February 17, 2026

New Mexico Environmental Department
Air Quality Bureau, Permit Section
525 Camino de los Marquez, Ste. 1
Santa Fe, New Mexico 87505
Phone: (505) 476-4300

RE: Significant Revision
Permit Number 0859-M10R4
Milagro Gas Treating Plant
San Juan County, New Mexico
Harvest Four Corners, LLC

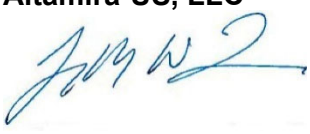
On behalf of Harvest Four Corners, LLC (Harvest), Altamira-US is submitting an application for significant revision of the 0859-M10R4 construction permit for the Milagro Gas Treating Plant. Harvest is requesting to replace one (1) Holman/Zurn 190 MMBtu/hr boiler (Unit 2) with one (1) Babcock & Wilcox 135.2 MMBtu/hr boiler (Unit 2A) equipped with a Flue Gas Recirculation (FGR), a low NOx burner (LNB), and with a Selective Catalytic Reduction (SCR) control device. Harvest is also updating emissions from the TEG dehydrator still vents (Units 9b, 10b, 11b, 14, 15), the amine regenerator vents (Units 16a, 16b, 17, 18, 19), startup, shutdown, and maintenance (Units SSM1, SSM2), and the fugitives (Unit F1) based on current gas analyses from the facility. In addition, malfunction emissions (Unit M1) are being removed from the permit.

Attached are two copies of the Milagro Gas Treating Plant significant revision application and a check for $500 to cover the permit filing fee.

Electronic versions of the application files will be provided to the state after the application is assigned to a permit reviewer.

Please don't hesitate to call me at (405) 702-1618 or email at Laura.Worthen-Lodes@Altamira-us.com if you have any questions.

Sincerely,
Altamira-US, LLC



Laura Worthen Lodes
Chief Engineering Officer

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		

Universal Air Quality Permit Application

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

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

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

Acknowledgements:

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

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

☒ Check No.: 15826 in the amount of $500

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

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

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

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

Section 1 – Facility Information

Section 1-A: Company Information

		AI # if known: 1277	Updating Permit #: 0859-M10R4
1	Facility Name: Milagro Gas Treating Plant	Plant primary SIC Code (4 digits): 1389	
		Plant NAIC code (6 digits): 211130	
a	Facility Street Address (If no facility street address, provide directions from a prominent landmark): 1754 Arroyo Drive, Bloomfield, New Mexico 87413		
2	Plant Operator Company Name: Harvest Four Corners, LLC	Phone/Fax: (505) 632-4600 / (505) 632-4782	
a	Plant Operator Address: 1755 Arroyo Drive, 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: Laura Worthen-Lodes	Phone/Fax: (405) 702-1618
a	Mailing Address: 525 Central Park Dr., Suite 500 Oklahoma City, OK 73105	E-mail: Laura.Worthen-Lodes@Altamira-US.com
6	Plant Operator Contact: Brandon Pearson	Phone/Fax: (970) 385-3824 / (505) 632-4782
a	Address: 1755 Arroyo Drive, Bloomfield, NM 87413	E-mail: bpearson@harvestmidstream.com
7	Air Permit Contact: Jennifer Nygren	Title: Environmental Specialist
a	E-mail: jdeal@harvestmidstream.com	Phone/Fax: (505) 619-0025
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): N/A
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: P101-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: 0859-M10R4
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: 27 MMSCF @ 10% CO_2 [(a)]	Daily: 645 MMSCF @ 10% CO_2 [(a)]	Annually: 235,425 MMSCF @ 10% CO_2 [(a)]
b	Proposed	Hourly: 27 MMSCF @ 10% CO_2 [(a)]	Daily: 645 MMSCF @ 10% CO_2 [(a)]	Annually: 235,425 MMSCF @ 10% CO_2 [(a)]
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: 27 MMSCF @ 10% CO_2 [(a)]	Daily: 645 MMSCF @ 10% CO_2 [(a)]	Annually: 235,425 MMSCF @ 10% CO_2 [(a)]
b	Proposed	Hourly: 27 MMSCF @ 10% CO_2 [(a)]	Daily: 645 MMSCF @ 10% CO_2 [(a)]	Annually: 235,425 MMSCF @ 10% CO_2 [(a)]

[(a)] The station's capacity is dependent on operating conditions, so actual throughput will vary from the rated capacity.

Section 1-D: Facility Location Information

1	Latitude (decimal degrees): 36.735536	Longitude (decimal degrees): -107.941502	County: San Juan	Elevation (ft): 5,700
2	UTM Zone: ☐ 12 or ☒ 13	Datum: ☐ NAD 83 ☒ WGS 84		
a	UTM E (in meters, to nearest 10 meters): 237,340	UTM N (in meters, to nearest 10 meters): 4,069,570		
3	Name and zip code of nearest New Mexico town: Bloomfield, NM 87413			
4	Detailed Driving Instructions from nearest NM town (attach a road map if necessary): From Bloomfield drive 1.5 miles north on Highway 550 to Arizona, turn right and drive 1.9 miles to Arroyo Drive, turn left and drive 0.25 miles to plant (on east side of the road).			
5	The facility is approximately 3 miles northeast of Bloomfield, NM.			
6	Land Status of facility (check one): ☒ Private ☐ Indian/Pueblo ☐ Government ☐ BLM ☐ Forest Service ☐ Military			
7	List all municipalities, Indian tribes, and counties within a ten (10) mile radius (20.2.72.203.B.2 NMAC) of the property on which the facility is proposed to be constructed or operated: Bloomfield, Aztec, Navajo Nation, 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/air-quality/modeling-publications/)? ☐ Yes ☒ No (20.2.72.206.A.7 NMAC) If yes, list all with corresponding distances in kilometers: N/A			
9	Name nearest Class I area: Mesa Verde National Park, Colorado			
10	Shortest distance (in km) from facility boundary to the boundary of the nearest Class I area (to the nearest 10 meters): 64.2 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: ~1,610 m			
12	Method(s) used to delineate the Restricted Area: Fence "**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	($\frac{\text{hours}}{\text{year}}$): 8,760		
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: N/A		NOV Tracking No: N/A
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: N/A		
c	Document Title: N/A	Date: N/A	Requirement # (or page # and paragraph #): N/A
d	Provide the required text to be inserted in this permit: N/A		
2	Is air quality dispersion modeling or modeling waiver being submitted with this application? ☒ 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: N/A 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): Michelle Roger		Phone: (713) 289-2630
a	R.O. Title: EH&S Manager	R.O. e-mail: Michelle.McCracken@harvestmidstream.com	
b	R. O. Address: 1111 Travis Street, Houston, TX 77002		
2	Alternate Responsible Official (20.2.70.300.D.2 NMAC): Austin Harrison		Phone: (318) 230-1395
a	A. R.O. Title: Operations Manager	A. R.O. e-mail: aharrison@harvestmidstream.com	
b	A. R. O. Address: 1111 Travis Street, Houston, TX 77002		
3	Company's Corporate or Partnership Relationship to any other Air Quality Permittee (List the names of any companies that have operating (20.2.70 NMAC) permits and with whom the applicant for this permit has a corporate or partnership relationship): N/A		
4	Name of Parent Company ("Parent Company" means the primary name of the organization that owns the company to be permitted wholly or in part.): Harvest Midstream 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: Colorado (29 km), Navajo Nation (5 km), Southern Ute Indian Tribe (29 km), Ute Mountain Ute Tribe (30 km), and Jicarilla Apache Nation (66 km)

Section 1-I – Submittal Requirements

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

Hard Copy Submittal Requirements:

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

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

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

Electronic files sent by (check one):

☐ CD/DVD attached to paper application

☒ Secure electronic transfer. Air Permit Contact Name: Laura Worthen-Lodes, Email: Laura.Worthen-Lodes@altamira-us.com, Phone number: (405) 702-1618.

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

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

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

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

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

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

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

2) The documents should also be submitted in Microsoft Office compatible file format (Word, Excel, etc.) allowing us to access the text and formulas in the documents (copy & paste). Any documents that cannot be submitted in a Microsoft Office compatible format shall be saved as a PDF file from within the electronic document that created the file. If you are unable to provide Microsoft office compatible electronic files or internally generated PDF files of files (items that were not created electronically: i.e. brochures, maps, graphics, etc,), submit these items in hard copy format. We must be able to review the formulas and inputs that calculated the emissions.

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

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

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Table 2-A: Regulated Emission Sources

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

Unit Number[1]	Source Description	Make	Model #	Serial #	Manufacturer's Rated Capacity[3] (Specify Units)	Requested Permitted Capacity[3] (Specify Units)	Date of Manufacture[2] / Date of Construction/ Reconstruction[2]	Controlled by Unit # / Emissions vented to Stack #	Source Classification Code (SCC)	For Each Piece of Equipment, Check One	RICE Ignition Type (CI, SI, 4SLB, 4SRB, 2SLB)[4]	Replacing Unit No.
1	Boiler	Holman/Zurn	22M Keystone	98833	137.98 MMBtu/hr	137.98 MMBtu/hr	1973 / 1993	LNB-1 / 1	10200601	☑ Existing (unchanged) ☐ New/Additional ☐ To Be Modified ☐ To be Removed ☐ Replacement Unit ☐ To be Replaced	N/A	N/A
2	Boiler	Holman/Zurn	22M Keystone	98728	190 MMBtu/hr	190 MMBtu/hr	1973 / 1993	N/A / 2	10200601	☐ Existing (unchanged) ☐ New/Additional ☐ To Be Modified ☐ To be Removed ☐ Replacement Unit ☑ To be Replaced	N/A	N/A
2A	Boiler	Babcock & Wilcox	FMO-80	N/A	135.2 MMBtu/hr	135.2 MMBtu/hr	N/A / N/A	SCR-1 / 2A	10200601	☐ Existing (unchanged) ☐ New/Additional ☐ To Be Modified ☐ To be Removed ☑ Replacement Unit ☐ To be Replaced	N/A	2
3	Boiler	Holman/Zurn	22M Keystone	98729	137.98 MMBtu/hr	137.98 MMBtu/hr	1973 / 1993	LNB-3 / 3	10200601	☑ Existing (unchanged) ☐ New/Additional ☐ To Be Modified ☐ To be Removed ☐ Replacement Unit ☐ To be Replaced	N/A	N/A
9a	Dehydrator Reboiler (Train 1)	Maloney Crawford	N/A	N/A	3.0 MMBtu/hr	3.0 MMBtu/hr	1980 / 1991	N/A / 9a	31000228	☑ Existing (unchanged) ☐ New/Additional ☐ To Be Modified ☐ To be Removed ☐ Replacement Unit ☐ To be Replaced	N/A	N/A
9b	TEG Dehydrator Still Vent (Train 1)	Maloney Crawford	N/A	80-1-D-4484-OA	145 MMscfd	145 MMscfd	1980 / 1991	VRU-1 / 9b	31000227	☐ Existing (unchanged) ☐ New/Additional ☑ To Be Modified ☐ To be Removed ☐ Replacement Unit ☐ To be Replaced	N/A	N/A
10a	Dehydrator Reboiler (Train 2)	Sivalls	N/A	N/A	2.25 MMBtu/hr	2.25 MMBtu/hr	1991 / 1991	N/A / 10a	31000228	☑ Existing (unchanged) ☐ New/Additional ☐ To Be Modified ☐ To be Removed ☐ Replacement Unit ☐ To be Replaced	N/A	N/A
10b	TEG Dehydrator Still Vent (Train 2)	Sivalls	N/A	27.140	145 MMscfd	145 MMscfd	1991 / 1991	VRU-1 / 10b	31000227	☐ Existing (unchanged) ☐ New/Additional ☑ To Be Modified ☐ To be Removed ☐ Replacement Unit ☐ To be Replaced	N/A	N/A
11a	Dehydrator Reboiler (Train 3)	Rama Fab	N/A	N/A	3.00 MMBtu/hr	3.00 MMBtu/hr	1976 / 1991	N/A / 11a	31000228	☑ Existing (unchanged) ☐ New/Additional ☐ To Be Modified ☐ To be Removed ☐ Replacement Unit ☐ To be Replaced	N/A	N/A
11b	TEG Dehydrator Still Vent (Train 3)	Rama Fab	N/A	01798	145 MMscfd	145 MMscfd	1976 / 1991	VRU-1 / 11b	31000227	☐ Existing (unchanged) ☐ New/Additional ☑ To Be Modified ☐ To be Removed ☐ Replacement Unit ☐ To be Replaced	N/A	N/A
14	TEG Dehydrator Still Vent (Train 4)	Sivalls	N/A	28.454	90 MMscfd	90 MMscfd	1997 / 1997	VRU-2 / 14	31000227	☐ Existing (unchanged) ☐ New/Additional ☑ To Be Modified ☐ To be Removed ☐ Replacement Unit ☐ To be Replaced	N/A	N/A
15	TEG Dehydrator Still Vent (Train 5)	T.H. Russell	N/A	771-521	120 MMscfd	120 MMscfd	1994 / 1996	VRU-1 / 15	31000227	☐ Existing (unchanged) ☐ New/Additional ☑ To Be Modified ☐ To be Removed ☐ Replacement Unit ☐ To be Replaced	N/A	N/A
16a	Amine Regenerator Vent (Train 1)	General Welding Works	N/A	73-29	145 MMscfd	145 MMscfd	1974 / 1991	N/A / 16a	31000201	☐ Existing (unchanged) ☐ New/Additional ☑ To Be Modified ☐ To be Removed ☐ Replacement Unit ☐ To be Replaced	N/A	N/A
16b	Amine Regenerator Vent (Train 2)	Belmas, Inc.	N/A	11396	145 MMscfd	145 MMscfd	1973 / 1991	N/A / 16b	31000201	☐ Existing (unchanged) ☐ New/Additional ☑ To Be Modified ☐ To be Removed ☐ Replacement Unit ☐ To be Replaced	N/A	N/A
17	Amine Regenerator Vent (Train 3)	Belmas, Inc.	N/A	73-30	145 MMscfd	145 MMscfd	1973 / 1991	N/A / 17	31000201	☐ Existing (unchanged) ☐ New/Additional ☑ To Be Modified ☐ To be Removed ☐ Replacement Unit ☐ To be Replaced	N/A	N/A
18	Amine Regenerator Vent (Train 4)	Field Erection	N/A	F-1014	90 MMscfd	90 MMscfd	1965 / 1991	N/A / 18	31000201	☐ Existing (unchanged) ☐ New/Additional ☑ To Be Modified ☐ To be Removed ☐ Replacement Unit ☐ To be Replaced	N/A	N/A
19	Amine Regenerator Vent (Train 5)	Fabwell Corp.	N/A	95-1004-1	120 MMscfd	120 MMscfd	1995 / 1995	N/A / 19	31000201	☐ Existing (unchanged) ☐ New/Additional ☑ To Be Modified ☐ To be Removed ☐ Replacement Unit ☐ To be Replaced	N/A	N/A

