total annual tons of greenhouse gases without adjusting with the global warming potentials (GWPs). GHG CO_2e emissions are the sum of the mass emissions of each individual GHG multiplied by its GWP found in Table A-1 in 40 CFR 98 Mandatory Greenhouse Gas Reporting.
3. Emissions from routine or predictable start up, shut down, and maintenance must be included.
4. Report GHG mass and GHG CO_2e emissions in Table 2-P of this application. Emissions are reported in **short** tons per year and represent each emission unit's Potential to Emit (PTE).
5. All Title V major sources, PSD major sources, and all power plants, whether major or not, must calculate and report GHG mass and CO2e emissions for each unit in Table 2-P.
6. For minor source facilities that are not power plants, are not Title V, and are not PSD there are three options for reporting GHGs in Table 2-P: 1) report GHGs for each individual piece of equipment; 2) report all GHGs from a group of unit types, for example report all combustion source GHGs as a single unit and all venting GHGs as a second separate unit; 3) or check the following ☐ By checking this box, the applicant acknowledges the total CO2e emissions are less than 75,000 tons per year.

Sources for Calculating GHG Emissions:

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

Global Warming Potentials (GWP):
Applicants must use the Global Warming Potentials codified in Table A-1 of the most recent version of 40 CFR 98 Mandatory Greenhouse Gas Reporting. The GWP for a particular GHG is the ratio of heat trapped by one unit mass of the GHG to that of one unit mass of CO_2 over a specified time period.

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

Metric to Short Ton Conversion:
Short tons for GHGs and other regulated pollutants are the standard unit of measure for PSD and title V permitting programs. 40 CFR 98 Mandatory Greenhouse Reporting requires metric tons.
1 metric ton = 1.10231 short tons (per Table A-2 to Subpart A of Part 98 – Units of Measure Conversions)

Section 7

Information Used To Determine Emissions

Information Used to Determine Emissions shall include the following:

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

Amine Sweetening Units (Units: 19 & 30)

- ProMax 3.1 output

Glycol Dehydrators (Units: 10, 14, 18, 24, 27)

- ProMax 3.1 output

Fugitives (Unit: FUG)

- ProMax 3.1 output
- Table 2-4, EPA Protocol for Equipment Leak Emission Estimates, 1995

Startup, Shutdown, and Maintenance (SSM) Emissions (Unit: SSM)

- ProMax 3.1 output

Amine Reboilers (Units: 7, 8, 11, 12, 15, 16)

- AP-42 Table 1.4-2
- GRI-HAPCalc 3.01 output
- 40 CFR 98 Tables C-1, C-2

Glycol Reboilers (Units: 9, 13, 17, 22, 28)

- AP-42 Table 1.4-2
- GRI-HAPCalc 3.01 output
- 40 CFR 98 Tables C-1, C-2

Heaters (Units: 20, 21, 25, 26)

- AP-42 Table 1.4-2
- GRI-HAPCalc 3.01 output
- 40 CFR 98 Tables C-1, C-2

TABLE 1.4-2. EMISSION FACTORS FOR CRITERIA POLLUTANTS AND GREENHOUSE GASES FROM NATURAL GAS COMBUSTION[a]

Pollutant	Emission Factor ($lb/10^6$ scf)	Emission Factor Rating
CO_2[b]	120,000	A
Lead	0.0005	D
N_2O (Uncontrolled)	2.2	E
N_2O (Controlled-low-NO_X burner)	0.64	E
PM (Total)[c]	7.6	D
PM (Condensable)[c]	5.7	D
PM (Filterable)[c]	1.9	B
SO_2[d]	0.6	A
TOC	11	B
Methane	2.3	B
VOC	5.5	C

[a] Reference 11. Units are in pounds of pollutant per million standard cubic feet of natural gas fired. Data are for all natural gas combustion sources. To convert from $lb/10^6$ scf to $kg/10^6$ m^3, multiply by 16. To convert from $lb/10^6$ scf to 1b/MMBtu, divide by 1,020. The emission factors in this table may be converted to other natural gas heating values by multiplying the given emission factor by the ratio of the specified heating value to this average heating value. TOC = Total Organic Compounds. VOC = Volatile Organic Compounds.

[b] Based on approximately 100% conversion of fuel carbon to CO_2. $CO_2[lb/10^6 \text{ scf}] = (3.67)(CON)(C)(D)$, where CON = fractional conversion of fuel carbon to CO_2, C = carbon content of fuel by weight (0.76), and D = density of fuel, 4.2×10^4 $lb/10^6$ scf.

[c] All PM (total, condensible, and filterable) is assumed to be less than 1.0 micrometer in diameter. Therefore, the PM emission factors presented here may be used to estimate PM_{10}, $PM_{2.5}$ or PM_1 emissions. Total PM is the sum of the filterable PM and condensible PM. Condensible PM is the particulate matter collected using EPA Method 202 (or equivalent). Filterable PM is the particulate matter collected on, or prior to, the filter of an EPA Method 5 (or equivalent) sampling train.

[d] Based on 100% conversion of fuel sulfur to SO_2. Assumes sulfur content is natural gas of 2,000 grains/10^6 scf. The SO_2 emission factor in this table can be converted to other natural gas sulfur contents by multiplying the SO_2 emission factor by the ratio of the site-specific sulfur content (grains/10^6 scf) to 2,000 grains/10^6 scf.

TABLE 1.4-3. EMISSION FACTORS FOR SPECIATED ORGANIC COMPOUNDS FROM NATURAL GAS COMBUSTION[a]

CAS No.	Pollutant	Emission Factor ($lb/10^6$ scf)	Emission Factor Rating
91-57-6	2-Methylnaphthalene[b, c]	2.4E-05	D
56-49-5	3-Methylchloranthrene[b, c]	<1.8E-06	E
	7,12-Dimethylbenz(a)anthracene[b,c]	<1.6E-05	E
83-32-9	Acenaphthene[b,c]	<1.8E-06	E
203-96-8	Acenaphthylene[b,c]	<1.8E-06	E
120-12-7	Anthracene[b,c]	<2.4E-06	E
56-55-3	Benz(a)anthracene[b,c]	<1.8E-06	E
71-43-2	Benzene[b]	2.1E-03	B
50-32-8	Benzo(a)pyrene[b,c]	<1.2E-06	E
205-99-2	Benzo(b)fluoranthene[b,c]	<1.8E-06	E
191-24-2	Benzo(g,h,i)perylene[b,c]	<1.2E-06	E
205-82-3	Benzo(k)fluoranthene[b,c]	<1.8E-06	E
106-97-8	Butane	2.1E+00	E
218-01-9	Chrysene[b,c]	<1.8E-06	E
53-70-3	Dibenzo(a,h)anthracene[b,c]	<1.2E-06	E
25321-22-6	Dichlorobenzene[b]	1.2E-03	E
74-84-0	Ethane	3.1E+00	E
206-44-0	Fluoranthene[b,c]	3.0E-06	E
86-73-7	Fluorene[b,c]	2.8E-06	E
50-00-0	Formaldehyde[b]	7.5E-02	B
110-54-3	Hexane[b]	1.8E+00	E
193-39-5	Indeno(1,2,3-cd)pyrene[b,c]	<1.8E-06	E
91-20-3	Naphthalene[b]	6.1E-04	E
109-66-0	Pentane	2.6E+00	E
85-01-8	Phenanathrene[b,c]	1.7E-05	D

TABLE 1.4-3. EMISSION FACTORS FOR SPECIATED ORGANIC COMPOUNDS FROM NATURAL GAS COMBUSTION (Continued)

CAS No.	Pollutant	Emission Factor ($lb/10^6$ scf)	Emission Factor Rating
74-98-6	Propane	1.6E+00	E
129-00-0	Pyrene[b, c]	5.0E-06	E
108-88-3	Toluene[b]	3.4E-03	C

[a] Reference 11. Units are in pounds of pollutant per million standard cubic feet of natural gas fired. Data are for all natural gas combustion sources. To convert from $lb/10^6$ scf to $kg/10^6$ m^3, multiply by 16. To convert from $1b/10^6$ scf to lb/MMBtu, divide by 1,020. Emission Factors preceeded with a less-than symbol are based on method detection limits.

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

[c] HAP because it is Polycyclic Organic Matter (POM). POM is a HAP as defined by Section 112(b) of the Clean Air Act.

[d] The sum of individual organic compounds may exceed the VOC and TOC emission factors due to differences in test methods and the availability of test data for each pollutant.

GRI-HAPCalc ® 3.01
External Combustion Devices Report

Facility ID:	**VAL VERDE TREATER**	**Notes:**
Operation Type:	**GAS PLANT**	
Facility Name:	**VAL VERDE TREATMENT PLANT**	
User Name:		
Units of Measure:	**U.S. STANDARD**	

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

External Combustion Devices

Unit Name: 1.8 MMBTU

Hours of Operation:	8,760	Yearly
Heat Input:	1.80	MMBtu/hr
Fuel Type:	NATURAL GAS	
Device Type:	BOILER	
Emission Factor Set:	EPA > FIELD > LITERATURE	
Additional EF Set:	-NONE-	

Calculated Emissions (ton/yr)

Chemical Name	Emissions	Emission Factor	Emission Factor Set
HAPs			
3-Methylcholanthrene	0.0000	0.0000000018 lb/MMBtu	EPA
7,12-Dimethylbenz(a)anthracene	0.0000	0.0000000157 lb/MMBtu	EPA
Formaldehyde	0.0006	0.0000735294 lb/MMBtu	EPA
Methanol	0.0034	0.0004333330 lb/MMBtu	GRI Field
Acetaldehyde	0.0023	0.0002909000 lb/MMBtu	GRI Field
1,3-Butadiene	0.0000	0.0000001830 lb/MMBtu	GRI Field
Benzene	0.0000	0.0000020588 lb/MMBtu	EPA
Toluene	0.0000	0.0000033333 lb/MMBtu	EPA
Ethylbenzene	0.0000	0.0000000720 lb/MMBtu	GRI Field
Xylenes(m,p,o)	0.0000	0.0000010610 lb/MMBtu	GRI Field
2,2,4-Trimethylpentane	0.0003	0.0000323000 lb/MMBtu	GRI Field
n-Hexane	0.0139	0.0017647059 lb/MMBtu	EPA
Phenol	0.0000	0.0000000950 lb/MMBtu	GRI Field
Naphthalene	0.0000	0.0000005980 lb/MMBtu	EPA
2-Methylnaphthalene	0.0000	0.0000000235 lb/MMBtu	EPA
Acenaphthylene	0.0000	0.0000000018 lb/MMBtu	EPA
Biphenyl	0.0000	0.0000011500 lb/MMBtu	GRI Field
Acenaphthene	0.0000	0.0000000018 lb/MMBtu	EPA
Fluorene	0.0000	0.0000000027 lb/MMBtu	EPA
Anthracene	0.0000	0.0000000024 lb/MMBtu	EPA
Phenanthrene	0.0000	0.0000000167 lb/MMBtu	EPA
Fluoranthene	0.0000	0.0000000029 lb/MMBtu	EPA
Pyrene	0.0000	0.0000000049 lb/MMBtu	EPA
Benz(a)anthracene	0.0000	0.0000000018 lb/MMBtu	EPA

Chrysene	0.0000	0.0000000018 lb/MMBtu	EPA
Benzo(a)pyrene	0.0000	0.0000000012 lb/MMBtu	EPA
Benzo(b)fluoranthene	0.0000	0.0000000018 lb/MMBtu	EPA
Benzo(k)fluoranthene	0.0000	0.0000000018 lb/MMBtu	EPA
Benzo(g,h,i)perylene	0.0000	0.0000000012 lb/MMBtu	EPA
Indeno(1,2,3-c,d)pyrene	0.0000	0.0000000018 lb/MMBtu	EPA
Dibenz(a,h)anthracene	0.0000	0.0000000012 lb/MMBtu	EPA
Lead	0.0000	0.0000004902 lb/MMBtu	EPA
Total	0.0205		