Unit Number[1]	Source Description	Make	Model #	Serial #	Manufacturer's Rated Capacity[3] (Specify Units)	Requested Permitted Capacity[3] (Specify Units)	Date of Manufacture[2] / Date of Construction/ Reconstruction[2]	Controlled by Unit # / Emissions vented to Stack #	Source Classification Code (SCC)	For Each Piece of Equipment, Check One	RICE Ignition Type (CI, SI, 4SLB, 4SRB, 2SLB)[4]	Replacing Unit No.
20	Boiler	Rentech	N/A	2015-15	245 MMBtu/hr	245 MMBtu/hr	2015 10/14/2015	LNB-2 20	10200601	☑ Existing (unchanged) ☐ To be Removed ☐ New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced	N/A	N/A
31b	Emergency Generator	Caterpillar	C27	MJE04077	1,141 hp	1,141 hp	2014 2017	N/A 31b	20200102	☑ Existing (unchanged) ☐ To be Removed ☐ New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced	CI	N/A
SSM1	Amine Trains & Associated Piping Blowdown SSM	N/A	N/A	N/A	N/A	N/A	N/A N/A	N/A N/A	31088811	☐ Existing (unchanged) ☐ To be Removed ☐ New/Additional ☐ Replacement Unit ☑ To Be Modified ☐ To be Replaced	N/A	N/A
SSM2	Dehydrator SSM	N/A	N/A	N/A	N/A	N/A	N/A N/A	N/A N/A	31000227	☐ Existing (unchanged) ☐ To be Removed ☐ New/Additional ☐ Replacement Unit ☑ To Be Modified ☐ To be Replaced	N/A	N/A
F1	Fugitives	N/A	N/A	N/A	N/A	N/A	N/A N/A	N/A N/A	31088811	☐ Existing (unchanged) ☐ To be Removed ☐ New/Additional ☐ Replacement Unit ☑ To Be Modified ☐ To be Replaced	N/A	N/A
M1	Malfunctions	N/A	N/A	N/A	N/A	N/A	N/A N/A	N/A N/A	31088811	☐ Existing (unchanged) ☑ To be Removed ☐ New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced	N/A	N/A
T33	Produced Water Storage Tank	N/A	N/A	N/A	120 bbl	120 bbl	2006 2006	N/A N/A	31088811	☑ 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 https://www.env.nm.gov/wp-content/uploads/sites/2/2017/10/InsignificantListTitleV.pdf. TV sources may elect to enter both TV Insignificant Activities and Part 72 Exemptions on this form.

Unit Number	Source Description	Manufacturer	Model No. / 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
21	Warehouse Heater			0.08 MMBtu/hr	20.2.72.202.B.1 NMAC IA List Item #3		☑ Existing (unchanged) ☐ To be Removed ☐ New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced
22	Warehouse Heater			0.08 MMBtu/hr	20.2.72.202.B.1 NMAC IA List Item #3		☑ Existing (unchanged) ☐ To be Removed ☐ New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced
23	Maintenance Heater			0.08 MMBtu/hr	20.2.72.202.B.1 NMAC IA List Item #3		☑ Existing (unchanged) ☐ To be Removed ☐ New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced
24	Maintenance Heater			0.08 MMBtu/hr	20.2.72.202.B.1 NMAC IA List Item #3		☑ Existing (unchanged) ☐ To be Removed ☐ New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced
25	Maintenance Heater			0.08 MMBtu/hr	20.2.72.202.B.1 NMAC IA List Item #3		☑ Existing (unchanged) ☐ To be Removed ☐ New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced
26	Maintenance Heater			0.08 MMBtu/hr	20.2.72.202.B.1 NMAC IA List Item #3		☑ Existing (unchanged) ☐ To be Removed ☐ New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced
27	Laboratory Heater			0.10 MMBtu/hr	20.2.72.202.B.1 NMAC IA List Item #3		☑ Existing (unchanged) ☐ To be Removed ☐ New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced
28	Office Heater			0.12 MMBtu/hr	20.2.72.202.B.1 NMAC IA List Item #3		☑ Existing (unchanged) ☐ To be Removed ☐ New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced
29	Water Heater			0.04 MMBtu/hr	20.2.72.202.B.1 NMAC IA List Item #3		☑ Existing (unchanged) ☐ To be Removed ☐ New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced
30	Slug Catcher Heater			0.012 MMBtu/hr	20.2.72.202.B.5 NMAC IA List Item #1.a & #1.b		☑ Existing (unchanged) ☐ To be Removed ☐ New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced
T1	Lubrication Oil Storage Tank			2,300 gal	20.2.72.202.B.2 NMAC IA List Item #5		☑ Existing (unchanged) ☐ To be Removed ☐ New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced
T2	Lubrication Oil Storage Tank			2,300 gal	20.2.72.202.B.2 NMAC IA List Item #5		☑ Existing (unchanged) ☐ To be Removed ☐ New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced
T3	Diesel Storage Tank			1,250 gal	20.2.72.202.B.2 NMAC IA List Item #5		☑ Existing (unchanged) ☐ To be Removed ☐ New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced
T4	Diesel Storage Tank			1,175 gal	20.2.72.202.B.2 NMAC IA List Item #5		☑ 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
T5	Diesel Storage Tank			500 gal	20.2.72.202.B.2 NMAC IA List Item #5		☑ Existing (unchanged) ☐ To be Removed ☐ New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced
T6	Solvent Storage Tank			300 gal	20.2.72.202.B.2 NMAC IA List Item #5		☑ Existing (unchanged) ☐ To be Removed ☐ New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced
T7	Gasoline Storage Tank			500 gal	20.2.72.202.B.5 NMAC IA List Item #1.a & #1.b		☑ Existing (unchanged) ☐ To be Removed ☐ New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced
T8	Used Oil Storage Tank			1,000 gal	20.2.72.202.B.2 NMAC IA List Item #5		☑ Existing (unchanged) ☐ To be Removed ☐ New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced
T9	Skimmer Oil Storage Tank			1,000 gal	20.2.72.202.B.2 NMAC IA List Item #5		☑ Existing (unchanged) ☐ To be Removed ☐ New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced
T10	Slop Oil Storage Tank			10,500 gal	20.2.72.202.B.2 NMAC IA List Item #5		☑ Existing (unchanged) ☐ To be Removed ☐ New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced
T11	Slop Oil Storage Tank			10,500 gal	20.2.72.202.B.2 NMAC IA List Item #5		☑ Existing (unchanged) ☐ To be Removed ☐ New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced
T12	Used Oil Storage Tank			4,200 gal	20.2.72.202.B.2 NMAC IA List Item #5		☑ Existing (unchanged) ☐ To be Removed ☐ New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced
T13	TEG Storage Tank			4,200 gal	20.2.72.202.B.2 NMAC IA List Item #5		☑ Existing (unchanged) ☐ To be Removed ☐ New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced
T14	TEG Storage Tank			4,200 gal	20.2.72.202.B.2 NMAC IA List Item #5		☑ Existing (unchanged) ☐ To be Removed ☐ New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced
T15	TEG Storage Tank			4,200 gal	20.2.72.202.B.2 NMAC IA List Item #5		☑ Existing (unchanged) ☐ To be Removed ☐ New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced
T16	Ambitrol Mix Storage Tank			4,200 gal	20.2.72.202.B.2 NMAC IA List Item #5		☑ Existing (unchanged) ☐ To be Removed ☐ New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced
T17	Amine/H_2O Mix Storage Tank			21,000 gal	20.2.72.202.B.2 NMAC IA List Item #5		☑ Existing (unchanged) ☐ To be Removed ☐ New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced
T18	Amine/H_2O Mix Storage Tank			10,500 gal	20.2.72.202.B.2 NMAC IA List Item #5		☑ Existing (unchanged) ☐ To be Removed ☐ New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced
T19	Amine Storage Tank			10,500 gal	20.2.72.202.B.2 NMAC IA List Item #5		☑ Existing (unchanged) ☐ To be Removed ☐ New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced
T20	Solus AP25 Storage Tank			400 gal	No VOC or HAP emissions N/A		☑ Existing (unchanged) ☐ To be Removed ☐ New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced
T21	Solus AP25 Storage Tank			400 gal	No VOC or HAP emissions N/A		☑ 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
T22	Cortrol OS5300 Storage Tank			400 gal	20.2.72.202.B.5 NMAC N/A		☑ Existing (unchanged) ☐ To be Removed ☐ New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced
T23	Steamate HRSG24 Storage Tank			400 gal	20.2.72.202.B.5 NMAC IA List Item #5		☑ Existing (unchanged) ☐ To be Removed ☐ New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced
T24	Amine/H_2O Mix Storage Tank			4,200 gal	20.2.7.202.B.2 NMAC IA List Item #5		☑ Existing (unchanged) ☐ To be Removed ☐ New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced
T25	Condensate Storage Tank			4,200 gal	20.2.7.202.B.5 NMAC IA List Item #1.a & #1.b		☑ Existing (unchanged) ☐ To be Removed ☐ New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced
T26	DI H_2O Storage Tank			21,000 gal	No VOC or HAP emissions N/A		☑ Existing (unchanged) ☐ To be Removed ☐ New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced
T27	Treated H_2O Storage Tank			21,000 gal	No VOC or HAP emissions N/A		☑ Existing (unchanged) ☐ To be Removed ☐ New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced
T28	Treated H_2O Storage Tank			21,000 gal	No VOC or HAP emissions N/A		☑ Existing (unchanged) ☐ To be Removed ☐ New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced
T29	Condensate Storage Tank			200 gal	20.2.7.202.B.5 NMAC IA List Item #1.a & #1.b		☑ Existing (unchanged) ☐ To be Removed ☐ New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced
T30	Condensate Storage Tank			200 gal	20.2.7.202.B.5 NMAC IA List Item #1.a & #1.b		☑ Existing (unchanged) ☐ To be Removed ☐ New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced
T31	Amine/H_2O Mix Storage Tank			16,800 gal	20.2.7.202.B.2 NMAC IA List Item #5		☑ Existing (unchanged) ☐ To be Removed ☐ New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced
T32	Amine/H_2O Mix Storage Tank			16,800 gal	20.2.7.202.B.2 NMAC IA List Item #5		☑ Existing (unchanged) ☐ To be Removed ☐ New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced
T34	MDEA Storage Tank			5,000 gal	20.2.7.202.B.2 NMAC IA List Item #5		☑ Existing (unchanged) ☐ To be Removed ☐ New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced
T35	MDEA Storage Tank			5,000 gal	20.2.7.202.B.2 NMAC IA List Item #5		☑ Existing (unchanged) ☐ To be Removed ☐ New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced
30b	Catalytic Heater			12 MBtu/hr	20.2.7.202.B.5 NMAC IA List Item #1.a & #1.b		☑ Existing (unchanged) ☐ To be Removed ☐ New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced
T36	Ammonia Storage Tank			550 gal	20.2.7.202.B.2 NMAC IA List Item #5		☐ Existing (unchanged) ☐ To be Removed ☑ New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced

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

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

Table 2-C: Emissions Control Equipment

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

Control Equipment Unit No.	Control Equipment Description	Date Installed	Controlled Pollutant(s)	Controlling Emissions for Unit Number(s)[1]	Efficiency (% Control by Weight)	Method used to Estimate Efficiency
VRU-1	VRU and Condenser for TEG Regenerator Still Vent Regenerator Flask Tank emissions recovered via closed loop system	2/15/2007	VOCs and HAPs	9b, 10b, 11b, 15	100%	Manufacturer Guarantee
VRU-2	VRU and Condenser for TEG Regeenrator Still Vent emissions recovered via closed loop system	2/15/2007	VOCs and HAPs	14	100%	Manufacturer Guarantee
LNB-1	Low NO_x Burner and Flue Gas Recirculation (FGR)	12/17/2024	NO_x	1		Manufacturer Data
LNB-2	Low NO_x Burner and Flue Gas Recirculation (FGR)	2015	NO_x	20		Manufacturer Data
	Amine regenerator flash tank emissions injected into the facility fuel system	2/15/2007	VOCs and HAPs	16a, 16b, 17, 18, 19		Manufacturer Data
LNB-3	Low NO_x Burner and Flue Gas Recirculation (FGR)	8/29/2025	NO_x	3		Manufacturer Data
SCR-1	Low NOx Burner, Flue Gas Recirculation (FGR), and Selective Catalytic Reduction (SCR)	TBD	NO_x	2A		Manufacturer Data

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

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

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

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

Unit No.	NOx		CO		VOC		SOx		PM[1]		PM10[1]		PM2.5[1]		H_2S		Lead	
	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr
1	5.45	23.88	11.05	48.42	0.60	2.65	0.092	0.40	0.76	3.31	0.76	3.31	0.76	3.31	-	-	-	-
2A	1.68	7.36	5.78	25.30	0.54	2.37	0.090	0.39	0.68	2.96	0.68	2.96	0.68	2.96	-	-	-	-
3	5.45	23.88	11.05	48.42	0.60	2.65	0.092	0.40	0.76	3.31	0.76	3.31	0.76	3.31	-	-	-	-
9a	0.33	1.46	0.28	1.23	0.018	0.080	2.00E-03	8.76E-03	0.025	0.11	0.025	0.11	0.025	0.11	-	-	-	-
9b	-	-	-	-	5.92	25.93	-	-	-	-	-	-	-	-	-	-	-	-
10a	0.25	1.10	0.21	0.92	0.014	0.060	1.50E-03	6.57E-03	0.019	0.083	0.019	0.083	0.019	0.083	-	-	-	-
10b	-	-	-	-	5.92	25.93	-	-	-	-	-	-	-	-	-	-	-	-
11a	0.33	1.46	0.28	1.23	0.018	0.080	2.00E-03	8.76E-03	0.025	0.11	0.025	0.11	0.025	0.11	-	-	-	-
11b	-	-	-	-	14.33	62.78	-	-	-	-	-	-	-	-	-	-	-	-
14	-	-	-	-	1.17	5.13	-	-	-	-	-	-	-	-	-	-	-	-
15	-	-	-	-	1.66	7.26	-	-	-	-	-	-	-	-	-	-	-	-
16a[2]	-	-	-	-	3.47	34.00	-	-	-		-	-	-	-	-	-	-	-
16b[2]																		
17[2]																		
18[2]																		
19[2]																		
20	9.80	42.92	20.55	90.00	1.03	4.51	0.16	0.72	2.07	9.06	2.07	9.06	2.07	9.06	-	-	-	-
31b	15.83	26.52	1.51	2.53	0.22	0.37	0.01	0.02	0.33	0.55	0.33	0.55	0.33	0.55	-	-	-	-
SSM1	-	-	-	-	*	9.96	-	-	-	-	-	-	-	-	-	-	-	-
SSM2	-	-	-	-	*	5.12	-	-	-	-	-	-	-	-	-	-	-	-
F1	-	-	-	-	0.62	3.57	-	-	-	-	-	-	-	-	-	-	-	-
T-33	-	-	-	-	*	1.97	-	-	-	-	-	-	-	-	-	-	-	-
Totals	39.13	128.58	50.71	218.05	36.14	194.40	0.45	1.96	4.66	19.50	4.66	19.50	4.66	19.50	-	-	-	-

" * " indicates lb/hr emission rates are not appropriate for this unit.

[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).

[2] These amine regenerator vents have a single combined emission limit cap for all five units.

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
1	5.45	23.88	11.05	48.42	0.60	2.65	0.092	0.40	0.76	3.31	0.76	3.31	0.76	3.31	-	-	-	-
2A	1.68	7.36	5.78	25.30	0.54	2.37	0.090	0.39	0.68	2.96	0.68	2.96	0.68	2.96	-	-	-	-
3	5.45	23.87	11.05	48.42	0.60	2.65	0.092	0.40	0.76	3.31	0.76	3.31	0.76	3.31	-	-	-	-
20	9.80	42.92	20.55	90.00	1.03	4.51	0.16	0.72	2.07	9.06	2.07	9.06	2.07	9.06	-	-	-	-
9a	0.33	1.46	0.28	1.23	0.018	0.080	2.00E-03	8.76E-03	0.025	0.11	0.025	0.11	0.025	0.11	-	-	-	-
9b[2]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
10a	0.25	1.10	0.21	0.92	0.014	0.060	1.50E-03	6.57E-03	0.019	0.083	0.019	0.083	0.019	0.083	-	-	-	-
10b[2]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11a	0.33	1.46	0.28	1.23	0.018	0.080	2.00E-03	8.76E-03	0.025	0.11	0.025	0.11	0.025	0.11	-	-	-	-
11b[2]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
14 [2]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
15 [2]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
16a[3]	-	-	-	-	3.47	34.00	-	-	-		-	-	-	-	-	-	-	-
16b[3]																		
17 [3]																		
183																		
19 [3]																		
31b	15.83	26.52	1.51	2.53	0.22	0.37	0.01	0.02	0.33	0.55	0.33	0.55	0.33	0.55	-	-	-	-
SSM1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SSM2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
F1	-	-	-	-	0.62	3.57	-	-	-	-	-	-	-	-	-	-	-	-
T-33	-	-	-	-	*	1.97	-	-	-	-	-	-	-	-	-	-	-	-
Totals	39.13	128.57	50.71	218.05	7.14	52.29	0.45	1.96	4.66	19.50	4.66	19.50	4.66	19.50	-	-	-	-

" * " indicates lb/hr emission rates are not appropriate for this unit.

[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).

[2] Emissions are associated with SSM2.

[3] These amine regenerator vents have a single combined emission limit cap for all five units.

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
SSM1	-	-	-	-	*	9.96	-	-	-	-	-	-	-	-	-	-	-	-
SSM2	-	-	-	-	*	5.12	-	-	-	-	-	-	-	-	-	-	-	-
Totals	-	-	-	-	-	15.08	-	-	-	-	-	-	-	-	-	-	-	-

[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)			
1	1	V	No	45	300	882.40	N/A	N/A	44.94	5.00
2A	2A	V	No	58	330	662.35	N/A	N/A	33.73	5.00
3	3	V	No	45	300	882.40	N/A	N/A	44.94	5.00
9a	9a	V	No	30	650	15.90	N/A	N/A	9.00	1.50
10a	10a	V	No	30	650	15.90	N/A	N/A	9.00	1.50
11a	11a	V	No	30	650	15.90	N/A	N/A	9.00	1.50
20	20	V	No	60	276	1,175.87	N/A	N/A	56.08	5.17
31b	31b	V	No	30	949	93.50	N/A	N/A	267.87	0.67

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

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

Stack No.	Unit No.(s)	Total HAPs		Formaldehyde ☑ HAP or ☐ TAP		Benzene ☑ HAP or ☐ TAP		Toluene ☑ HAP or ☐ TAP		Xylene ☑ HAP or ☐ TAP		n-Hexane ☑ HAP or ☐ TAP		Ammonia ☐ 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
1	1	0.25	1.12	0.01	0.04	2.84E-04	1.24E-03	4.60E-04	2.01E-03	-	-	0.24	1.07	-	-				
2A	2A	0.25	1.09	9.94E-03	0.04	2.78E-04	1.22E-03	4.51E-04	1.97E-03	-	-	0.24	1.05	0.528	2.315				
3	3	0.25	1.12	0.01	0.04	2.84E-04	1.24E-03	4.60E-04	2.01E-03	-	-	0.24	1.07	-	-				
20	20	0.45	1.98	0.02	0.08	5.04E-04	2.21E-03	8.17E-04	3.58E-03	-	-	0.43	1.89	-	-				
9a	9a	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
9b	9b[1]	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
10a	10a	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
10b	10b[1]	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
11a	11a	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
11b	11b[1]	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
14	14 [1]	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
15	15 [1]	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
16a	16a[2]	2.13	7.21	-	-	0.73	2.02	0.90	3.29	0.48	1.84	0.01	0.05	-	-				
16b	16b[2]																		
17	17 [2]																		
18	18 [2]																		
19	19 [2]																		
31b	31b	0.01	0.02	5.84E-04	9.78E-04	5.74E-03	9.61E-03	2.08E-03	3.48E-03	1.43E-03	2.39E-03	-	-	-	-				
SSM1	SSM1	*	0.13	-	-	*	7.98E-03	*	0.03	-	0.02	*	0.07	-	-				
SSM2	SSM2	*	2.08	-	-	*	0.07	*	0.91	*	0.96	*	0.05	-	-				
N/A	F1	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
T-33	T-33	*	0.34	-	-	*	0.05	*	0.07	*	0.05	*	0.17	-	-				
Totals:		3.35	15.07	0.05	0.21	0.74	2.17	0.91	4.31	0.49	2.86	1.17	5.41	0.528	2.315				

[1] Emissions are associated with SSM2.

[2] These amine regenerator vents have a single combined emission limit cap for all five units.