Criteria Pollutants

VOC	0.0425	0.0053921569 lb/MMBtu	EPA
PM	0.0587	0.0074509804 lb/MMBtu	EPA
PM, Condensible	0.0441	0.0055882353 lb/MMBtu	EPA
PM, Filterable	0.0147	0.0018627451 lb/MMBtu	EPA
CO	0.6493	0.0823529410 lb/MMBtu	EPA
NMHC	0.0672	0.0085294118 lb/MMBtu	EPA
NOx	0.7729	0.0980392157 lb/MMBtu	EPA
SO2	0.0046	0.0005880000 lb/MMBtu	EPA

Other Pollutants

Dichlorobenzene	0.0000	0.0000011765 lb/MMBtu	EPA
Methane	0.0178	0.0022549020 lb/MMBtu	EPA
Acetylene	0.0420	0.0053314000 lb/MMBtu	GRI Field
Ethylene	0.0042	0.0005264000 lb/MMBtu	GRI Field
Ethane	0.0240	0.0030392157 lb/MMBtu	EPA
Propylene	0.0074	0.0009333330 lb/MMBtu	GRI Field
Propane	0.0124	0.0015686275 lb/MMBtu	EPA
Butane	0.0162	0.0020588235 lb/MMBtu	EPA
Cyclopentane	0.0003	0.0000405000 lb/MMBtu	GRI Field
Pentane	0.0201	0.0025490196 lb/MMBtu	EPA
n-Pentane	0.0158	0.0020000000 lb/MMBtu	GRI Field
Cyclohexane	0.0004	0.0000451000 lb/MMBtu	GRI Field
Methylcyclohexane	0.0013	0.0001691000 lb/MMBtu	GRI Field
n-Octane	0.0004	0.0000506000 lb/MMBtu	GRI Field
n-Nonane	0.0000	0.0000050000 lb/MMBtu	GRI Field
CO2	927.5294	117.6470588235 lb/MMBtu	EPA

Unit Name: 2.52 MMBTU

Hours of Operation:	8,760 Yearly
Heat Input:	2.52 MMBtu/hr
Fuel Type:	NATURAL GAS
Device Type:	BOILER
Emission Factor Set:	EPA > FIELD > LITERATURE
Additional EF Set:	-NONE-

Calculated Emissions (ton/yr)

Chemical Name	Emissions	Emission Factor	Emission Factor Set

HAPs

3-Methylcholanthrene	0.0000	0.0000000018 lb/MMBtu	EPA
7,12-Dimethylbenz(a)anthracene	0.0000	0.0000000157 lb/MMBtu	EPA
Formaldehyde	0.0008	0.0000735294 lb/MMBtu	EPA
Methanol	0.0048	0.0004333330 lb/MMBtu	GRI Field
Acetaldehyde	0.0032	0.0002909000 lb/MMBtu	GRI Field
1,3-Butadiene	0.0000	0.0000001830 lb/MMBtu	GRI Field
Benzene	0.0000	0.0000020588 lb/MMBtu	EPA
Toluene	0.0000	0.0000033333 lb/MMBtu	EPA
Ethylbenzene	0.0000	0.0000000720 lb/MMBtu	GRI Field
Xylenes(m,p,o)	0.0000	0.0000010610 lb/MMBtu	GRI Field
2,2,4-Trimethylpentane	0.0004	0.0000323000 lb/MMBtu	GRI Field
n-Hexane	0.0195	0.0017647059 lb/MMBtu	EPA
Phenol	0.0000	0.0000000950 lb/MMBtu	GRI Field
Naphthalene	0.0000	0.0000005980 lb/MMBtu	EPA
2-Methylnaphthalene	0.0000	0.0000000235 lb/MMBtu	EPA
Acenaphthylene	0.0000	0.0000000018 lb/MMBtu	EPA
Biphenyl	0.0000	0.0000011500 lb/MMBtu	GRI Field
Acenaphthene	0.0000	0.0000000018 lb/MMBtu	EPA
Fluorene	0.0000	0.0000000027 lb/MMBtu	EPA
Anthracene	0.0000	0.0000000024 lb/MMBtu	EPA
Phenanthrene	0.0000	0.0000000167 lb/MMBtu	EPA
Fluoranthene	0.0000	0.0000000029 lb/MMBtu	EPA
Pyrene	0.0000	0.0000000049 lb/MMBtu	EPA
Benz(a)anthracene	0.0000	0.0000000018 lb/MMBtu	EPA
Chrysene	0.0000	0.0000000018 lb/MMBtu	EPA
Benzo(a)pyrene	0.0000	0.0000000012 lb/MMBtu	EPA
Benzo(b)fluoranthene	0.0000	0.0000000018 lb/MMBtu	EPA
Benzo(k)fluoranthene	0.0000	0.0000000018 lb/MMBtu	EPA
Benzo(g,h,i)perylene	0.0000	0.0000000012 lb/MMBtu	EPA
Indeno(1,2,3-c,d)pyrene	0.0000	0.0000000018 lb/MMBtu	EPA
Dibenz(a,h)anthracene	0.0000	0.0000000012 lb/MMBtu	EPA
Lead	0.0000	0.0000004902 lb/MMBtu	EPA
Total	0.0287		

Criteria Pollutants

VOC	0.0595	0.0053921569 lb/MMBtu	EPA
PM	0.0822	0.0074509804 lb/MMBtu	EPA
PM, Condensible	0.0617	0.0055882353 lb/MMBtu	EPA
PM, Filterable	0.0206	0.0018627451 lb/MMBtu	EPA
CO	0.9090	0.0823529410 lb/MMBtu	EPA
NMHC	0.0941	0.0085294118 lb/MMBtu	EPA
NOx	1.0821	0.0980392157 lb/MMBtu	EPA
SO2	0.0065	0.0005880000 lb/MMBtu	EPA

Other Pollutants

Dichlorobenzene	0.0000	0.0000011765 lb/MMBtu	EPA
Methane	0.0249	0.0022549020 lb/MMBtu	EPA
Acetylene	0.0588	0.0053314000 lb/MMBtu	GRI Field
Ethylene	0.0058	0.0005264000 lb/MMBtu	GRI Field
Ethane	0.0335	0.0030392157 lb/MMBtu	EPA
Propylene	0.0103	0.0009333330 lb/MMBtu	GRI Field

Propane	0.0173	0.0015686275	lb/MMBtu	EPA
Butane	0.0227	0.0020588235	lb/MMBtu	EPA
Cyclopentane	0.0004	0.0000405000	lb/MMBtu	GRI Field
Pentane	0.0281	0.0025490196	lb/MMBtu	EPA
n-Pentane	0.0221	0.0020000000	lb/MMBtu	GRI Field
Cyclohexane	0.0005	0.0000451000	lb/MMBtu	GRI Field
Methylcyclohexane	0.0019	0.0001691000	lb/MMBtu	GRI Field
n-Octane	0.0006	0.0000506000	lb/MMBtu	GRI Field
n-Nonane	0.0001	0.0000050000	lb/MMBtu	GRI Field
CO2	1,298.5412	117.6470588235	lb/MMBtu	EPA

Unit Name: 3.8 MMBTU

Hours of Operation: 8,760 Yearly

Heat Input: 3.80 MMBtu/hr

Fuel Type: NATURAL GAS

Device Type: BOILER

Emission Factor Set: EPA > FIELD > LITERATURE

Additional EF Set: -NONE-

Calculated Emissions (ton/yr)

Chemical Name	Emissions	Emission Factor		Emission Factor Set
HAPs				
3-Methylcholanthrene	0.0000	0.0000000018	lb/MMBtu	EPA
7,12-Dimethylbenz(a)anthracene	0.0000	0.0000000157	lb/MMBtu	EPA
Formaldehyde	0.0012	0.0000735294	lb/MMBtu	EPA
Methanol	0.0072	0.0004333330	lb/MMBtu	GRI Field
Acetaldehyde	0.0048	0.0002909000	lb/MMBtu	GRI Field
1,3-Butadiene	0.0000	0.0000001830	lb/MMBtu	GRI Field
Benzene	0.0000	0.0000020588	lb/MMBtu	EPA
Toluene	0.0001	0.0000033333	lb/MMBtu	EPA
Ethylbenzene	0.0000	0.0000000720	lb/MMBtu	GRI Field
Xylenes(m,p,o)	0.0000	0.0000010610	lb/MMBtu	GRI Field
2,2,4-Trimethylpentane	0.0005	0.0000323000	lb/MMBtu	GRI Field
n-Hexane	0.0294	0.0017647059	lb/MMBtu	EPA
Phenol	0.0000	0.0000000950	lb/MMBtu	GRI Field
Naphthalene	0.0000	0.0000005980	lb/MMBtu	EPA
2-Methylnaphthalene	0.0000	0.0000000235	lb/MMBtu	EPA
Acenaphthylene	0.0000	0.0000000018	lb/MMBtu	EPA
Biphenyl	0.0000	0.0000011500	lb/MMBtu	GRI Field
Acenaphthene	0.0000	0.0000000018	lb/MMBtu	EPA
Fluorene	0.0000	0.0000000027	lb/MMBtu	EPA
Anthracene	0.0000	0.0000000024	lb/MMBtu	EPA
Phenanthrene	0.0000	0.0000000167	lb/MMBtu	EPA
Fluoranthene	0.0000	0.0000000029	lb/MMBtu	EPA
Pyrene	0.0000	0.0000000049	lb/MMBtu	EPA
Benz(a)anthracene	0.0000	0.0000000018	lb/MMBtu	EPA
Chrysene	0.0000	0.0000000018	lb/MMBtu	EPA
Benzo(a)pyrene	0.0000	0.0000000012	lb/MMBtu	EPA
Benzo(b)fluoranthene	0.0000	0.0000000018	lb/MMBtu	EPA
Benzo(k)fluoranthene	0.0000	0.0000000018	lb/MMBtu	EPA

Benzo(g,h,i)perylene	0.0000	0.0000000012 lb/MMBtu	EPA
Indeno(1,2,3-c,d)pyrene	0.0000	0.0000000018 lb/MMBtu	EPA
Dibenz(a,h)anthracene	0.0000	0.0000000012 lb/MMBtu	EPA
Lead	0.0000	0.0000004902 lb/MMBtu	EPA
Total	0.0432		

Criteria Pollutants

VOC	0.0897	0.0053921569 lb/MMBtu	EPA
PM	0.1240	0.0074509804 lb/MMBtu	EPA
PM, Condensible	0.0930	0.0055882353 lb/MMBtu	EPA
PM, Filterable	0.0310	0.0018627451 lb/MMBtu	EPA
CO	1.3707	0.0823529410 lb/MMBtu	EPA
NMHC	0.1420	0.0085294118 lb/MMBtu	EPA
NOx	1.6318	0.0980392157 lb/MMBtu	EPA
SO2	0.0098	0.0005880000 lb/MMBtu	EPA

Other Pollutants

Dichlorobenzene	0.0000	0.0000011765 lb/MMBtu	EPA
Methane	0.0375	0.0022549020 lb/MMBtu	EPA
Acetylene	0.0887	0.0053314000 lb/MMBtu	GRI Field
Ethylene	0.0088	0.0005264000 lb/MMBtu	GRI Field
Ethane	0.0506	0.0030392157 lb/MMBtu	EPA
Propylene	0.0155	0.0009333330 lb/MMBtu	GRI Field
Propane	0.0261	0.0015686275 lb/MMBtu	EPA
Butane	0.0343	0.0020588235 lb/MMBtu	EPA
Cyclopentane	0.0007	0.0000405000 lb/MMBtu	GRI Field
Pentane	0.0424	0.0025490196 lb/MMBtu	EPA
n-Pentane	0.0333	0.0020000000 lb/MMBtu	GRI Field
Cyclohexane	0.0008	0.0000451000 lb/MMBtu	GRI Field
Methylcyclohexane	0.0028	0.0001691000 lb/MMBtu	GRI Field
n-Octane	0.0008	0.0000506000 lb/MMBtu	GRI Field
n-Nonane	0.0001	0.0000050000 lb/MMBtu	GRI Field
CO2	1,958.1176	117.6470588235 lb/MMBtu	EPA