Table 2-J: Fuel

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

Unit No.	Fuel Type (low sulfur Diesel, ultra low sulfur diesel, Natural Gas, Coal, …)	Fuel Source: purchased commercial, pipeline quality natural gas, residue gas, raw/field natural gas, process gas (e.g. SRU tail gas) or other	Specify Units				
			Lower Heating Value	Hourly Usage	Annual Usage	% Sulfur	% Ash
1	Natural Gas	Raw/Field Natural Gas	900 Btu/scf	153.31 Mscf/hr	1,343.01 MMscf/yr	Negl.	Negl.
2A	Natural Gas	Raw/Field Natural Gas	900 Btu/scf	150.22 Mscf/hr	1,315.95 MMscf/yr	Negl.	Negl.
3	Natural Gas	Raw/Field Natural Gas	900 Btu/scf	153.31 Mscf/hr	1,343.01 MMscf/yr	Negl.	Negl.
9a	Natural Gas	Raw/Field Natural Gas	900 Btu/scf	3.33 Mscf/hr	29.20 MMscf/yr	Negl.	Negl.
10a	Natural Gas	Raw/Field Natural Gas	900 Btu/scf	2.50 Mscf/hr	21.90 MMscf/yr	Negl.	Negl.
11a	Natural Gas	Raw/Field Natural Gas	900 Btu/scf	3.33 Mscf/hr	29.20 MMscf/yr	Negl.	Negl.
20	Natural Gas	Raw/Field Natural Gas	900 Btu/scf	272.22 Mscf/hr	2,384.67 MMscf/yr	Negl.	Negl.
31b	Natural Gas	Raw/Field Natural Gas	900 Btu/scf	7396.80 MBtu/hr	24,779.28 MMBtu/yr	Negl.	Negl.

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)
T33	31088811	Produced H_2O	Produced H_2O	8.34	18.02	Unknown	Unknown	Unknown	Unknown

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			
T33	TBD	Produced H_2O		FX	120		Unknown	N/A	Unknown	N/A	Unknown	630,000	125.00

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 Gas	C1 - C6+ & Contaminants	Gas	645 MMscfd @ 10% CO_2	Natual Gas	C1 - C6+ & Contaminants	Gas	645 MMscfd @ 10% CO_2
The station capcity is a direct function of available horsepower. The throughput is therefore dependant on atmosphereic temperature and pressure, gas temperature and pressure, relative humidity and gas quality, as other factors. The "throughput" expressed above is a nominal quantity (with a 15 percent safety factor), neither an absolute maximum, nor an average. Actual throughput will vary from the nominal amount.							

Table 2-N: CEM Equipment

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

Stack No.	Pollutant(s)	Manufacturer	Model No.	Serial No.	Sample Frequency	Averaging Time	Range	Sensitivity	Accuracy
N/A - There are no continuous emissions measurement (CEM) equipment at this facility.									

Table 2-O: Parametric Emissions Measurement Equipment

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

Unit No.	Parameter/Pollutant Measured	Location of Measurement	Unit of Measure	Acceptable Range	Frequency of Maintenance	Nature of Maintenance	Method of Recording	Averaging Time
N/A - There are no parametric emissions measurent equipment located at this facility.								

Table 2-P: Greenhouse Gas Emissions

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

☐ By checking this box, the applicant acknowledges the total CO2e emissions are less than 75,000 tons per year.

		CO_2 ton/yr	N_2O ton/yr	CH_4 ton/yr	SF_6 ton/yr	PFC/HFC ton/yr[2]									Total GHG Mass Basis ton/yr[4]	Total CO_2e ton/yr[5]
Unit No.	**GWPs [1]**	**1**	**298**	**25**	**22,800**	**footnote 3**										
1	**mass GHG**	78,385.85	0.15	1.48	-	-								-	78,387.47	-
	CO_2e	78,385.85	44.02	36.93	-	-								-	-	78,466.81
2A	**mass GHG**	76,806.54	0.14	1.45	-	-								-	76,808.14	-
	CO_2e	76,806.54	43.14	36.19	-	-								-	-	76,885.87
3	**mass GHG**	78,385.85	0.15	1.48	-	-								-	78,387.47	-
	CO_2e	78,385.85	44.02	36.93	-	-								-	-	78,466.81
9a	**mass GHG**	1,704.29	3.21E-03	0.032	-	-									1,704.32	-
	CO_2e	1,704.29	0.96	0.80	-	-									-	1,706.05
9b	**mass GHG**	-	-	-	-	-									-	-
	CO_2e	-	-	-	-	-									-	-
10a	**mass GHG**	1,278.22	2.41E-03	0.024	-	-									1,278.24	-
	CO_2e	1,278.22	0.72	0.60	-	-									-	1,279.54
10b	**mass GHG**	-	-	-	-	-									-	-
	CO_2e	-	-	-	-	-									-	-
11a	**mass GHG**	1,704.29	3.21E-03	0.032	-	-									1,704.32	-
	CO_2e	1,704.29	0.96	0.80	-	-									-	1,706.05
11b	**mass GHG**	-	-	-	-	-									-	-
	CO_2e	-	-	-	-	-									-	-
14	**mass GHG**	-	-	-	-	-									-	-
	CO_2e	-	-	-	-	-									-	-
15	**mass GHG**	-	-	-	-	-									-	-
	CO_2e	-	-	-	-	-									-	-
16a **16b** **17**	**mass GHG**	914,631.20	-	546.50	-	-									915,177.70	-
18 **19**	**CO_2e**	914,631.20	-	13,662.48	-	-									-	928,293.68
20	**mass GHG**	139,183.45	0.26	2.62	-	-									139,186.34	-
	CO_2e	139,183.45	78.17	65.58	-	-									-	139,327.20
31b	**mass GHG**	2,016.82	0.02	0.08	-	-									2,016.91	-
	CO_2e	2,016.82	4.88	2.05	-	-									-	2,023.74
SSM1	**mass GHG**	249.36	-	716.26	-	-									965.62	-
	CO_2e	249.36	-	17,906.62	-	-									-	18,155.98

		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**										
SSM2	**mass GHG**	1.55	-	4.40	-	-									5.95	-
	CO_2e	1.55	-	110.10	-	-									-	111.64
F1	**mass GHG**	29.73	-	85.53	-	-									115.26	-
	CO_2e	29.73	-	2,138.27	-	-									-	2,168.00
T33	**mass GHG**				-	-									-	-
	CO_2e	-	-	-	-	-									-	-
Total	**mass GHG**	1,294,377.14	0.73	1,359.89	-	-									1,295,737.76	-
	CO_2e	1,294,377.14	216.86	33,997.35	-	-									-	1,328,591.35

[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.

Application Summary

Harvest Four Corners, LLC (Harvest) is submitting this application for a significant revision to NSR Permit No. 0859-M10R4 pursuant to 20.2.72.219.D.(1)(a) NMAC for the Milagro Gas Treating Plant (Milagro). The facility is located in San Juan County, New Mexico. In this application, Harvest is requesting to replace one (1) Holman/Zurn 190 MMBtu/hr boiler (Unit 2) with one (1) Babcock & Wilcox 135.2 MMBtu/hr boiler (Unit 2A) equipped with a Flue Gas Recirculation (FGR), a low NOx burner (LNB), and with a Selective Catalytic Reduction (SCR) control device. Harvest is also updating emissions from the TEG dehydrator still vents (Units 9b, 10b, 11b, 14, 15), the amine regenerator vents (Units 16a, 16b, 17, 18, 19), startup, shutdown, and maintenance (Units SSM1, SSM2), and the fugitives (Unit F1) based on current gas analyses from the facility. In addition, malfunction emissions (Unit M1) are being removed from the permit.

Unit 2 had a Fuel Induced Recirculation (FIR) control device and the new Unit 2A will have Low NOx Burners (LNB) with Flue Gas Recirculation (FGR) and Selective Catalytic Reduction (SCR) control device. The current FIR control device uses fuel gas flow to induce recirculated flue gas from the boiler stack, into the burner fuel zone. The presence of flue gas with fuel results in delayed combustion. Delayed combustion produces a lower adiabatic flame temperature and reduced NO_x emissions from thermal NO_x. The proposed replacement unit, which will be equipped with LNB + FGR and SCR control device, will require the injection of ammonia to drive the chemical reaction necessary to reduce NOx from the flue gas from the boiler. The reaction chamber contains a catalyst bed where NOx from the flue gas is reduced to nitrogen and water by the reaction of NOx and ammonia.

Process Summary

The primary function of the Milagro Gas Treating Plant is to remove CO_2 and water from raw natural gas and deliver pipeline quality sales gas to downstream pipelines. The raw natural gas feeding the plant contains both CO_2 and water exceeding pipeline quality specifications. The gas stream is treated through five process trains. Each process train routes inlet gas through an amine contactor to remove CO_2, followed by a triethylene glycol (TEG) contactor to remove water.

Trains 1-3 are designed for a maximum throughput of 145 MMscfd each. Train 4 is designed for a maximum throughput of 90 MMscfd. Train 5 is designed for a maximum throughput of 120 MMscfd.

Amine is regenerated in the amine regenerators, equipped on all 5 trains using 60 psig steam as a heat medium (Units 16a, 16b, 17, 18, 19). Released CO_2 is routed to atmosphere.

The dehydrator reboilers (Units 9a, 10a, and 11a) for trains 1-3 burn natural gas to provide heat needed to regenerate the TEG while the reboilers associated with trains 4 & 5 utilize 400 psig steam as a heat input. The dehydrators associated with trains 1-3 & 5 are equipped with flash tanks, while train 4 is not. Hydrocarbons from the flash tanks are recycled back into the plant fuel system. Emissions from the five dehydrator still vents are cooled and routed through either of the two vapor recovery units

(VRU). The VRUs capture the still vent gas, compress it, and route it back into the plant fuel system. All condensate and produced water that results from cooling the dehydrator vent streams is piped to the condensate storage tanks (T25). From here produced water is separated and stored in the produced water tank (T33).

The facility is built around a 400 psig / 60 psig steam system. Superheated 400 psig steam drives steam turbines throughout the facility, which are coupled to pumps, FD fans, and electricity generators. The 60 psig steam is a byproduct of the 400 psig steam system and is designed to provide process heat to regenerate amine. Today the plant steam is provided by four package boilers; Boiler 1 (Unit 1), Boiler (Unit 2), Boiler 3 (Unit 3), and Boiler 5 (Unit 20).

Startup, Shutdown, and Maintenance (SSM)

SSM emissions associated with the blowdown of processing equipment are captured in unit SSM1. Emissions were calculated from the estimated annual quantity of gas vented and the composition of the gas. A safety factor was included.

SSM emissions from the dehydrator still vents (unit SSM2) can occur during an outage of both vapor recovery units (VRU). Emissions were calculated using GRI-GLYCalc and a safety factor was included.

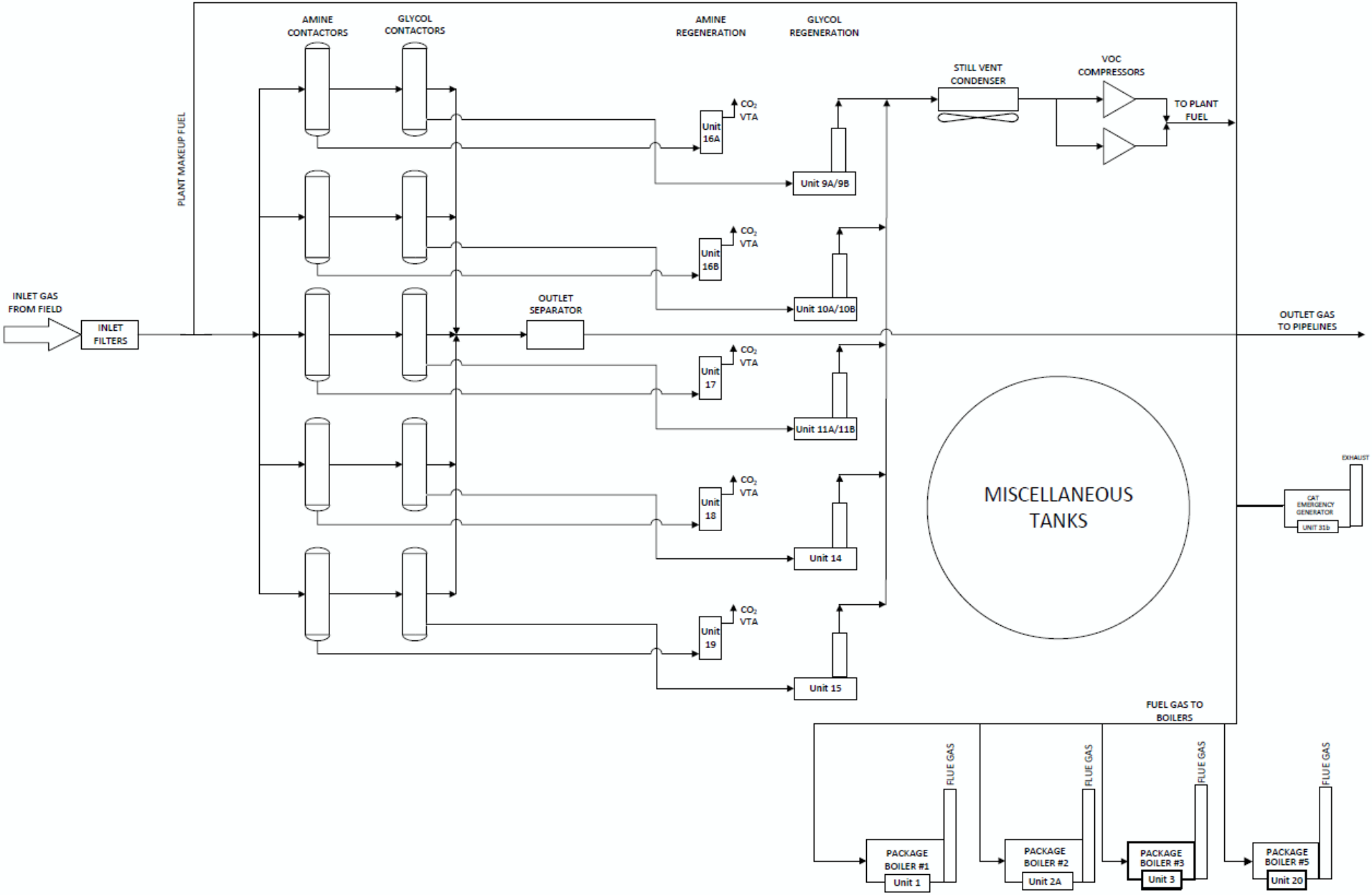
For the boilers, dehydrator reboilers, amine contactors, and fugitive equipment leaks, it is concluded that there are no SSM emissions in excess of those identified for steady-state operation as seen in Section 2, Table 2-E.

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 diagram is provided on the following page.



HARVEST MIDSTREAM

PROCESS FLOW DIAGRAM

Milagro Gas Treating Plant

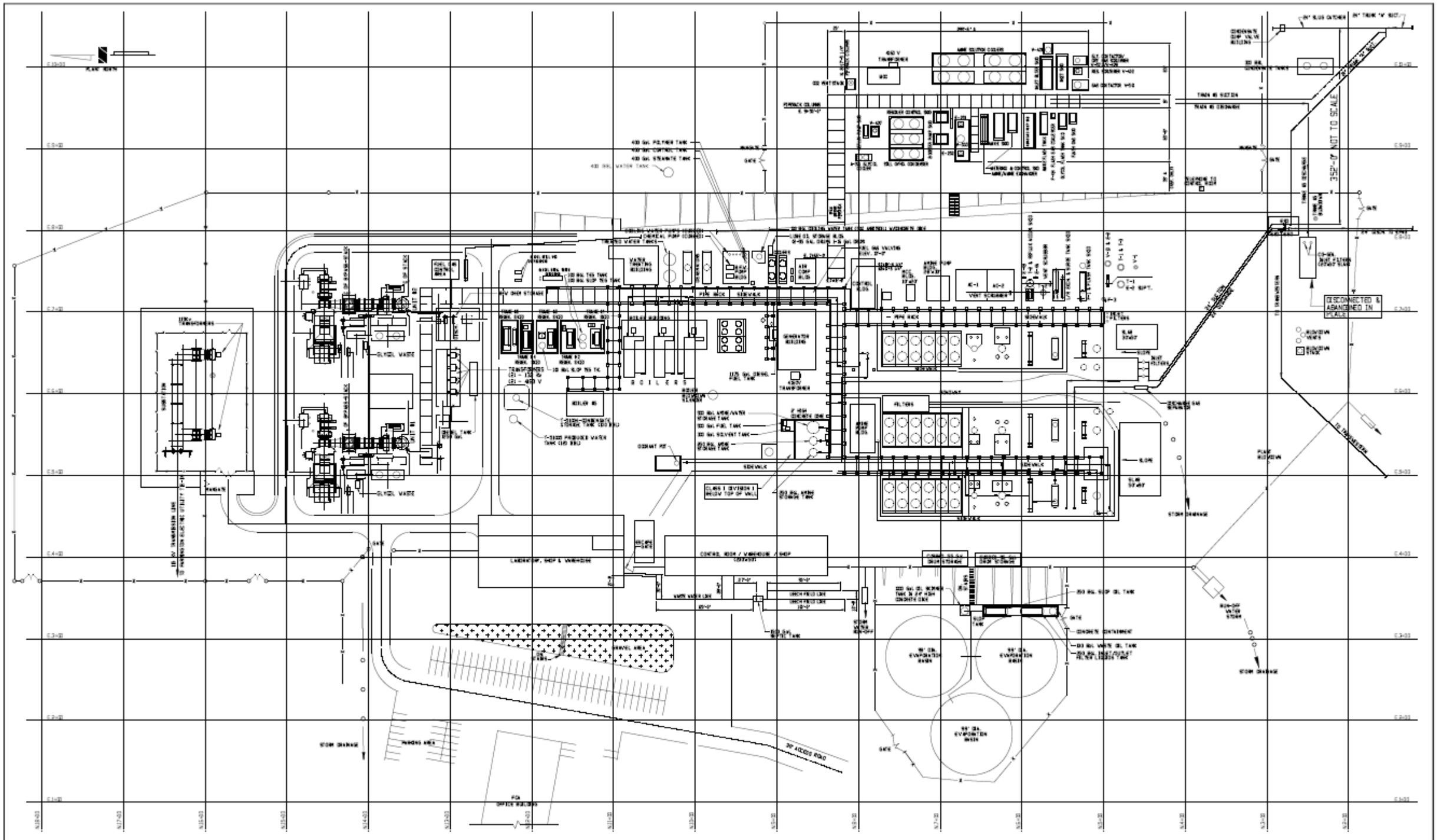
February 2026

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 provided on the following page.



NOTES:

REVISED
1/27/2021
DESTROY ALL PREVIOUS REV'S.

DRAWING NO.	TITLE
-	-

REFERENCE DRAWINGS

REV	DRAWN BY	DATE REVISED	CHECKED BY	PROJECT ENG.	APPROVED BY
21	T. GOODSEN	1/27/2021	D.F.	D.J.	M.P.
	REVISED TO REMOVE MEMBRANE UNITS				
20	T. GOODSEN	9/30/2020	D.F.	D.J.	M.P.
	REVISED TO MAKE CORRECTIONS PER COMMENTS FROM D.F.				
19	T. GOODSEN	9/22/2020	D.F.	D.J.	M.P.
	REVISED PER MOC-20-002-IT				
18	T. GOODSEN	7/18/2019			
	REVISED TO ELIMINATE REFERENCES TO CLEAR UP FEE ASSOCIATIONS				
17	P. HENDERSON	1/13/10	PH	J.PRICE	J. PRICE
	ADDED TRUNK A SUG OUTCHER AND CONDENSATE TANKS				

REVISIONS

HARVEST MIDSTREAM

San Juan Basin
1755 Arroyo Drive
Bloomfield, NM 87413

MILAGRO PLANT
PLOT PLAN

SAN JUAN COUNTY — NEW MEXICO

DRAWN BY	PHIL M.
CHECKED BY	JG
PROJECT ENG.	
APPROVED BY	KWD
DATE ISSUED	12/10/90

SCALE: 1" = 50' — AFE#: 901.25

MLG-01-P00001-S01

21

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.

This section contains the following calculations for this facility. Supporting documentation for these calculations can be found in Section 7.

Subsection 1 – Emission calculations for units either added or modified with this application.

Boilers (Units 1, 2A, 3, and 20)

Nitrogen oxides (NO_x), carbon monoxide (CO), volatile organic compounds (VOC), and particulate (PM) emissions from the Babcock & Wilcox boiler (Unit 2A), the Holman boilers (Units 1 & 3), and the Rentech boiler (Unit 20) were calculated using manufacturer's data. Sulfur dioxide (SO_2) and hazardous air pollutant (HAP) emissions were calculated using AP-42 emissions factors. Units 1, 3, and 20 are each equipped with a low NO_X burner (LNB) and flue gas recirculation (FGR). Unit 2A is equipped with a LNB, FGR, and with a SCR catalyst.

The boilers (uncontrolled) startup with less fuel input than during steady-state operation, so emissions will be lower than during steady-state operation. During shutdown, the fuel supply stops quickly, but air flow may not, causing the continued formation of NO_X. Even so, with no fuel, NO_X formation will be less than during steady state operation. Emissions due to scheduled maintenance will be negligible as the unit is not in operation.

Dehydrator and Dehydrator Blowdowns (Units 9b, 10b, 11b, 14, and 15)

Emissions from the dehydrator still vents are routed through a VRU to recover the hydrocarbons entrained in the stripped water. These hydrocarbons are then used for fuel within the facility, eliminating the VOC and HAP emissions from the dehydrator still vents. During normally scheduled maintenance, only one VRU is serviced at a time to maintain the uptime of the process. For the purposes of permitting and as a worst-case scenario, it will be assumed that both VRUs will be serviced at once. Thus emissions from the still vents will bypass the VRU and will vent directly to the atmosphere. Note: The gas from the still vents are routed through a condenser before it is sent to the VRU. Also, Units 9b, 10b, 11b & 15 are equipped with flash tanks. Unit 14 is not. The gas from the flash tanks is recovered.

The dehydrator still vent VOC and HAP emissions were calculated using GRI-GLYCalc and the extended gas analysis dated July 15, 2025 for Trains 1, 2, 4, and 5 and October 8, 2025 for Train 3. In order to identify uncontrolled emissions from the dehydrator still vents, it was assumed the dehydrators operate at design capacity, venting to atmosphere, for 8,760 hr/yr.

Amine Contactors and Blowdowns (Units 16a, 16b, 17, 18, 19)

VOC and HAP emissions from the amine contactors were calculated using results from AmineCalc. Combined VOC emissions from all the amine units were limited to 34.0 tpy (obtained from the current construction permit). Emissions were calculated assuming each amine unit operates at full capacity for 8,760 hr/yr. Representative runs were prepared for each of the amine trains both during normal operation and during the receipt of rich gas during Ignacio plant outages. Normal operations were modeled using an extended gas analysis dated July 15, 2025 (obtained during normal operation). Operations during Ignacio plant outages were modeled using an extended gas analysis dated March 13, 2025 (obtained while Milagro was receiving rich gas during an Ignacio plant outage). These results and a balance of run hours for each operating mode were used to establish the requested pph and tpy emissions caps. To allow for variations in inlet gas composition, safety factors were included.

Flash tanks capture the amine regenerator emissions and they are injected into the facility fuel system.

It is requested SSM emissions from the amine trains and associated piping continue to be permitted under a single facility-wide emissions limit.

Amine Trains & Associated Piping Blowdown (Unit SSM1)

SSM VOC and HAP emissions from the amine trains and associated piping are the result of blowdowns. The emissions were calculated from the annual quantity of gas vented and the composition of the gas. The annual quantity of gas vented was estimated based on historical operations, both the number of events and the quantity of gas vented during each event as determined by HFC engineering. A safety factor was added because emissions from blowdowns are dependent on the composition of the gas and because the annual quantity of gas vented may vary. The use of the safety factor was also designed to ensure an adequate emissions limit, which includes any emissions from other miscellaneous startup, shutdown and maintenance activities.

Emissions during normal operation were determined using an extended gas analysis dated July 15, 2025 (obtained during normal operation). Emissions associated with Ignacio plant outages were determined using an extended gas analysis dated May 7, 2025 (obtained while Milagro was receiving rich gas during an Ignacio plant outage). It was estimated that 100% of the SSM blow down volume would occur during normal operation.