Unit Name: 61.8 MMBTU

Hours of Operation: 8,760 Yearly

Heat Input: 61.80 MMBtu/hr

Fuel Type: NATURAL GAS

Device Type: BOILER

Emission Factor Set: EPA > FIELD > LITERATURE

Additional EF Set: -NONE-

Calculated Emissions (ton/yr)

Chemical Name	Emissions	Emission Factor	Emission Factor Set
HAPs			
3-Methylcholanthrene	0.0000	0.0000000018 lb/MMBtu	EPA
7,12-Dimethylbenz(a)anthracene	0.0000	0.0000000157 lb/MMBtu	EPA
Formaldehyde	0.0199	0.0000735294 lb/MMBtu	EPA
Methanol	0.1173	0.0004333330 lb/MMBtu	GRI Field
Acetaldehyde	0.0787	0.0002909000 lb/MMBtu	GRI Field

1,3-Butadiene	0.0000	0.0000001830 lb/MMBtu	GRI Field
Benzene	0.0006	0.0000020588 lb/MMBtu	EPA
Toluene	0.0009	0.0000033333 lb/MMBtu	EPA
Ethylbenzene	0.0000	0.0000000720 lb/MMBtu	GRI Field
Xylenes(m,p,o)	0.0003	0.0000010610 lb/MMBtu	GRI Field
2,2,4-Trimethylpentane	0.0087	0.0000323000 lb/MMBtu	GRI Field
n-Hexane	0.4777	0.0017647059 lb/MMBtu	EPA
Phenol	0.0000	0.0000000950 lb/MMBtu	GRI Field
Naphthalene	0.0002	0.0000005980 lb/MMBtu	EPA
2-Methylnaphthalene	0.0000	0.0000000235 lb/MMBtu	EPA
Acenaphthylene	0.0000	0.0000000018 lb/MMBtu	EPA
Biphenyl	0.0003	0.0000011500 lb/MMBtu	GRI Field
Acenaphthene	0.0000	0.0000000018 lb/MMBtu	EPA
Fluorene	0.0000	0.0000000027 lb/MMBtu	EPA
Anthracene	0.0000	0.0000000024 lb/MMBtu	EPA
Phenanthrene	0.0000	0.0000000167 lb/MMBtu	EPA
Fluoranthene	0.0000	0.0000000029 lb/MMBtu	EPA
Pyrene	0.0000	0.0000000049 lb/MMBtu	EPA
Benz(a)anthracene	0.0000	0.0000000018 lb/MMBtu	EPA
Chrysene	0.0000	0.0000000018 lb/MMBtu	EPA
Benzo(a)pyrene	0.0000	0.0000000012 lb/MMBtu	EPA
Benzo(b)fluoranthene	0.0000	0.0000000018 lb/MMBtu	EPA
Benzo(k)fluoranthene	0.0000	0.0000000018 lb/MMBtu	EPA
Benzo(g,h,i)perylene	0.0000	0.0000000012 lb/MMBtu	EPA
Indeno(1,2,3-c,d)pyrene	0.0000	0.0000000018 lb/MMBtu	EPA
Dibenz(a,h)anthracene	0.0000	0.0000000012 lb/MMBtu	EPA
Lead	0.0001	0.0000004902 lb/MMBtu	EPA
Total	0.7047		

Criteria Pollutants

VOC	1.4596	0.0053921569 lb/MMBtu	EPA
PM	2.0169	0.0074509804 lb/MMBtu	EPA
PM, Condensible	1.5126	0.0055882353 lb/MMBtu	EPA
PM, Filterable	0.5042	0.0018627451 lb/MMBtu	EPA
CO	22.2916	0.0823529410 lb/MMBtu	EPA
NMHC	2.3088	0.0085294118 lb/MMBtu	EPA
NOx	26.5376	0.0980392157 lb/MMBtu	EPA
SO2	0.1592	0.0005880000 lb/MMBtu	EPA

Other Pollutants

Dichlorobenzene	0.0003	0.0000011765 lb/MMBtu	EPA
Methane	0.6104	0.0022549020 lb/MMBtu	EPA
Acetylene	1.4431	0.0053314000 lb/MMBtu	GRI Field
Ethylene	0.1425	0.0005264000 lb/MMBtu	GRI Field
Ethane	0.8227	0.0030392157 lb/MMBtu	EPA
Propylene	0.2526	0.0009333330 lb/MMBtu	GRI Field
Propane	0.4246	0.0015686275 lb/MMBtu	EPA
Butane	0.5573	0.0020588235 lb/MMBtu	EPA
Cyclopentane	0.0110	0.0000405000 lb/MMBtu	GRI Field
Pentane	0.6900	0.0025490196 lb/MMBtu	EPA
n-Pentane	0.5414	0.0020000000 lb/MMBtu	GRI Field
Cyclohexane	0.0122	0.0000451000 lb/MMBtu	GRI Field
Methylcyclohexane	0.0458	0.0001691000 lb/MMBtu	GRI Field

n-Octane	0.0137	0.0000506000	lb/MMBtu	GRI Field
n-Nonane	0.0014	0.0000050000	lb/MMBtu	GRI Field
CO2	31,845.1765	117.6470588235	lb/MMBtu	EPA

Unit Name: 73 MMBTU

Hours of Operation: 8,760 Yearly
Heat Input: 73.00 MMBtu/hr
Fuel Type: NATURAL GAS
Device Type: BOILER
Emission Factor Set: EPA > FIELD > LITERATURE
Additional EF Set: -NONE-

Calculated Emissions (ton/yr)

Chemical Name	Emissions	Emission Factor		Emission Factor Set
HAPs				
3-Methylcholanthrene	0.0000	0.0000000018	lb/MMBtu	EPA
7,12-Dimethylbenz(a)anthracene	0.0000	0.0000000157	lb/MMBtu	EPA
Formaldehyde	0.0235	0.0000735294	lb/MMBtu	EPA
Methanol	0.1386	0.0004333330	lb/MMBtu	GRI Field
Acetaldehyde	0.0930	0.0002909000	lb/MMBtu	GRI Field
1,3-Butadiene	0.0001	0.0000001830	lb/MMBtu	GRI Field
Benzene	0.0007	0.0000020588	lb/MMBtu	EPA
Toluene	0.0011	0.0000033333	lb/MMBtu	EPA
Ethylbenzene	0.0000	0.0000000720	lb/MMBtu	GRI Field
Xylenes(m,p,o)	0.0003	0.0000010610	lb/MMBtu	GRI Field
2,2,4-Trimethylpentane	0.0103	0.0000323000	lb/MMBtu	GRI Field
n-Hexane	0.5642	0.0017647059	lb/MMBtu	EPA
Phenol	0.0000	0.0000000950	lb/MMBtu	GRI Field
Naphthalene	0.0002	0.0000005980	lb/MMBtu	EPA
2-Methylnaphthalene	0.0000	0.0000000235	lb/MMBtu	EPA
Acenaphthylene	0.0000	0.0000000018	lb/MMBtu	EPA
Biphenyl	0.0004	0.0000011500	lb/MMBtu	GRI Field
Acenaphthene	0.0000	0.0000000018	lb/MMBtu	EPA
Fluorene	0.0000	0.0000000027	lb/MMBtu	EPA
Anthracene	0.0000	0.0000000024	lb/MMBtu	EPA
Phenanthrene	0.0000	0.0000000167	lb/MMBtu	EPA
Fluoranthene	0.0000	0.0000000029	lb/MMBtu	EPA
Pyrene	0.0000	0.0000000049	lb/MMBtu	EPA
Benz(a)anthracene	0.0000	0.0000000018	lb/MMBtu	EPA
Chrysene	0.0000	0.0000000018	lb/MMBtu	EPA
Benzo(a)pyrene	0.0000	0.0000000012	lb/MMBtu	EPA
Benzo(b)fluoranthene	0.0000	0.0000000018	lb/MMBtu	EPA
Benzo(k)fluoranthene	0.0000	0.0000000018	lb/MMBtu	EPA
Benzo(g,h,i)perylene	0.0000	0.0000000012	lb/MMBtu	EPA
Indeno(1,2,3-c,d)pyrene	0.0000	0.0000000018	lb/MMBtu	EPA
Dibenz(a,h)anthracene	0.0000	0.0000000012	lb/MMBtu	EPA
Lead	0.0002	0.0000004902	lb/MMBtu	EPA
Total	0.8326			

Criteria Pollutants

VOC	1.7241	0.0053921569	lb/MMBtu	EPA
PM	2.3824	0.0074509804	lb/MMBtu	EPA
PM, Condensible	1.7868	0.0055882353	lb/MMBtu	EPA
PM, Filterable	0.5956	0.0018627451	lb/MMBtu	EPA
CO	26.3315	0.0823529410	lb/MMBtu	EPA
NMHC	2.7272	0.0085294118	lb/MMBtu	EPA
NOx	31.3471	0.0980392157	lb/MMBtu	EPA
SO2	0.1880	0.0005880000	lb/MMBtu	EPA

Other Pollutants

Dichlorobenzene	0.0004	0.0000011765	lb/MMBtu	EPA
Methane	0.7210	0.0022549020	lb/MMBtu	EPA
Acetylene	1.7047	0.0053314000	lb/MMBtu	GRI Field
Ethylene	0.1683	0.0005264000	lb/MMBtu	GRI Field
Ethane	0.9718	0.0030392157	lb/MMBtu	EPA
Propylene	0.2984	0.0009333330	lb/MMBtu	GRI Field
Propane	0.5016	0.0015686275	lb/MMBtu	EPA
Butane	0.6583	0.0020588235	lb/MMBtu	EPA
Cyclopentane	0.0129	0.0000405000	lb/MMBtu	GRI Field
Pentane	0.8150	0.0025490196	lb/MMBtu	EPA
n-Pentane	0.6395	0.0020000000	lb/MMBtu	GRI Field
Cyclohexane	0.0144	0.0000451000	lb/MMBtu	GRI Field
Methylcyclohexane	0.0541	0.0001691000	lb/MMBtu	GRI Field
n-Octane	0.0162	0.0000506000	lb/MMBtu	GRI Field
n-Nonane	0.0016	0.0000050000	lb/MMBtu	GRI Field
CO2	37,616.4706	117.6470588235	lb/MMBtu	EPA

Bryan Research & Engineering, Inc.

ProMax® 3.2

with

TSWEET® & PROSIM®

Simulation Report

Project: Train 478 Permit Case 140F.pmx

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Client Name: Enterprise
Location: Val Verde Train 4, 7, 8
Job: Permit Case w Flash Gas Treater Integrated

ProMax Filename: C:\Documents and Settings\cbonan\My Documents\Projects\Val Verde VOC Mitigation\AFE - Val Verde VOC Mitigation\Design Basis (To-Be Cases)\Emissions Factors Basis\Train 478 Permit Case 140F.pmx
ProMax Version: 3.2.11188.0
Simulation Initiated: 2/23/2012 11:08:07 AM

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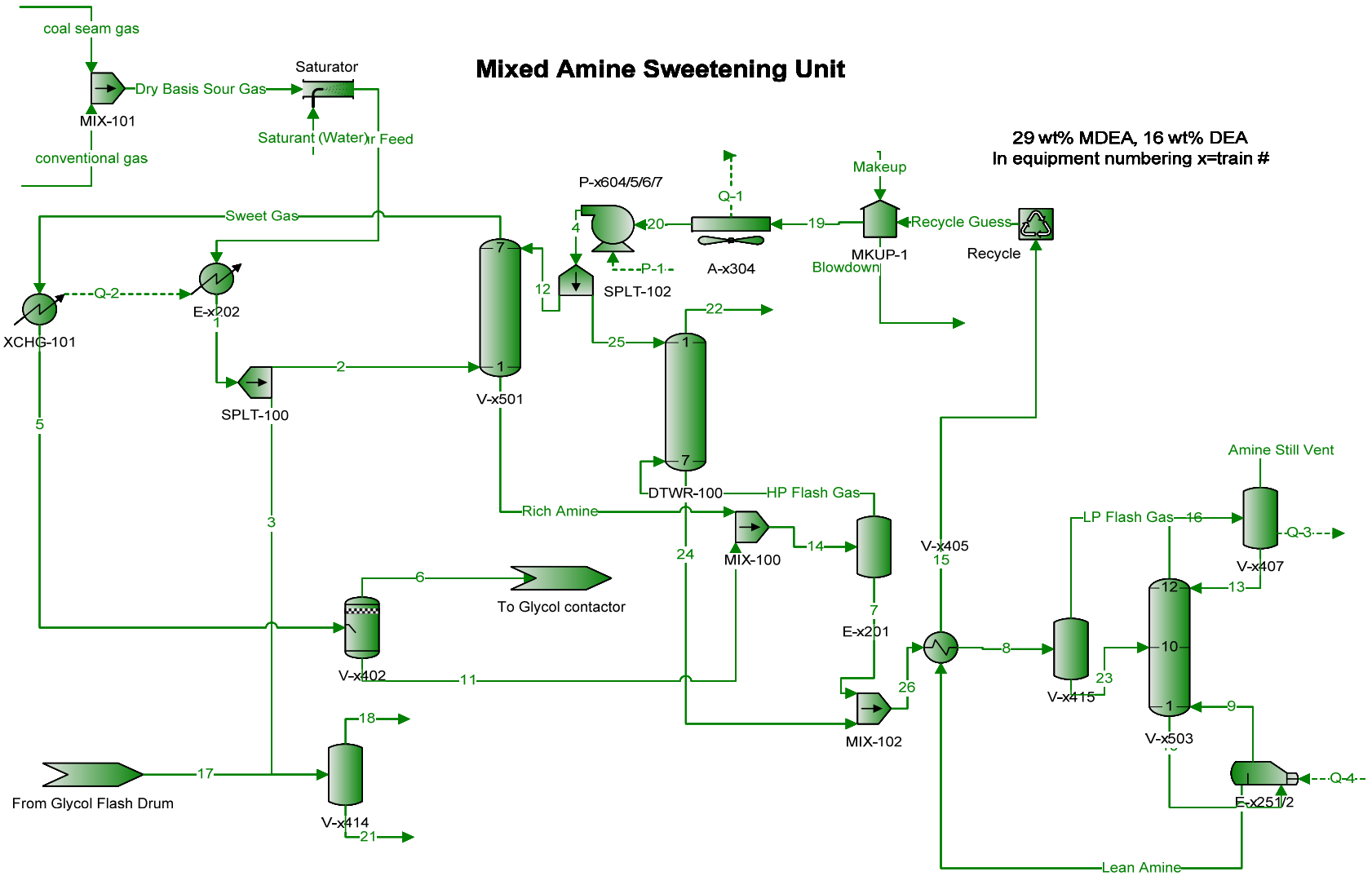
Report Navigator can be activated via the ProMax Navigator Toolbar.
An asterisk (*), throughout the report, denotes a user specified value.
A question mark (?) after a value, throughout the report, denotes an extrapolated or approximate value.


Mixed Amine Sweetening Unit
29 wt% MDEA, 16 wt% DEA
In equipment numbering x=train #
coal seam gas
conventional gas
MIX-101
Dry Basis Sour Gas
Saturator
Saturant (Water)
Sour Feed
Sweet Gas
XCHG-101
Q-2
E-x202
SPLT-100
V-x501
P-x604/5/6/7
P-1
SPLT-102
Q-1
A-x304
Makeup
MKUP-1
Blowdown
Recycle Guess
Recycle
DTWR-100
HP Flash Gas
Rich Amine
MIX-100
E-x201
V-x405
LP Flash Gas
Amine Still Vent
V-x407
Q-3
V-x415
V-x503
Q-4
E-x251/2
Lean Amine
V-x402
To Glycol contactor
From Glycol Flash Drum
V-x414
MIX-102

	A	B	C
2	**Process Streams**		**Amine Still Vent**
3	**Composition**	**Status:**	**Solved**
4	Phase: **Total**	**From Block:**	**V-x407**
5		**To Block:**	**--**
6	**Mole Fraction**		**%**
7	CO2		89.5931
8	Nitrogen		5.24839E-06
9	Methane		0.128316
10	Ethane		0.00319294
11	Propane		0.000607712
12	i-Butane		5.84042E-05
13	n-Butane		9.15973E-05
14	i-Pentane		5.07627E-06
15	n-Pentane		7.26262E-06
16	n-Hexane		2.08806E-06
17	n-Heptane		1.85866E-06
18	Octane		3.72189E-07
19	Nonane		0
20	Decane		0
21	Benzene		0.000393156
22	Toluene		0.000690209
23	Ethylbenzene		0
24	m-Xylene		0
25	MDEA		1.38810E-09
26	MEA		0
27	DEA		1.70178E-12
28	Triethylene Glycol		0
29	Water		10.2736
30	**Mass Flow**		**lb/h**
31	CO2		72244.9
32	Nitrogen		0.00269388
33	Methane		37.7171
34	Ethane		1.75913
35	Propane		0.490998
36	i-Butane		0.0621975
37	n-Butane		0.0975464
38	i-Pentane		0.00671058
39	n-Pentane		0.00960083
40	n-Hexane		0.00329695
41	n-Heptane		0.00341243
42	Octane		0.000778978
43	Nonane		0
44	Decane		0
45	Benzene		0.562689
46	Toluene		1.16522
47	Ethylbenzene		0
48	m-Xylene		0
49	MDEA		3.03073E-06
50	MEA		0
51	DEA		3.27823E-09
52	Triethylene Glycol		0
53	Water		3391.17

Bryan Research & Engineering, Inc.

ProMax® 3.2

with

TSWEET® & PROSIM®

Simulation Report

Project: Train 5,6 Permit Case.pmx

Licensed to EPCO Holdings, Inc. and Affiliates

Client Name: Enterprise Products
Location: Val Verde Trains 5 & 6
Job: Trains 5 & 6 Permit Case

ProMax Filename: C:\Documents and Settings\cbonan\My Documents\Projects\Val Verde VOC Mitigation\AFE - Val Verde VOC Mitigation\Design Basis (To-Be Cases)\To-Be Cases at Max-Rate, Permit Basis\Train 5,6 Permit Case.pmx
ProMax Version: 3.2.11188.0
Simulation Initiated: 8/21/2011 12:33:23 PM

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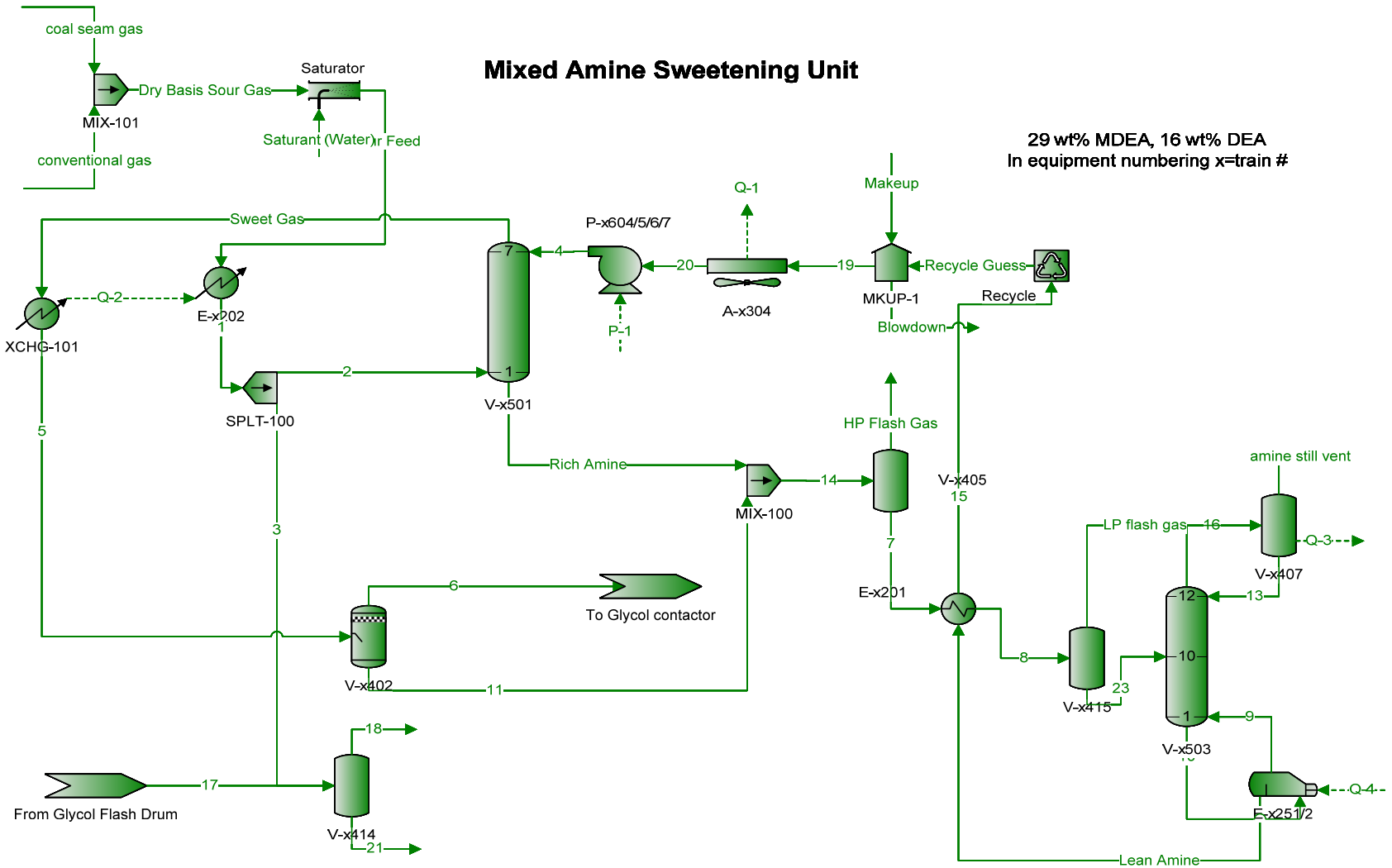
Report Navigator can be activated via the ProMax Navigator Toolbar.
An asterisk (*), throughout the report, denotes a user specified value.
A question mark (?) after a value, throughout the report, denotes an extrapolated or approximate value.


Mixed Amine Sweetening Unit
29 wt% MDEA, 16 wt% DEA
In equipment numbering x=train #
coal seam gas
conventional gas
MIX-101
Dry Basis Sour Gas
Saturator
Saturant (Water)
Sweet Gas
XCHG-101
Q-2
E-x202
SPLT-100
V-x501
P-x604/5/6/7
P-1
Q-1
A-x304
Makeup
MKUP-1
Recycle Guess
Recycle
Blowdown
Rich Amine
MIX-100
HP Flash Gas
E-x201
V-x405
amine still vent
LP flash gas
V-x407
Q-3
V-x415
V-x503
E-x251/2
Q-4
Lean Amine
To Glycol contactor
V-x402
From Glycol Flash Drum
V-x414

Process Streams		amine still vent
Composition	**Status:**	**Solved**
Phase: **Total**	**From Block:**	**V-x407**
	To Block:	**--**
Mole Fraction		**%**
CO2		88.7754
Nitrogen		1.51752E-05
Methane		0.937771
Ethane		0.00904643
Propane		0.000942245
i-Butane		0.000110668
n-Butane		0.000268234
i-Pentane		0
n-Pentane		0
n-Hexane		8.41262E-06
n-Heptane		1.09519E-05
Octane		2.85667E-06
Nonane		0
Decane		0
Benzene		0.000926377
Toluene		0.00164184
Ethylbenzene		0
m-Xylene		0
MDEA		1.48885E-10
MEA		0
DEA		2.47628E-13
Triethylene Glycol		0
Water		10.2738
Mass Flow		**lb/h**
CO2		33844.6
Nitrogen		0.00368256
Methane		130.322
Ethane		2.35639
Propane		0.359923
i-Butane		0.0557205
n-Butane		0.135053
i-Pentane		0
n-Pentane		0
n-Hexane		0.00628007
n-Heptane		0.00950638
Octane		0.00282673
Nonane		0
Decane		0
Benzene		0.626837
Toluene		1.31046
Ethylbenzene		0
m-Xylene		0
MDEA		1.53688E-07
MEA		0
DEA		2.25527E-10
Triethylene Glycol		0
Water		1603.33

Bryan Research & Engineering, Inc.