It is requested SSM emissions from the amine trains and associated piping continue to be permitted under a single facility-wide emissions limit.

Dehydrator Venting during VRU Downtime (Unit SSM2)

SSM VOC and HAP emissions from the dehydrators are associated with VRU downtime. The combined total SSM emissions from all five dehydrators were estimated at a maximum of 5.53 tons per year (tpy) VOC. HAP emissions were estimated using the GRI-GLYCalc estimated pounds per hour (pph) HAP emission rates and the number of hours of operation per year required to emit the 5.53 tpy VOC (334 hr/yr).

It is requested SSM emissions from all the dehydrator still vents (Unit SSM2) continue to be permitted under a single facility-wide emissions limit.

Equipment Leaks (Unit F1)

Fugitive organic compound emissions from equipment leaks, valves, flanges, seals, etc., were calculated using a count of the Milagro pipeline components and emission factors from the 1995 Protocol for Equipment Leak Emission Estimates published by the EPA. VOC and HAP emissions were calculated as weight percentages of the total organic compound emissions.

Weight percentages during normal operation were determined using an extended gas analysis dated July 15, 2025 (obtained during normal operation). Weight percentages associated with receiving rich gas during Ignacio plant outages were determined using an extended gas analysis dated May 7, 2025 (obtained while Milagro was receiving rich gas during an Ignacio plant outage). It was assumed normal operation would occur for 6,475 hr/yr and operation during Ignacio plant outages would occur for 2,285 hr/yr. This is the maximum operating time for Ignacio plant outages such that emissions stay at or below the 34.0 tpy VOC cap on amine vent emissions.

Due to the nature of the source, it was estimated that SSM emissions from valves, connectors, seals, etc. are accounted for in the calculations.

Storage Tank (Unit T36) (Exempt pursuant to 20.2.72.202.B NMAC)

The following assumptions were made:

- Note that there are no criteria pollutant, GHG or HAP emissions associated with Unit T36.
- Due to the low VOC content of the mixture (~25%) as well as for the small storage volume (550 gal), it is assumed this unit will not have emissions > 0.5 tpy VOC and will be exempt pursuant to 20.2.72.202.B.(5) NMAC.

Subsection 2 – Emission calculations for all other units at this facility not affected by this application.

Dehydrator Reboilers (Units 9a, 10a & 11a)

NO_X, CO, VOC, SO_2 and PM emissions from the dehydrator reboilers were calculated using AP-42 emission factors. HAP emissions were calculated using GRI-HAPCalc. Emissions were calculated assuming each reboiler operates at full capacity for 8,760 hr/yr. Note that Units 14 & 15 have reboilers but do not burn fuel gas; instead, 400 psig steam is used to regenerate the glycol.

The dehydrator reboilers (uncontrolled) start-up with less fuel input than steady-state operation, so emissions are lower than during steady-state operation. During shutdown, the fuel supply stops quickly, effectively stopping the production of emissions. Emissions due to scheduled maintenance are negligible as the units are not in operation.

The criteria pollutant emission rates for Units 9a, 10a, and 11a were carried forward and not revised.

Emergency Generator (Unit 31b)

NO_X, CO, VOC and particulate emissions from the diesel generator (Unit 31b) were calculated using manufacturer's data. SO_2 and HAP emissions were calculated using AP-42 emission factors from Section 3.4. Emissions were calculated assuming the generator operates at full site capacity for 3,350 hr/yr (limiting the NO_X emissions to 26.5 tpy).

The engine will be started at no load with a rich fuel mixture. As a result, emissions during startup should be minimized. Moreover, because engines take only minutes to reach operating temperature, emissions during startup should not cause an exceedance of an allowable limit. Similarly, emissions during shutdown should not cause an exceedance of the allowable limit because fuel and air flow cease within seconds of shutdown. Emissions due to scheduled maintenance should be negligible as the unit is not in operation.

Miscellaneous Heaters (Units 21-30) (Exempt pursuant 20.2.72.202.B.(5) NMAC)

NO_X, CO, VOC, SO_2 and PM emissions from the heaters were calculated using AP-42 emission factors. Emissions were calculated assuming each heater operates at full capacity for 8,760 hr/yr. Since the emission rate for each pollutant, from all heaters combined, is less than 0.5 tpy, the heaters are all exempt sources.

Storage Tanks

Where appropriate, working/breathing losses from the storage tanks were calculated using AP-42. The following assumptions were made:

- Residual oil #6 was used to estimate lubrication oil, used oil, skimmer oil and slop oil emissions. As the vapor pressure of residual oil is less than 0.2 pounds per square inch absolute (psia), the tanks containing lubrication oil (Units T1 & T2), used oil (Units T8 & T12), skimmer oil (Unit T9) and slop oil (Units T10 & T11) were assumed to be exempt sources for a construction permit and insignificant sources for a Title V permit.
- Distillate fuel oil #2 was used to estimate diesel fuel emissions. As the vapor pressure of distillate fuel oil #2 is less than 0.2 psia, the tanks containing diesel fuel (Units T3-T5) were assumed to be exempt sources for a construction permit and insignificant sources for a Title V permit;
- Jet kerosene was used to estimate petroleum solvent emissions. As the vapor pressure of jet kerosene is less than 0.2 psia, the tank containing solvent (Unit T6) was assumed to be an exempt source for a construction permit and an insignificant source for a Title V permit;
- Gasoline (RVP 13) was used to estimate gasoline tank (Unit T7) emissions;
- As the vapor pressure of triethylene glycol (TEG) is less than 0.2 psia, the tanks containing TEG (Units T13-T15) were assumed to be exempt sources for a construction permit and insignificant sources for a Title V permit;
- As the vapor pressures of ethylene glycol and propylene glycol are less than 0.2 psia, the tank containing Ambitrol (Unit T16) was assumed to be an exempt source for a construction permit and an insignificant source for a Title V permit. Note that Ambitrol is an inhibited ethylene or propylene glycol coolant containing ethylene or propylene glycol, water, and less than 5% dipotassium hydrogen phosphate;
- As the vapor pressure of methyl diethanolamine (MDEA) is less than 0.2 psia, the tanks containing amine or amine/water (Units T17-T19, T24, T31, T32, T34 & T35) were assumed to be exempt sources for a construction permit and insignificant sources for a Title V permit; and
- The natural gasoline liquid composition identified in HAPCalc 3.0 was used to estimate condensate tank (Units T25, T29 & T30) emissions.

The VOC emission rate for the gasoline storage tank (Unit T7) was calculated at 783.4 pounds per year. As such, the tank is an exempt source for a construction permit and an insignificant source for a Title V permit.

The combined VOC emission rate from the three condensate storage tanks (Units T25, T29 & T30) is 829.4 pounds per year. As such, the tanks are exempt sources for a construction permit and insignificant sources for a Title V permit.

Note that there are no criteria pollutant, GHG or HAP emissions associated with Units T26-T28. See the applicable Material Safety Data Sheets.

VOC, benzene, and n-hexane emissions from the produced water tank (Unit T33) were calculated using emission factors from the CDPHE PS Memo 09-02 (Oil & Gas Produced Water Tank Batteries - Regulatory Definitions & Permitting Guidance). Ethylbenzene, toluene and xylene emissions from the produced water tank were calculated using emission factors from the TCEQ Project 2010-29 (Emission Factor Determination for Produced Water Storage Tanks) report.

Due to the nature of operations, startup and shutdown emissions from the storage tanks were assumed to be accounted for in the calculations described above. Emissions due to maintenance should be negligible. The VOC emission rate for Unit T33 was carried forward and not revised.

Storage Tanks (Units T20 through T23) (Exempt pursuant to 20.2.72.202.B NMAC)

The following assumptions were made:

- Note that there are no criteria pollutant, GHG or HAP emissions associated with Units T20-T21. See the applicable Material Safety Data Sheets.
- As the vapor pressures of Cortrol OS5300 (Unit T22) and Steammate HRSG24 (T23) are 18 mmHg (0.35 psia), the tanks cannot be exempt pursuant to 20.2.72.202.B.(2) NMAC. However, due to the low VOC content of the mixtures (~25%) as well as for the small storage volume (400 gal), it is assumed these units will not have emissions > 0.5 tpy VOC and will be exempt pursuant to 20.2.72.202.B.(5) NMAC.

Section 6

Subsection 1 – Emission Calculations for Units either Added or Modified with this Application

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For clarity, Subsection 1 contains emission calculations for units that were either added or modified with this application (i.e. Units 2A, 9b, 10b, 11b, 14, 15, 16a, 16b, 17, 18, 19, F1, SSM1, and SSM2). For all other emission calculations pertinent to the other units at this facility, please refer to Section 6 Subsection 2.

Harvest Four Corners, LLC - Milagro Gas Treating Plant

Emissions Summary

Uncontrolled Emissions																	
		NO_x		CO		VOC		SO_2		PM		PM_{10}		$PM_{2.5}$		H_2S	
Unit ID	Equipment Description	lb/hr	tpy	lb/hr	tpy	lb/hr	tpy	lb/hr	tpy	lb/hr	tpy	lb/hr	tpy	lb/hr	tpy	lb/hr	tpy
1	Boiler 1	5.45	23.88	11.05	48.42	0.60	2.65	0.092	0.40	0.76	3.31	0.76	3.31	0.76	3.31	-	-
2A	Boiler 2	1.68	7.36	5.78	25.30	0.54	2.37	0.090	0.39	0.68	2.96	0.68	2.96	0.68	2.96	-	-
3	Boiler 3	5.45	23.88	11.05	48.42	0.60	2.65	0.092	0.40	0.76	3.31	0.76	3.31	0.76	3.31	-	-
20	Boiler 5	9.80	42.92	20.55	90.00	1.03	4.51	0.16	0.72	2.07	9.06	2.07	9.06	2.07	9.06	-	-
9a	TEG Reboiler Burner Train 1	0.33	1.46	0.28	1.23	0.018	0.080	2.00E-03	8.76E-03	0.025	0.11	0.025	0.11	0.025	0.11	-	-
9b	TEG Regenerator Still Vent/Flash Tank Train 1	-	-	-	-	5.92	25.93	-	-	-	-	-	-	-	-	-	-
10a	TEG Reboiler Burner Train 2	0.25	1.10	0.21	0.92	0.014	0.060	1.50E-03	6.57E-03	0.019	0.083	0.019	0.083	0.019	0.083	-	-
10b	TEG Regenerator Still Vent/Flash Tank Train 2	-	-	-	-	5.92	25.93	-	-	-	-	-	-	-	-	-	-
11a	TEG Reboiler Burner Train 3	0.33	1.46	0.28	1.23	0.018	0.080	2.00E-03	8.76E-03	0.025	0.11	0.025	0.11	0.025	0.11	-	-
11b	TEG Regenerator Still Vent/Flash Tank Train 3	-	-	-	-	14.33	62.78	-	-	-	-	-	-	-	-	-	-
14	TEG Regenerator Still Vent Train 4 (no flash tank)	-	-	-	-	1.17	5.13	-	-	-	-	-	-	-	-	-	-
15	TEG Regenerator Still Vent/Flash Tank Train 5	-	-	-	-	1.66	7.26	-	-	-	-	-	-	-	-	-	-
16a[1]	Amine Regenerator Vent Train 1																
16b[1]	Amine Regenerator Vent Train 2																
17 [1]	Amine Regenerator Vent Train 3	-	-	-	-	3.47	34.00	-	-	-		-	-	-	-	-	-
18 [1]	Amine Regenerator Vent Train 4																
19 [1]	Amine Regenerator Vent Train 5																
31b	Caterpillar C27 Generator	15.83	26.52	1.51	2.53	0.22	0.37	0.01	0.02	0.33	0.55	0.33	0.55	0.33	0.55		
SSM1	Amine Trains & Associated Piping Blowdowns	-	-	-	-	*	9.96	-	-	-	-	-	-	-	-	-	-
SSM2	Dehydrator SSM	-	-	-	-	*	5.12	-	-	-	-	-	-	-	-	-	-
F1 [2]	Fugitives	-	-	-	-	0.62	3.57	-	-	-	-	-	-	-	-	-	-
T-33	Produced water storage tank	-	-	-	-	*	1.97	-	-	-	-	-	-	-	-	-	-
	Total	**39.13**	**128.58**	**50.71**	**218.05**	**36.14**	**194.40**	**0.45**	**1.96**	**4.66**	**19.50**	**4.66**	**19.50**	**4.66**	**19.50**	**-**	**-**

" - " indicates pollutants are not to be expected.