ProMax® 3.2

with

TSWEET® & PROSIM®

Simulation Report

Project: Train 5,6 Permit Case.pmx

Licensed to EPCO Holdings, Inc. and Affiliates

Client Name: Enterprise Products
Location: Val Verde Trains 5 & 6
Job: Trains 5 & 6 Permit Case

ProMax Filename: C:\Documents and Settings\cbonan\My Documents\Projects\Val Verde VOC Mitigation\AFE - Val Verde VOC Mitigation\Design Basis (To-Be Cases)\To-Be Cases at Max-Rate, Permit Basis\Train 5,6 Permit Case.pmx
ProMax Version: 3.2.11188.0
Simulation Initiated: 8/21/2011 12:33:23 PM

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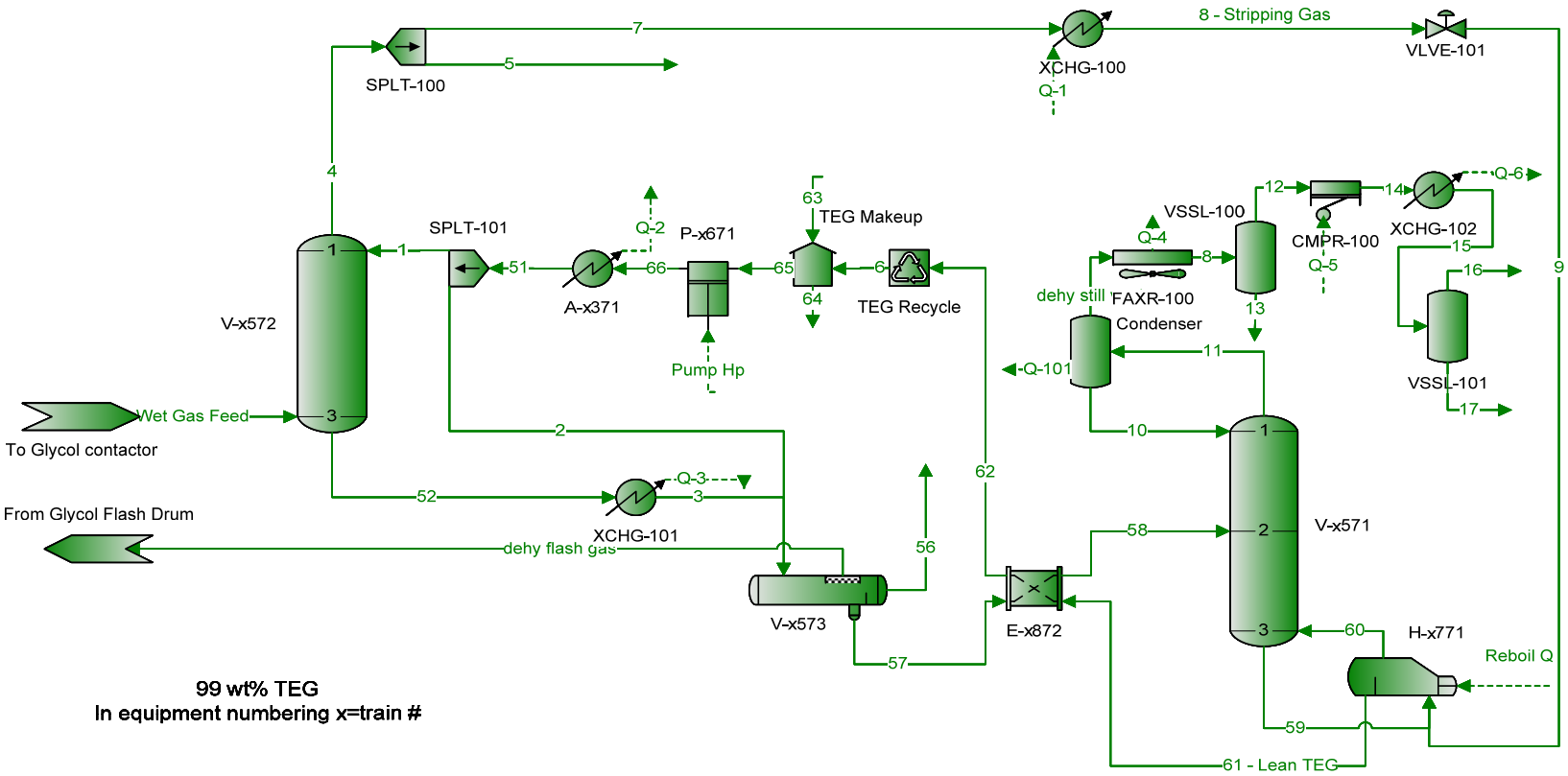
Report Navigator can be activated via the ProMax Navigator Toolbar.
An asterisk (*), throughout the report, denotes a user specified value.
A question mark (?) after a value, throughout the report, denotes an extrapolated or approximate value.

Glycol Dehydration Unit with Stripping Gas



99 wt% TEG
In equipment numbering x=train #

Process Streams		dehy flash gas	dehy still vent
Composition	**Status:**	**Solved**	**Solved**
Phase: **Total**	**From Block:**	**V-x573**	**Condenser**
	To Block:	**From Glycol Flash Drum**	**FAXR-100**
Mole Fraction		**%**	**%**
CO2		0.0878786	0.0124274
Nitrogen		0.00542533	0.00696927
Methane		97.8401	36.2827
Ethane		1.04951	0.180299
Propane		0.202079	0.0321685
i-Butane		0.0426190	0.00729695
n-Butane		0.0692242	0.0133134
i-Pentane		1.89320E-09	3.45255E-10
n-Pentane		2.68547E-09	5.96797E-10
n-Hexane		0.00504701	0.00239070
n-Heptane		0.0253050	0.0216839
Octane		0.00373206	0.00535688
Nonane		0	0
Decane		0	0
Benzene		0.00107558	0.00735877
Toluene		0.00134867	0.0164340
Ethylbenzene		5.49197E-08	9.57553E-07
m-Xylene		1.49118E-08	2.86401E-07
MDEA		6.83116E-06	0.00208349
MEA		7.47508E-07	0.000122768
DEA		9.49347E-08	1.88276E-05
Triethylene Glycol		0.000470099	0.0129999
Water		0.666150	63.3964
Mass Flow		**lb/h**	**lb/h**
CO2		0.0864166	0.194263
Nitrogen		0.00339594	0.0693453
Methane		35.0716	206.744
Ethane		0.705139	1.92564
Propane		0.199106	0.503838
i-Butane		0.0553494	0.150642
n-Butane		0.0899017	0.274849
i-Pentane		3.05206E-09	8.84775E-09
n-Pentane		4.32929E-09	1.52939E-08
n-Hexane		0.00971818	0.0731765
n-Heptane		0.0566566	0.771751
Octane		0.00952557	0.217345
Nonane		0	0
Decane		0	0
Benzene		0.00187727	0.204167
Toluene		0.00277660	0.537835
Ethylbenzene		1.30280E-07	3.61084E-05
m-Xylene		3.53735E-08	1.07999E-05
MDEA		1.81887E-05	0.0881849
MEA		1.02025E-06	0.00266361
DEA		2.23019E-07	0.000703086
Triethylene Glycol		0.00157743	0.693421
Water		0.268152	405.667

Bryan Research & Engineering, Inc.

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Simulation Report

Project: Train 4, 7, 8 at 53.33 + 31.17 MidMesa.pmx

Licensed to EPCO Holdings, Inc. and Affiliates

Client Name: Enterprise
Location: Val Verde Train 4, 7, 8
Job: Normal Ops Case w Flash Gas Treater Integrated

ProMax Filename: C:\Documents and Settings\cbonan\My Documents\Projects\Val Verde VOC Mitigation\AFE - Val Verde VOC Mitigation\Design Basis (To-Be Cases)\Emissions Factors Basis\Train 4, 7, 8 at 53.33 + 31.17 MidMesa.pmx
ProMax Version: 3.2.11188.0
Simulation Initiated: 3/7/2012 9:54:36 AM

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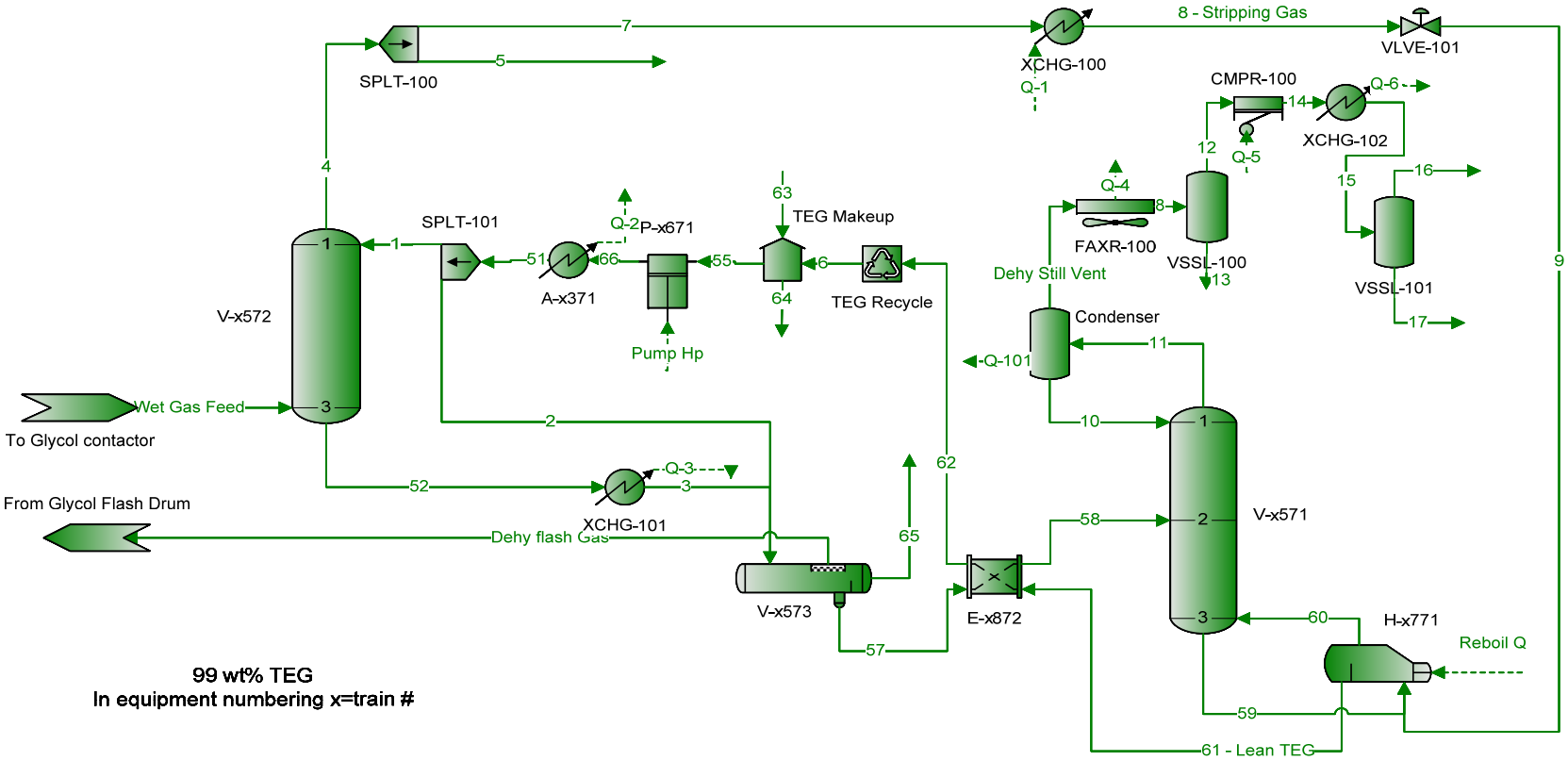
Glycol Dehydration Unit with Stripping Gas



99 wt% TEG
In equipment numbering x=train #

Process Streams		Amine Still Vent
Composition	**Status:**	**Solved**
Phase: **Total**	**From Block:**	**V-x407**
	To Block:	**--**
Mole Fraction		**%**
CO2		89.4791
Nitrogen		1.37434E-05
Methane		0.232410
Ethane		0.00827756
Propane		0.00174235
i-Butane		0.000168213
n-Butane		0.000343670
i-Pentane		2.27873E-05
n-Pentane		3.25283E-05
n-Hexane		8.98362E-06
n-Heptane		9.78738E-06
Octane		1.85163E-06
Nonane		0
Decane		0
Benzene		0.00143474
Toluene		0.00263828
Ethylbenzene		5.52186E-05
m-Xylene		0.000179676
MDEA		1.17000E-09
MEA		0
DEA		1.44170E-12
Triethylene Glycol		0
Water		10.2736
Mass Flow		**lb/h**
CO2		64159.4
Nitrogen		0.00627266
Methane		60.7460
Ethane		4.05522
Propane		1.25177
i-Butane		0.159292
n-Butane		0.325444
i-Pentane		0.0267864
n-Pentane		0.0382369
n-Hexane		0.0126133
n-Heptane		0.0159785
Octane		0.00344604
Nonane		0
Decane		0
Benzene		1.82592
Toluene		3.96054
Ethylbenzene		0.0955124
m-Xylene		0.310787
MDEA		2.27152E-06
MEA		0
DEA		2.46956E-09
Triethylene Glycol		0
Water		3015.48

Val Verde Feed Gas Composition

Component	Mol%	wt%
CO2	19.1030	38.8391
Nitrogen	0.0412	0.0533
Methane	79.5578	58.9624
Ethane	0.9457	1.3137
Propane	0.2384	0.4856
i-Butane	0.0386	0.1036
n-Butane	0.0398	0.1069
i-Pentane	0.0123	0.0410
n-Pentane	0.0091	0.0303
n-Hexane	0.0022	0.0088
n-Heptane	0.0101	0.0468
Octane	0.0010	0.0053
Nonane	0.0000	0.0000
Decane	0.0000	0.0000
Benzene	0.0003	0.0011
Toluene	0.0005	0.0021
Ethylbenzene	0.0000	0.0000
m-Xylene	0.0000	0.0000
Total	**100.000**	**100.000**
VOC's	0.3523	0.8315
HAP's	0.0030	0.0120

Red Cedar Feed Gas Composition

Component	Mol%	wt%
CO2	5.7465	14.2550
Nitrogen	0.0183	0.0289
Methane	93.7441	84.7680
Ethane	0.4006	0.6790
Propane	0.0561	0.1394
i-Butane	0.0112	0.0367
n-Butane	0.0158	0.0518
i-Pentane	0.0000	0.0000
n-Pentane	0.0000	0.0000
n-Hexane	0.0010	0.0049
n-Heptane	0.0051	0.0288
Octane	0.0008	0.0052
Nonane	0.0000	0.0000
Decane	0.0000	0.0000
Benzene	0.0002	0.0009
Toluene	0.0003	0.0016
Ethylbenzene	0.0000	0.0000
m-Xylene	0.0000	0.0000
Total	**100.0000**	**100.0000**
VOC's	0.0905	0.2691
HAP's	0.0015	0.0073

Middle Mesa Gas Composition

Component	Mol%	wt%
CO2	11.3079	25.0020
Nitrogen	0.0838	0.1179
Methane	85.4586	68.8768
Ethane	2.0762	3.1364
Propane	0.6597	1.4615
i-Butane	0.1128	0.3294
n-Butane	0.1497	0.4371
i-Pentane	0.0453	0.1642
n-Pentane	0.0377	0.1367
n-Hexane	0.0099	0.0429
n-Heptane	0.0486	0.2447
Octane	0.0054	0.0310
Nonane	0.0000	0.0000
Decane	0.0000	0.0000
Benzene	0.0016	0.0063
Toluene	0.0025	0.0116
Ethylbenzene	0.0001	0.0005
m-Xylene	0.0002	0.0011
Total	**100.0000**	**100.0000**
VOC's	1.0735	2.8668
HAP's	0.0143	0.0623

160 MM Val Verde + 93.5 MM Middle Mesa Blend

Component	Mol%	wt%
CO2	16.2276	34.0020
Nitrogen	0.0569	0.0759
Methane	81.7345	62.4282
Ethane	1.3627	1.9509
Propane	0.3938	0.8268
i-Butane	0.0660	0.1826
n-Butane	0.0803	0.2223
i-Pentane	0.0245	0.0841
n-Pentane	0.0196	0.0675
n-Hexane	0.0050	0.0207
n-Heptane	0.0243	0.1159
Octane	0.0026	0.0143
Nonane	0.0000	0.0000
Decane	0.0000	0.0000
Benzene	0.0008	0.0029
Toluene	0.0012	0.0054
Ethylbenzene	0.0000	0.0002
m-Xylene	0.0001	0.0004
Total	**100.0000**	**100.0000**
VOC's	0.6183	1.5430
HAP's	0.0072	0.0296

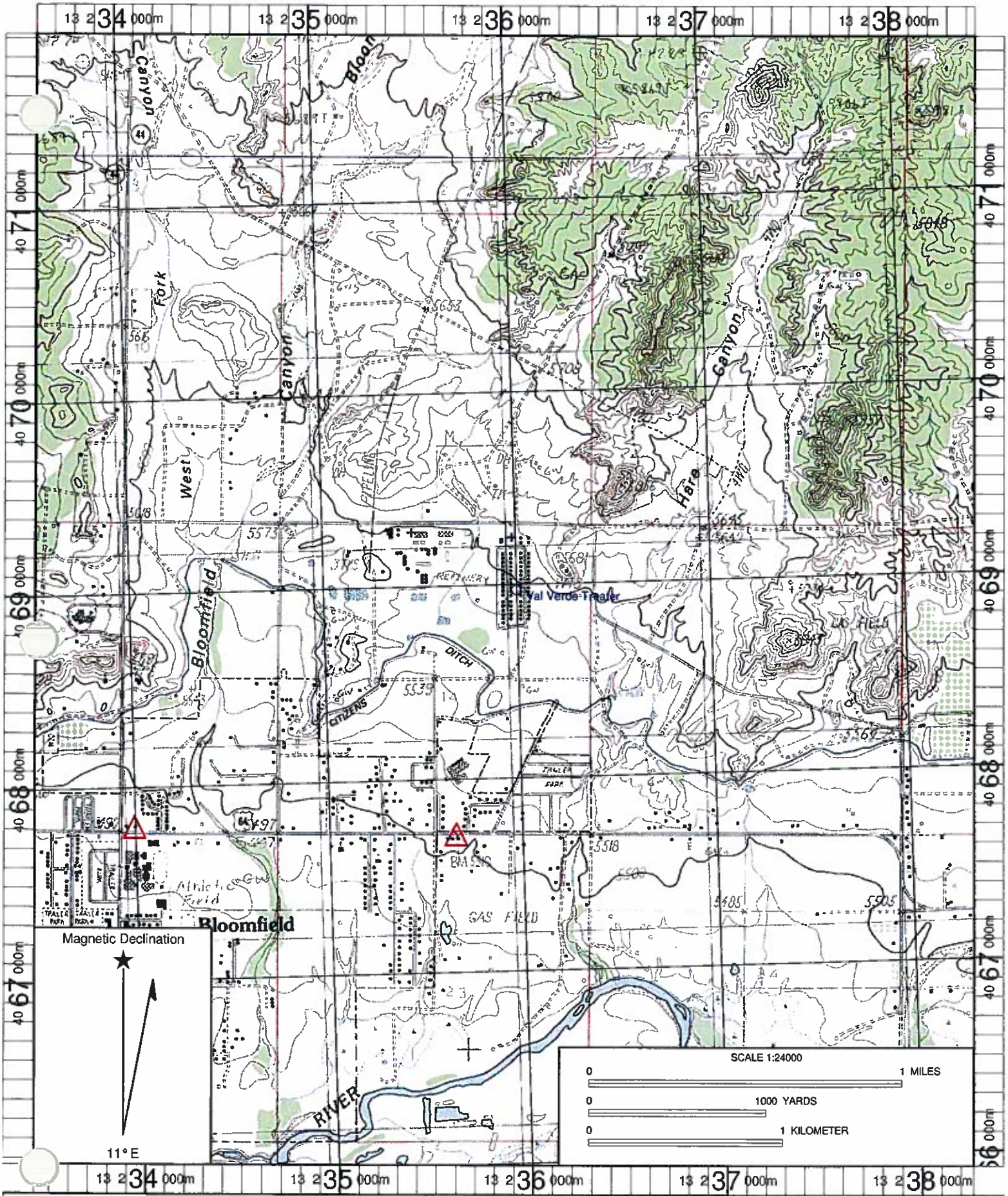
Section 8

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.



Name: BLOOMFIELD
Date: 6/2/2010
Scale: 1 inch equals 2000 feet

Location: 13 0235935 E 4068921 N NAD83
Caption: Val Verde Gas Treatment Plant

Datum: NAD83

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.

Not Applicable for a Title V application

Section 10

Written Description of the Routine Operations of the Facility

---

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

The purpose of the Val Verde facility is to remove carbon dioxide and water from field natural gas. Natural gas is received by pipeline and then treated by one of the five treating trains. Each train removes CO_2 using an amine unit and water using a glycol dehydration unit. After treatment, the gas is removed from the facility by pipeline.

Section 11
Source Determination

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

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

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

A. Identify the emission sources evaluated in this section (list and describe)**: See Table 2-A in Section 2 of this application.**

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

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

☒ **Yes** ☐ **No**

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

☒ **Yes** ☐ **No**

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

☒ **Yes** ☐ **No**

C. Make a determination:

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

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

Section 12

Section 12.A
PSD Applicability Determination for All Sources

(Submitting under 20.2.72, 20.2.74 NMAC)

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

A. This facility is:

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

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

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

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

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

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

Not Applicable for a Title V application

Section 13

Determination of State & Federal Air Quality Regulations

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

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

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

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

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

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

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

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

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

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

Example of a Table for STATE REGULATIONS:

STATE REGU-LATIONS CITATION	Title	Applies? Enter Yes or No	Unit(s) or Facility	JUSTIFICATION: (You may delete instructions or statements that do not apply in the justification column to shorten the document.)
20.2.1 NMAC	General Provisions	Yes	Facility	General Provisions apply to Notice of Intent, Construction, and Title V permit applications.
20.2.3 NMAC	Ambient Air Quality Standards NMAAQS	Yes	Facility	20.2.3 NMAC is a SIP approved regulation that limits the maximum allowable concentration of Total Suspended Particulates, Sulfur Compounds, Carbon Monoxide and Nitrogen Dioxide. The facility meets maximum allowable concentrations of TSP, SO_2, H_2S, NO_x, and CO under this regulation.
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 also notify the NMED of any excess emission per 20.2.7.110 NMAC.
20.2.23 NMAC	Fugitive Dust Control	No for permitted facilities, possible for NOIs	Facility	This regulation is not applicable because the facility is not a fugitive dust source.
20.2.33 NMAC	Gas Burning Equipment - Nitrogen Dioxide	No		This facility does not have existing gas burning equipment having a heat input of greater than 1,000,000 million British Thermal Units per year per unit. The facility is not subject to this regulation and does not have emission sources that meet the applicability requirements under 20.2.33.108 NMAC.
20.2.34 NMAC	Oil Burning Equipment: NO_2	No		This facility does not have oil burning equipment having a heat input of greater than 1,000,000 million British Thermal Units per year per unit. The facility is not subject to this regulation and does not have emission sources that meet the applicability requirements under 20.2.34.108 NMAC.
20.2.35 NMAC	Natural Gas Processing Plant – Sulfur	No		This regulation establishes sulfur emission standards for natural gas processing plants. Val Verde is a new natural gas processing plant as defined in 20.2.35.7.B NMAC and releases less than 5 tons of sulfur a day in plant processes and is therefore not subject to this regulation.
20.2.37 and 20.2.36 NMAC	Petroleum Processing Facilities and Petroleum Refineries	N/A	N/A	**These regulations were repealed by the Environmental Improvement Board. If you had equipment subject to 20.2.37 NMAC before the repeal, your combustion emission sources are now subject to 20.2.61 NMAC.**
20.2.38 NMAC	Hydrocarbon Storage Facility	No		This regulation is not applicable as no hydrocarbons containing hydrogen sulfide are stored at the facility. [20.2.38.109 NMAC]
20.2.39 NMAC	Sulfur Recovery Plant - Sulfur	No		This regulation establishes sulfur emission standards for sulfur recovery plants which are not part of petroleum or natural gas processing facilities. This regulation is not applicable as there are no sulfur recovery activities at the facility.
20.2.61.109 NMAC	Smoke & Visible Emissions	Yes	7, 8, 9, 11, 12, 13, 15, 16, 17, 20, 21, 22, 25, 26, 28	This regulation establishes controls on smoke and visible emissions from certain sources, including stationary combustion equipment. Engines and heaters are Stationary Combustion Equipment. Units subject to this regulation are Units 7, 8, 9, 11, 12, 13, 15, 16, 17, 20, 21, 22, 25, 26, and 28.
20.2.70 NMAC	Operating Permits	Yes	Facility	This regulation establishes requirements for obtaining an operating permit. This facility is a Title V major source therefore this regulation applies.