" * " indicates lb/hr emission rates are not appropriate for this unit.

[1] These amine regenerator vents have a single combined emission limit cap for all five units.

[2] A safety factor has been added to allow for gas analysis variability.

Harvest Four Corners, LLC - Milagro Gas Treating Plant

Emissions Summary

Controlled Emissions																
		NO_x		CO		VOC		SO_2		PM		PM_{10}		$PM_{2.5}$		H_2S	
Unit ID	Equipment Description	lb/hr	tpy	lb/hr	tpy	lb/hr	tpy	lb/hr	tpy	lb/hr	tpy	lb/hr	tpy	lb/hr	tpy	lb/hr	tpy
1	Boiler 1	5.45	23.88	11.05	48.42	0.60	2.65	0.092	0.40	0.76	3.31	0.76	3.31	0.76	3.31	-	-
2A	Boiler 2	1.68	7.36	5.78	25.30	0.54	2.37	0.090	0.39	0.68	2.96	0.68	2.96	0.68	2.96	-	-
3	Boiler 3	5.45	23.87	11.05	48.42	0.60	2.65	0.092	0.40	0.76	3.31	0.76	3.31	0.76	3.31	-	-
20	Boiler 5	9.80	42.92	20.55	90.00	1.03	4.51	0.16	0.72	2.07	9.06	2.07	9.06	2.07	9.06	-	-
9a	TEG Reboiler Burner Train 1	0.33	1.46	0.28	1.23	0.018	0.080	2.00E-03	8.76E-03	0.025	0.11	0.025	0.11	0.025	0.11	-	-
9b[2]	TEG Regenerator Still Vent/Flash Tank Train 1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
10a	TEG Reboiler Burner Train 2	0.25	1.10	0.21	0.92	0.014	0.060	1.50E-03	6.57E-03	0.019	0.083	0.019	0.083	0.019	0.083	-	-
10b[2]	TEG Regenerator Still Vent/Flash Tank Train 2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11a	TEG Reboiler Burner Train 3	0.33	1.46	0.28	1.23	0.018	0.080	2.00E-03	8.76E-03	0.025	0.11	0.025	0.11	0.025	0.11	-	-
11b[2]	TEG Regenerator Still Vent/Flash Tank Train 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
14[2]	TEG Regenerator Still Vent Train 4 (no flash tank)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
15[2]	TEG Regenerator Still Vent/Flash Tank Train 5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
16a[1]	Amine Regenerator Vent Train 1																
16b[1]	Amine Regenerator Vent Train 2																
17[1]	Amine Regenerator Vent Train 3	-	-	-	-	3.47	34.00	-	-	-		-	-	-	-	-	-
18[1]	Amine Regenerator Vent Train 4																
19[1]	Amine Regenerator Vent Train 5																
31b	Caterpillar C27 Generator	15.83	26.52	1.51	2.53	0.22	0.37	0.01	0.02	0.33	0.55	0.33	0.55	0.33	0.55		
SSM1	Amine Trains & Associated Piping Blowdowns	-	-	-	-	*	9.96	-	-	-	-	-	-	-	-	-	-
SSM2	Dehydrator SSM	-	-	-	-	*	5.12	-	-	-	-	-	-	-	-	-	-
F1[3]	Fugitives	-	-	-	-	0.62	3.57	-	-	-	-	-	-	-	-	-	-
T-33	Produced water storage tank	-	-	-	-	*	1.97	-	-	-	-	-	-	-	-	-	-
	Total	**39.13**	**128.57**	**50.71**	**218.05**	**7.14**	**67.38**	**0.45**	**1.96**	**4.66**	**19.50**	**4.66**	**19.50**	**4.66**	**19.50**	**-**	**-**
	Total Minus SSM	**39.13**	**128.57**	**50.71**	**218.05**	**7.14**	**52.29**	**0.45**	**1.96**	**4.66**	**19.50**	**4.66**	**19.50**	**4.66**	**19.50**	**-**	**-**
	Total SSM	**-**	**-**	**-**	**-**	**-**	**15.08**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**		

Controlled HAP, TAP, and GHG Emissions																		
		Total HAP		Formaldehyde		Benzene		Toluene		Xylene		n-Hexane		Ammonia		CO_2	N_2O	CH_4	CO_2e
Unit ID	Equipment Description	lb/hr	tpy	lb/hr	tpy	lb/hr	tpy	lb/hr	tpy	lb/hr	tpy	lb/hr	tpy	lb/hr	tpy	tpy	tpy	tpy	tpy
1	Boiler 1	0.25	1.12	0.010	0.044	2.84E-04	1.24E-03	4.60E-04	2.01E-03	-	-	0.24	1.07	-	-	78,385.85	0.15	1.48	78,466.81
2A	Boiler 2	0.25	1.09	0.010	0.044	2.78E-04	1.22E-03	4.51E-04	1.97E-03	-	-	0.24	1.05	0.53	2.31	76,806.54	0.14	1.45	76,885.87
3	Boiler 3	0.25	1.12	0.010	0.044	2.84E-04	1.24E-03	4.60E-04	2.01E-03	-	-	0.24	1.07	-	-	78,385.85	0.15	1.48	78,466.81
20	Boiler 5	0.45	1.98	0.018	0.079	5.04E-04	2.21E-03	8.17E-04	3.58E-03	-	-	0.43	1.89	-	-	139,183.45	0.26	2.62	139,327.20
9a	TEG Reboiler Burner Train 1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1,704.29	3.21E-03	0.032	1,706.05
9b[2]	TEG Regenerator Still Vent/Flash Tank Train 1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
10a	TEG Reboiler Burner Train 2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1,278.22	2.41E-03	0.024	1,279.54
10b[2]	TEG Regenerator Still Vent/Flash Tank Train 2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11a	TEG Reboiler Burner Train 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1,704.29	3.21E-03	0.032	1,706.05
11b[2]	TEG Regenerator Still Vent/Flash Tank Train 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
14[2]	TEG Regenerator Still Vent Train 4 (no flash tank)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
15[2]	TEG Regenerator Still Vent/Flash Tank Train 5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
16a[1]	Amine Regenerator Vent Train 1													-	-			546.50	928,293.68
16b[1]	Amine Regenerator Vent Train 2													-	-				
17[1]	Amine Regenerator Vent Train 3	2.13	7.21	-	-	0.73	2.02	0.90	3.29	0.48	1.84	0.012	0.05	-	-	914,631.20	-		
18[1]	Amine Regenerator Vent Train 4													-	-				
19[1]	Amine Regenerator Vent Train 5													-	-				
31b	Caterpillar C27 Generator	0.01	0.02	5.836E-04	9.775E-04	5.74E-03	9.61E-03	2.08E-03	3.48E-03	1.43E-03	2.39E-03	-	-	-	-	2,016.82	0.02	0.08	2,023.74
SSM1	Amine Trains & Associated Piping Blowdowns	*	0.128	-	-	*	7.98E-03	*	0.03	-	0.02	*	0.070	-	-	249.36	-	716.26	18,155.98
SSM2	Dehydrator SSM	*	2.08	-	-	*	0.07	*	0.91	*	0.96	*	0.046	-	-	1.55	-	4.40	111.64
F1[3]	Fugitives	-	-	-	-	-	-	-	-	-	-	-	-	-	-	29.73	-	85.53	2,168.00
T-33	Produced water storage tank	*	0.34	-	-	*	0.053	*	0.068	*	0.045	*	0.17	-	-	-	-	-	-
	Total	**3.35**	**15.07**	**0.05**	**0.21**	**0.74**	**2.17**	**0.91**	**4.31**	**0.49**	**2.86**	**1.17**	**5.41**	**0.53**	**2.31**	**1,294,377.14**	**0.73**	**1,359.89**	**1,328,591.35**

" - " indicates pollutants are not to be expected.

" * " indicates lb/hr emission rates are not appropriate for this unit.

[1] These amine regenerator vents have a single combined emission limit cap for all five units.

[2] Emissions are associated with SSM2.

[3] A safety factor has been added to allow for gas analysis variability.

Boiler Exhaust Emissions Calculations

Unit Number: 2A
Description: Babcock & Wilcox Boiler

Note: The data on this worksheet applies to each individual emissions unit identified above.

Fuel Consumption

135.20	MMBtu/hr	Capacity	Mfg. data
150,222	scf/hr	Hourly fuel consumption	MMBtu/hr x 1,000,000 / Btu/scf
8,760	hr/yr	Annual operating time	
1,184,352	MMBtu/yr	Annual fuel consumption	MMBtu/hr x hr/yr
1,315.95	MMscf/yr	Annual fuel consumption	scf/hr x hr/yr / 1,000,000
900	Btu/scf	Field gas heating value	Nominal heat content

Steady-State Emission Rates

Pollutants	Emission Factors, ppmv	Emission Factors, lb/MMBtu	Uncontrolled Emission Rates, pph	tpy
NOX	9	0.01	1.68	7.36
CO	50	0.04	5.78	25.30
VOC		0.004	0.54	2.37
PM		0.005	0.68	2.96

Emission factors taken from manufacturers data. NOx is based on using a SCR as a control device.
Emission factors (lb/MMBtu) = ppmv / 10^6 / molar volume * MW (NO_x /CO) * F_d Factor * 20.9 / (20.9 -3%O_2)
Molar Volume (dscf/lb-mol) = 379.5
MW (lb/lb-mol) = 46.01 NO_x & 28.01 CO
F_d (dscf/MMBtu) = 8710 (40 CFR 60 Appendix A Method 19 Table 19-2)
Uncontrolled Emission Rates (pph) = lb/MMBtu x MMBtu/hr
Uncontrolled Emission Rates (tpy) = Uncontrolled Emission Rates (pph) x hr/yr / 2,000 lb/ton
A safety factor of 7% was applied to NO_x.
A safety factor of 7% was applied to CO.

Pollutants	Emission Factors, lb/MMscf	Uncontrolled Emission Rates, pph	tpy
SO2	0.60	9.01E-02	3.95E-01

Emission factors taken from AP-42, Table 1.4-2, 07/98
Uncontrolled Emission Rates (pph) = lb/MMscf x scf/hr / 1,000,000
Uncontrolled Emission Rates (tpy) = Uncontrolled Emission Rates (pph) x hr/yr / 2,000 lb/ton

Pollutants	Emission Factors, lb/MMBtu	Uncontrolled Emission Rates, pph	tpy
Benzene	2.06E-06	2.78E-04	1.22E-03
Dichlorobenzene	1.18E-06	1.59E-04	6.97E-04
Formaldehyde	7.35E-05	9.94E-03	4.35E-02
n-Hexane	1.76E-03	2.39E-01	1.05
Napthalene	5.98E-07	8.09E-05	3.54E-04
Polycyclics	8.65E-08	1.17E-05	5.12E-05
Toluene	3.33E-06	4.51E-04	1.97E-03

Emission factors taken from AP-42, Table 1.4-3, 07/98
Emission factors (lb/MMscf) divided by 1,020 (per AP-42) to convert to lb/MMBtu
Uncontrolled Emission Rates (pph) = lb/MMBtu x MMBtu/hr
Uncontrolled Emission Rates (tpy) = Uncontrolled Emission Rates (pph) x hr/yr / 2,000 lb/ton

Boiler Exhaust Emissions Calculations

Unit Number: 2A
Description: Babcock & Wilcox Boiler

Ammonia Slip Emissions

Pollutants	Emission Factors, ppmv	Uncontrolled Emission Rates, pph	tpy
NH3	10	0.53	2.31