STATE REGU-LATIONS CITATION	Title	Applies? Enter Yes or No	Unit(s) or Facility	JUSTIFICATION: (You may delete instructions or statements that do not apply in the justification column to shorten the document.)
20.2.71 NMAC	Operating Permit Fees	Yes	Facility	This regulation establishes a schedule of operating permit emission fees. This facility is subject to 20.2.70 NMAC and is in turn subject to 20.2.71 NMAC.
20.2.72 NMAC	Construction Permits	Yes	Facility	This regulation establishes the requirements for obtaining a construction permit. This facility is subject to 20.2.72 NMAC and is permitted under NSR Permit 0728-M10.
20.2.73 NMAC	NOI & Emissions Inventory Requirements	Yes	Facility	This regulation establishes the requirements for emissions inventory reporting. All Title V major sources meet the applicability requirements of 20.2.73.300 NMAC.
20.2.74 NMAC	Permits – Prevention of Significant Deterioration (PSD)	Yes	Facility	This regulation establishes requirements for obtaining a prevention of significant deterioration permit. Val Verde is a PSD major source of greenhouse gases. Val Verde has not undergone a major modification and therefore does not currently require a PSD permit.
20.2.75 NMAC	Construction Permit Fees	Yes	Facility	This regulation establishes a schedule of operating permit emission fees. This facility is subject to 20.2.71 NMAC and is therefore not subject to 20.2.75 NMAC.
20.2.77 NMAC	New Source Performance	Yes	7, 8, 11, 12, 15, 16, 20, 21, 25, 26, 19, 30	This regulation establishes state authority to implement new source performance standards (NSPS) for stationary sources. This is a stationary source which is subject to the requirements of 40 CFR Part 60, as amended through December 31, 2010. NSPS Subpart Dc applies to Units 7, 8, 11, 12, 15, 16, 20, 21, 25, and 26 and NSPS Subpart LLL applies to the amine sweetening units (Units 19 and 30). NSPS A also applies to the units listed here.
20.2.78 NMAC	Emission Standards for HAPS	No		This regulation establishes state authority to implement emission standards for hazardous air pollutants subject to 40 CFR Part 61. Although this regulation does not apply to this facility under routine operating conditions, in the case of asbestos demolition, this regulation would be applicable as 40 CFR 61 Subparts A and M would apply.
20.2.79 NMAC	Permits – Nonattainment Areas	No		This regulation establishes the requirements for obtaining a nonattainment area permit. The facility is not located in a non-attainment area and therefore is not subject to this regulation.
20.2.80 NMAC	Stack Heights	No		This regulation establishes requirements for the evaluation of stack heights and dispersion techniques. This regulation is not applicable as all stacks at this facility follow good engineering practice.
20.2.82 NMAC	MACT Standards for source categories of HAPS	Yes	10, 14, 18, 24, 27	This regulation applies as MACT HH applies to Units 10, 14, 18, 24, and 27. This regulation is not applicable to units subject to MACT DDDDD as this regulation was not added to the Federal Register before December 31, 2010. [20.2.82.8 NMAC] The facility will be subject to MACT GGGGG in the event of a site remediation meeting the definitions under §63.795.

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

FEDERAL REGU-LATIONS CITATION	Title	Applies? Enter Yes or No	Unit(s) or Facility	JUSTIFICATION:
40 CFR 50	NAAQS	Yes	Facility	This regulation defines national ambient air quality standards. The facility meets all applicable national ambient air quality standards for NOx, CO, SO_2, H_2S, PM_{10}, and $PM_{2.5}$ under this regulation.
NSPS 40 CFR 60, Subpart A	General Provisions	Yes	7, 8, 11, 12, 15, 16, 20, 21, 25, 26, 19, 30	This regulation defines general provisions for relevant standards that have been set under this part. The facility is subject to this regulation because NSPS Subpart Dc applies to Units 7, 8, 11, 12, 15, 16, 20, 21, 25, and 26 and NSPS Subpart LLL applies to the amine sweetening units (Units 19 and 30).
NSPS 40 CFR60.40a, Subpart Da	Subpart Da, Performance Standards for **Electric Utility Steam Generating Units**	No		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 CFR60.40b Subpart Db	**Electric Utility Steam Generating Units**	No		This regulation establishes standards of performance for industrial-commercial-institutional steam generating units. This regulation does not apply because the facility does not operate any industrial-commercial-institutional steam generating units which commenced construction, modification, or reconstruction after June 19, 1984 and have a heat input capacity of greater than 29 MW (100 MMBtu/hr). [§60.4b(a)]
40 CFR 60.40c, Subpart Dc	Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units	Yes	7, 8, 11, 12, 15, 16, 20, 21, 25, 26	This regulation establishes standards of performance for small industrial-commercial-institutional steam generating units. This regulation applies as the facility has 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). [§60.40c(a)] This regulation applies to units 7, 8, 11, 12, 15, 16, 20, 21, 25 and 26.
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		This regulation establishes performance standards for storage vessels for petroleum liquids for which construction, reconstruction, or modification commenced after May 18, 1978, and prior to July 23, 1984. This regulation is not applicable as liquid storage vessels at the facility have a capacity of less than 1,589,873 liters (420,000 gallons) and are used to store condensate processed or treated prior to custody transfer. [§60.110a(b)]
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	No		This regulation establishes performance standards for storage vessels volatile organic liquids for which construction, reconstruction, or modification commenced after July 23, 1984. This regulation is not applicable as this facility has no storage vessels with a capacity greater than or equal to 75 cubic meters (m^3) that are used to store volatile organic liquids (VOL) for which construction, reconstruction, or modification is commenced after July 23, 1984. [§60.110b(a)]

FEDERAL REGU-LATIONS CITATION	Title	Applies? Enter Yes or No	Unit(s) or Facility	JUSTIFICATION:
	Commenced **After** July 23, 1984			
NSPS 40 CFR 60.330 Subpart GG	**Stationary Gas Turbines**	No		This regulation establishes standards of performance for certain stationary gas turbines. There are no turbines located at Val Verde therefore this regulation does not apply.
NSPS 40 CFR 60, Subpart KKK	Leaks of VOC from **Onshore Gas Plants**	No		This regulation defines standards of performance for equipment leaks of VOC emissions from onshore natural gas processing plants for which construction, reconstruction, or modification commenced after January 20, 1984, and on or before August 23, 2011. The facility is not a natural gas processing plant as defined in §60.631 as it does not extract natural gas liquids from field gas or fractionate mixed natural gas liquids to natural gas products. Accordingly, this regulation does not apply.
NSPS 40 CFR Part 60 Subpart LLL	Standards of Performance for **Onshore Natural Gas Processing**: SO_2 Emissions	Yes	19, 30	This regulation establishes standards of performance for SO_2 emissions from onshore natural gas processing for which construction, reconstruction, or modification of the amine sweetening unit commenced after January 20, 1984 and on or before August 23, 2011. This regulation applies to the amine sweetening units at the facility [§60.640(a)]. Because the facility is designed to process less than two long tons of H_2S per day, only recordkeeping and reporting requirements apply. [60.640(b)]
NSPS 40 CFR Part 60 Subpart OOOO	Standards of Performance for Crude Oil and Natural Gas Production, Transmission, and Distribution for which construction, modification or reconstruction commenced after August 23, 2011 and before September 18, 2015	No		This regulation is not applicable because the plant does not have equipment covered under the regulation that was constructed, modified or reconstructed after August 23, 2011 and before September 18, 2015 (§60.5365).
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	No		This regulation is not applicable because the plant does not have equipment covered under the regulation that was constructed, modified or reconstructed after September 18, 2015 (§60.5365(a)).
NSPS 40 CFR 60 Subpart IIII	Standards of performance for Stationary Compression Ignition Internal Combustion Engines	No		This regulation is not applicable because the diesel-fired emergency generator engine (Unit 10) and firewater pump (Unit 11) commenced construction prior to July 11, 2005 (§60.4200(a)(2)).

FEDERAL REGU-LATIONS CITATION	Title	Applies? Enter Yes or No	Unit(s) or Facility	JUSTIFICATION:
NSPS 40 CFR Part 60 Subpart JJJJ	Standards of Performance for Stationary Spark Ignition Internal Combustion Engines	No		This regulation establishes standards of performance for stationary spark ignition combustion engines. This regulation is not applicable as there are no RICE located at the facility.
NSPS 40 CFR 60 Subpart TTTT	Standards of Performance for Greenhouse Gas Emissions for Electric Generating Units	No		This regulation is not applicable because the plant does not have electric generating units (§60.5509(a)).
NSPS 40 CFR 60 Subpart UUUU	Emissions Guidelines for Greenhouse Gas Emissions and Compliance Times for Electric Utility Generating Units	No		This regulation is not applicable because the plant does not have electric generating units (§60.5710a).
NSPS 40 CFR 60, Subparts WWW, XXX, Cc, and Cf	Standards of performance for Municipal Solid Waste (MSW) Landfills	No		These regulations are not applicable because the plant is not a municipal solid waste (MSW) landfill.
NESHAP 40 CFR 61 Subpart A	General Provisions	No		This regulation defines general provisions for relevant standards that have been set under this part. Although this standard does not apply to this facility under routine operating conditions, in the case of asbestos demolition, Subparts A and M would apply.
NESHAP 40 CFR 61 Subpart E	National Emission Standards for **Mercury**	No		This regulation establishes a national emission standard for mercury. The facility does not have stationary sources which process mercury ore to recover mercury, use mercury chlor-alkali cells to produce chlorine gas and alkali metal hydroxide, and incinerate or dry wastewater treatment plant sludge [40 CFR Part 61.50]. The facility is not subject to this regulation.
NESHAP 40 CFR 61 Subpart V	National Emission Standards for **Equipment Leaks** (Fugitive Emission Sources)	No		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	10, 14, 18, 24, 27, 7, 8, 11, 12, 15, 16, 9, 13, 17, 22, 28, 20, 21, 25, 26	This regulation defines general provisions for relevant standards that have been set under this part. This regulation applies as MACT HH applies to Units 10, 14, 18, 24, and 27 and MACT DDDDD applies to Units 7, 8, 11, 12, 15, 16, 9, 13, 17, 22, 28, 20, 21, 25, and 26. The facility will be subject to MACT GGGGG in the event of a site remediation meeting the definitions under §63.795.
MACT 40 CFR 63.760 Subpart HH	**Oil and Natural Gas Production Facilities**	Yes	10, 14, 18, 24, 27	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. MACT HH applies to the listed units as they are existing "small" glycol dehydration units at a major source of HAPs. [§63.760(a)(1)] [§63.760(b)(1)(i)(B)]

FEDERAL REGU-LATIONS CITATION	Title	Applies? Enter Yes or No	Unit(s) or Facility	JUSTIFICATION:
MACT 40 CFR 63 Subpart HHH		No		This regulation establishes national emission standards for hazardous air pollutants from natural gas transmission and storage facilities. Val Verde is a major source of HAPs but does not meet the definition of "facility" as defined in §63.1271. Val Verde does not process, compress, or store natural gas prior to entering a pipeline to a local distribution company or a final end user. This regulation does not apply.
MACT 40 CFR 63 Subpart DDDDD	National Emission Standards for Hazardous Air Pollutants for Major Industrial, Commercial, and Institutional Boilers & Process Heaters	Yes	7, 8, 11, 12, 15, 16, 9, 13, 17, 22, 28, 20, 21, 25, 26	This regulation establishes emission limitations and work practice standards for HAPs emitted from industrial, commercial, and institutional boilers and process heaters at major sources of HAPs. This regulation applies as the facility is equipped with process heaters as defined in §63.7575 and is a major source of HAPs. Applies to Units 7, 8, 11, 12, 15, 16, 9, 13, 17, 22, 28, 20, 21, 25, and 26. [§63.7485]
MACT 40 CFR 63 Subpart UUUUU	National Emission Standards for Hazardous Air Pollutants Coal & Oil Fire Electric Utility Steam Generating Unit	No		This regulation does not apply as the plant does not have electric generating units (§63.9980).
MACT 40 CFR 63 Subpart ZZZZ	National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (**RICE MACT**)	No		This regulation defines national emissions standards for HAPs for stationary reciprocating Internal Combustion Engines. This regulation is not applicable as there are no engines located at the facility.
40 CFR 64	**Compliance Assurance Monitoring**	No		This regulation defines compliance assurance monitoring. The regulation does not apply as the facility does not have any emissions units with pre-controlled emissions greater than 100 tpy.
40 CFR 68	**Chemical Accident Prevention**	No		This regulation is not applicable as the facility does not process more than a threshold quantity of a regulated substance.
Title IV – Acid Rain 40 CFR 72	**Acid Rain**	No		This part establishes the acid rain program. This part does not apply because the facility is not covered by this regulation [40 CFR Part 72.6].
Title IV – Acid Rain 40 CFR 73	**Sulfur Dioxide** Allowance Emissions	No		This regulation establishes sulfur dioxide allowance emissions for certain types of facilities. This part does not apply because the facility is not the type covered by this regulation [40 CFR Part 73.2].
Title IV-Acid Rain 40 CFR 75	**Continuous Emissions Monitoring**	No		This regulation does not apply as the facility is not an acid rain source.
Title IV – Acid Rain 40 CFR 76	**Acid Rain** Nitrogen Oxides **Emission Reduction Program**	No		This regulation establishes an acid rain nitrogen oxides emission reduction program. This regulation applies to each coal-fired utility unit that is subject to an acid rain emissions limitation or reduction requirement for SO_2. This part does not apply because the facility does not operate any coal-fired units [40 CFR Part 76.1].

FEDERAL REGU-LATIONS CITATION	Title	Applies? Enter Yes or No	Unit(s) or Facility	JUSTIFICATION:
Title VI – 40 CFR 82	Protection of **Stratospheric Ozone**	No	N/A	Not Applicable –facility does not "service", "maintain" or "repair" class I or class II appliances nor "disposes" of the appliances. Note: Disposal definition in 82.152: Disposal means the process leading to and including: (1) The discharge, deposit, dumping or placing of any discarded appliance into or on any land or water; (2) The disassembly of any appliance for discharge, deposit, dumping or placing of its discarded component parts into or on any land or water; or (3) The disassembly of any appliance for reuse of its component parts. "Major maintenance, service, or repair means" any maintenance, service, or repair that involves the removal of any or all of the following appliance components: compressor, condenser, evaporator, or auxiliary heat exchange coil; or any maintenance, service, or repair that involves uncovering an opening of more than four (4) square inches of "flow area" for more than 15 minutes.

Section 14

Operational Plan to Mitigate Emissions

(Submitting under 20.2.70, 20.2.72, 20.2.74 NMAC)

☐ **Title V Sources** (20.2.70 NMAC)**:** By checking this box and certifying this application the permittee certifies that it has developed an **Operational Plan to Mitigate Emissions During Startups, Shutdowns, and Emergencies** defining the measures to be taken to mitigate source emissions during startups, shutdowns, and emergencies as required by 20.2.70.300.D.5(f) and (g) NMAC. This plan shall be kept on site to be made available to the Department upon request. This plan should not be submitted with this application.

☐ **NSR** (20.2.72 NMAC)**, PSD** (20.2.74 NMAC) **& Nonattainment** (20.2.79 NMAC) **Sources:** By checking this box and certifying this application the permittee certifies that it has developed an **Operational Plan to Mitigate Source Emissions During Malfunction, Startup, or Shutdown** defining the measures to be taken to mitigate source emissions during malfunction, startup, or shutdown as required by 20.2.72.203.A.5 NMAC. This plan shall be kept on site to be made available to the Department upon request. This plan should not be submitted with this application.

☒ **Title V** (20.2.70 NMAC)**, NSR** (20.2.72 NMAC)**, PSD** (20.2.74 NMAC) **& Nonattainment** (20.2.79 NMAC) **Sources:** By checking this box and certifying this application the permittee certifies that it has established and implemented a Plan to Minimize Emissions During Routine or Predictable Startup, Shutdown, and Scheduled Maintenance through work practice standards and good air pollution control practices as required by 20.2.7.14.A and B NMAC. This plan shall be kept on site or at the nearest field office to be made available to the Department upon request. This plan should not be submitted with this application.

Harvest has the appropriate documentation and will make it available to the NMED upon request.

Section 15

Alternative Operating Scenarios

(Submitting under 20.2.70, 20.2.72, 20.2.74 NMAC)

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

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

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

No alternative operating scenarios are included in 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) for more detailed instructions on SSM emissions modeling requirements.
3) Title V (20.2.70 NMAC) ambient impact analysis: Title V applications must specify the construction permit and/or Title V Permit number(s) for which air quality dispersion modeling was last approved. Facilities that have only a Title V permit, such as landfills and air curtain incinerators, are subject to the same modeling required for preconstruction permits required by 20.2.72 and 20.2.74 NMAC.

What is the purpose of this application?	Enter an X for each purpose that applies
New PSD major source or PSD major modification (20.2.74 NMAC). See #1 above.	
New Minor Source or significant permit revision under 20.2.72 NMAC (20.2.72.219.D NMAC). See #1 above. **Note:** Neither modeling nor a modeling waiver is required for VOC emissions.	
Reporting existing pollutants that were not previously reported.	
Reporting existing pollutants where the ambient impact is being addressed for the first time.	
Title V application (new, renewal, significant, or minor modification. 20.2.70 NMAC). See #3 above.	
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.

As this is a Title V application, air dispersion modeling is not required.

Section 17

Compliance Test History

(Submitting under 20.2.70, 20.2.72, 20.2.74 NMAC)

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

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

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

Unit No.	Test Description	Test Date

Not applicable as this facility does not have any units with required compliance testing.

Section 18

Addendum for Streamline Applications

Do not print this section unless this is a streamline application.

Streamline Applications do not require a complete application. Submit Sections 1-A, 1-B, 1-D, 1-F, 1-G, 2-A, 2-C thru L, Sections 3 thru 8, Section 13, Section 18, Section 22, and Section 23 (Certification). Other sections may be required at the discretion of the Department. 20.2.72.202 NMAC Exemptions do not apply to Streamline sources. 20.2.72.219 NMAC revisions and modifications do not apply to Streamline sources, thus 20.2.72.219 type actions require a complete new application submittal. Please do not print sections of a streamline application that are not required.

Not Applicable for a Title V application

Section 19

Requirements for Title V Program

Do not print this section unless this is a Title V application.

Who Must Use this Attachment:

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

To save paper and to standardize the application format, delete this sentence, and begin your submittal for this item here.

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

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

As there are no emission units that have uncontrolled emissions above major source limits, CAM is not applicable to the equipment at this site.

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

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

The facility is in compliance with all applicable requirements and regulations at the time this permit application is being submitted. The regulations included in the Val Verde Gas Treatment Plant Title V permit are currently being met and will continue to be met by Harvest Four Corners, LLC.

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

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

Harvest Four Corners, LLC will continue to meet the requirements of any applicable requirements for which they are in compliance with at the time this permit application is being submitted. Enterprise will also comply with any requirements that become applicable during the permit term.

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

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

Harvest Four Corners, LLC will submit any required compliance certifications as specified in the facility Title V Operating Permit.

19.5 - Stratospheric Ozone and Climate Protection

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

1. Does your facility have any air conditioners or refrigeration equipment that uses CFCs, HCFCs or other ozone-depleting substances? ☐ **Yes** ☒ **No**

2. Does any air conditioner(s) or any piece(s) of refrigeration equipment contain a refrigeration charge greater than 50 lbs? ☐ **Yes** ☒ **No**

   (If the answer is yes, describe the type of equipment and how many units are at the facility.)

3. Do your facility personnel maintain, service, repair, or dispose of any motor vehicle air conditioners (MVACs) or appliances ("appliance" and "MVAC" as defined at 82. 152)? ☐ **Yes** ☒ **No**

4. Cite and describe which Title VI requirements are applicable to your facility (i.e. 40 CFR Part 82, Subpart A through G.)

Title VI, Section 608 (National Recycling ad Emissions Reduction Program) and Section 609 (Servicing of Motor Vehicle Air Conditioners) are not applicable to this site.

19.6 - Compliance Plan and Schedule

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

A. Description of Compliance Status: (20.2.70.300.D.11.a NMAC)
A narrative description of your facility's compliance status with respect to all applicable requirements (as defined in 20.2.70 NMAC) at the time this permit application is submitted to the department.

B. Compliance plan: (20.2.70.300.D.11.B NMAC)
A narrative description of the means by which your facility will achieve compliance with applicable requirements with which it is not in compliance at the time you submit your permit application package.

C. Compliance schedule: (20.2.70.300D.11.c NMAC)
A schedule of remedial measures that you plan to take, including an enforceable sequence of actions with milestones, which will lead to compliance with all applicable requirements for your source. This schedule of compliance must be at least as stringent as that contained in any consent decree or administrative order to which your source is subject. The obligations of any consent decree or administrative order are not in any way diminished by the schedule of compliance.

D. Schedule of Certified Progress Reports: (20.2.70.300.D.11.d NMAC)
A proposed schedule for submission to the department of certified progress reports must also be included in the compliance schedule. The proposed schedule must call for these reports to be submitted at least every six (6) months.

E. Acid Rain Sources: (20.2.70.300.D.11.e NMAC)
If your source is an acid rain source as defined by EPA, the following applies to you. For the portion of your acid rain source subject to the acid rain provisions of title IV of the federal Act, the compliance plan must also include any additional requirements under the acid rain provisions of title IV of the federal Act. Some requirements of title IV regarding the schedule and methods the source will use to achieve compliance with the acid rain emissions limitations may supersede the requirements of title V and 20.2.70 NMAC. You will need to consult with the Air Quality Bureau permitting staff concerning how to properly meet this requirement.

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

This site is currently in compliance with all applicable requirements; therefore, a compliance plan and schedule are not required.

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

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

This site is not subject to section 112(r) of the Clean Air Act; therefore, an RMP has not been submitted to and approved by EPA.

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

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

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

Other States: Colorado – 31 km
Indian Tribes: Navajo Nation Reservation – 25 km; Jicarilla Apache Nation Reservation – 68 km

19.9 - Responsible Official

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

The Responsible Official for the Val Verde Gas Treatment Plant is Travis Jones, EHS Manager of Harvest Midstream.

Section 22: Certification

Company Name: _____

I, _____, 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 ____ day of _____, _____, upon my oath or affirmation, before a notary of the State of

_____.

_____ _____
*Signature Date

_____ _____
Printed Name Title

Scribed and sworn before me on this ____ day of _____, _____.

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

_____ day of _____, _____.

_____ _____
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.