Emission factor taken from manufacturers data. NH_3 is based on using a SCR as a control device.
Emission (pph) = (ppmv/10^6) * (MW/Molar Volume) * F_d Factor * Q
MW (lb/lb-mol) = 17.03 NH3
Molar Volume (dscf/lb-mol) = 379.5
Q (MMBtu/hr) = Fuel Flow Rate
F_d (dscf/MMBtu) = 8710 (40 CFR 60 Appendix A Method 19 Table 19-2)
Uncontrolled Emission Rates (tpy) = Uncontrolled Emission Rates (pph) x hr/yr / 2,000 lb/ton

Exhaust Parameters

330	°F	Exhaust temperature	Mfg. specification
39,741	acfm	Stack flowrate	Mfg. specification
5.00	ft	Stack exit diameter	Mfg. specification
19.63	ft^2	Stack exit area	3.1416 x ((ft / 2) ^2)
33.73	fps	Stack exit velocity	acfm / ft^2 / 60 sec/min
58.00	ft	Stack height	Mfg. specification

Dehy Vent Emissions Calculations

Unit Number: 9b, 10b, 11b, 14, 15
Description: Dehy Still Vents

Operating Time

8760	hr/yr	
145	MMSCFD	Dehy 9b throughputs
145	MMSCFD	Dehy 10b throughputs
145	MMSCFD	Dehy 11b throughput
90	MMSCFD	Dehy 14 throughput
120	MMSCFD	Dehy 15 throughput

Uncontrolled Emission Rates

Pollutants	Uncontrolled Emission Rates					
	9b Regenerator Vent/Flash Gas Emissions		10b Regenerator Vent/Flash Gas Emissions		11b Combined Regenerator Vent/Flash Gas Emissions	
	pph	tpy	pph	tpy	pph	tpy
Methane	4.4677	19.5685	4.4677	19.5685	4.6453	20.3462
Ethane	0.9897	4.3348	0.9897	4.3348	1.0389	4.5504
Propane	0.8845	3.8740	0.8845	3.8740	0.9299	4.0728
Isobutane	0.3396	1.4872	0.3396	1.4872	0.3084	1.3507
n-Butane	0.4866	2.1313	0.4866	2.1313	0.4047	1.7725
Isopentane	0.1257	0.5507	0.1257	0.5507	0.0807	0.3535
n-Pentane	0.2143	0.9386	0.2143	0.9386	0.1252	0.5484
Cyclopentane	0.0274	0.1198	0.0274	0.1198	0.0380	0.1664
n-Hexane	0.0798	0.3495	0.0798	0.3495	0.1187	0.5199
Cyclohexane	0.1518	0.6649	0.1518	0.6649	0.1933	0.8468
Other Hexanes	0.1055	0.4622	0.1055	0.4622	0.1715	0.7510
Heptanes	0.1183	0.5182	0.1183	0.5182	0.2272	0.9952
Methylcyclohexane	0.4806	2.1051	0.4806	2.1051	0.7224	3.1640
2,2,4-Trimethylpentane	0.0065	0.0284	0.0065	0.0284	0.0060	0.0262
Benzene	0.0000	0.0000	0.0000	0.0000	0.4359	1.9093
Toluene	1.2535	5.4905	1.2535	5.4905	2.9601	12.9654
Ethylbenzene	0.0000	0.0000	0.0000	0.0000	0.5399	2.3648
Xylenes	0.7718	3.3805	0.7718	3.3805	4.1765	18.2930
C8+ Heavies	0.8740	3.8282	0.8740	3.8282	2.8957	12.6831
VOC	5.9199	25.9291	5.9199	25.9291	14.3341	62.7830
HAP	2.1116	9.2489	2.1116	9.2489	8.2371	36.0786

Emission rates obtained from GLY-Calc report (11/4/25)

Dehy Vent Emissions Calculations

Unit Number: 9b, 10b, 11b, 14, 15
Description: Dehy Still Vents

Pollutants	Uncontrolled Emission Rates					
	14 Regenerator Vent Emissions (no flash tank)		15 Combined Regenerator Vent/Flash Gas Emissions		Total	
	pph	tpy	pph	tpy	pph	tpy
Methane	15.9703	69.9497	3.3377	14.6193	32.8887	144.0522
Ethane	1.1315	4.9558	0.7707	3.3758	4.9205	21.5516
Propane	0.5962	2.6114	0.6910	3.0267	3.9861	17.4589
Isobutane	0.2075	0.9090	0.3117	1.3654	1.5068	6.5995
n-Butane	0.2245	0.9833	0.3828	1.6766	1.9852	8.6950
Isopentane	0.0774	0.3388	0.1419	0.6215	0.5514	2.4152
n-Pentane	0.0653	0.2861	0.1297	0.5682	0.7488	3.2799
Cyclopentane	0.0000	0.0000	0.0000	0.0000	0.0928	0.4060
n-Hexane	0.0000	0.0000	0.0000	0.0000	0.2783	1.2189
Cyclohexane	0.0000	0.0000	0.0000	0.0000	0.4969	2.1766
Other Hexanes	0.0000	0.0000	0.0000	0.0000	0.3825	1.6754
Heptanes	0.0000	0.0000	0.0000	0.0000	0.4638	2.0316
Methylcycloheane	0.0000	0.0000	0.0000	0.0000	1.6836	7.3742
2,2,4-Trimethylpentane	0.0000	0.0000	0.0000	0.0000	0.0190	0.0830
Benzene	0.0000	0.0000	0.0000	0.0000	0.4359	1.9093
Toluene	0.0000	0.0000	0.0000	0.0000	5.4671	23.9464
Ethylbenzene	0.0000	0.0000	0.0000	0.0000	0.5399	2.3648
Xylenes	0.0000	0.0000	0.0000	0.0000	5.7201	25.0540
C8+ Heavies	0.0000	0.0000	0.0000	0.0000	4.6437	20.3395
VOC	1.1709	5.1286	1.6571	7.2584	29.0019	127.0282
HAP	0.0000	0.0000	0.0000	0.0000	12.4603	54.5764

Emission rates obtained from GLY-Calc report (11/4/25)

Amine Vent Emissions Calculations

Unit Number: 16a, 16b, 17-19
Description: Train 1-5 Amine Vents

Operating Time

34.0	tpy VOC	Allowable annual amine vent emissions	Current NSR permit
50	%	Safety factor	Estimated
2.32	pph VOC	Normal short-term emission rate	See table below
3.47	pph VOC	Normal short-term emission rate w/safety factor	pph x (1 + (% / 100))
1.01	pph VOC	Ignacio plant outage short-term emission rate	See table below
1.51	pph VOC	Ignacio plant outage short-term emission rate w/safety factor	pph x (1 + (% / 100))
8,760	hr/yr		

Steady-State Emission Rates

Normal Amine Vent Emissions Calculations (07/15/2025 Plant Inlet Gas Composition)						
Pollutants	Uncontrolled Emission Rates					
	Train 1, pph	Train 2, pph	Train 3, pph	Train 4, pph	Train 5, pph	Total, pph
H2S	0.000	0.000	0.000	0.000	0.000	0.000
CO2	58510.930	58510.930	58510.930	30027.160	44913.800	250473.750
MDEA	0.000	0.000	0.000	0.000	0.000	0.000
H2O	0.000	0.000	0.000	0.000	0.000	0.000
N2	0.013	0.013	0.013	0.006	0.014	0.059
C1	30.179	30.179	30.179	15.369	36.414	142.320
C2	0.590	0.590	0.590	0.311	0.730	2.811
C3	0.138	0.138	0.138	0.076	0.177	0.667
i-C4	0.000	0.000	0.000	0.000	0.000	0.000
n-C4	0.000	0.000	0.000	0.000	0.000	0.000
i-C5	0.001	0.001	0.001	0.000	0.001	0.004
n-C5	0.000	0.000	0.000	0.000	0.000	0.000
Hexanes	0.000	0.000	0.000	0.000	0.000	0.000
Heptanes	0.000	0.000	0.000	0.000	0.000	0.000
Octanes+	0.000	0.000	0.000	0.000	0.000	0.000
2,2,4-Trimeth	0.000	0.000	0.000	0.000	0.000	0.000
Benzene	0.097	0.097	0.097	0.058	0.113	0.462
Ethylbenzene	0.000	0.000	0.000	0.000	0.000	0.000
n-Hexane	0.003	0.003	0.003	0.001	0.002	0.012
Toluene	0.181	0.181	0.181	0.063	0.145	0.751
Xylenes	0.101	0.101	0.101	0.035	0.082	0.420
VOC	0.521	0.521	0.521	0.233	0.520	2.316
HAP	0.382	0.382	0.382	0.157	0.342	1.645

Emission rates obtained from AmineCalc results

Amine Vent Emissions Calculations

Unit Number: 16a, 16b, 17-19
Description: Train 1-5 Amine Vents

Ignacio Plant Outage Amine Vent Emissions Calculations (03/13/2025 Plant Inlet Gas Composition)						
Pollutants	Uncontrolled Emission Rates					
	Train 1, pph	Train 2, pph	Train 3, pph	Train 4, pph	Train 5, pph	Total, pph
H2S	0.000	0.000	0.000	0.000	0.000	0.000
CO2	30867.500	30867.500	30872.940	14375.170	23419.320	130402.430
MDEA	0.000	0.000	0.000	0.000	0.000	0.000
H2O	0.000	0.000	0.000	0.000	0.000	0.000
N2	0.009	0.009	0.009	0.004	0.008	0.039
C1	30.861	30.861	33.629	17.322	31.127	143.800
C2	0.510	0.510	0.536	0.285	0.509	2.350
C3	0.114	0.114	0.120	0.064	0.115	0.527
i-C4	0.000	0.000	0.000	0.000	0.000	0.000
n-C4	0.000	0.000	0.000	0.000	0.000	0.000
i-C5	0.000	0.000	0.000	0.000	0.000	0.000
n-C5	0.000	0.000	0.000	0.000	0.000	0.000
Hexanes	0.000	0.000	0.000	0.000	0.000	0.000
Heptanes	0.000	0.000	0.000	0.000	0.000	0.000
Octanes	0.000	0.000	0.000	0.000	0.000	0.000
2,2,4-Trimeth	0.000	0.000	0.000	0.000	0.000	0.000
Benzene	0.060	0.060	0.060	0.033	0.054	0.267
Ethylbenzene	0.000	0.000	0.000	0.000	0.000	0.000
n-Hexane	0.000	0.000	0.000	0.000	0.000	0.000
Toluene	0.035	0.035	0.036	0.016	0.028	0.150
Xylenes	0.015	0.015	0.015	0.007	0.012	0.064
VOC	0.224	0.224	0.231	0.120	0.209	1.008
HAP	0.110	0.110	0.111	0.056	0.094	0.481

Emission rates obtained from AmineCalc results

Pollutants	Uncontrolled Emission Rates		
	Normal, pph	Igancio Outage, pph	Total, tpy
2,2,4-Trimeth	0.00E+00	0.00E+00	0.00E+00
Benzene	4.62E-01	0.267	2.02
Ethylbenzene	0.00E+00	0.00E+00	0.00E+00
n-Hexane	1.20E-02	0.00E+00	5.26E-02
Toluene	7.51E-01	0.150	3.29
Xylenes	4.20E-01	0.064	1.84
Total HAP	1.65E+00	0.481	7.21

Normal and Ignacio plant outage emission rates (pph) obtained from the tables above
Uncontrolled Emission Rates (tpy) = [(Uncontrolled normal emission rates (pph) x Minimum normal operating time (hr/yr))
+ (Uncontrolled Ignacio plant outage emission rates (pph)
x Maximum Ignacio plant outage operating time (hr/yr))]
/ 2,000 lb/ton

Equipment Leaks Emissions Calculations

Unit Number: F1
Description: Valves, Connectors, Seals & Open-Ended Lines (During Normal Operation)

Steady-State Emission Rates

Equipment	Number of Components, # of sources	Emission Factors, kg/hr/source	Emission Factors, lb/hr/source	Uncontrolled TOC Emission Rates, pph	tpy
Valves	3176	0.0045	0.0099	31.44	101.79
Connectors	3517	0.0002	0.0004	1.55	5.01
Pump Seals	118	0.0024	0.0053	0.62	2.02
Compressor Seals	15	0.0088	0.0194	0.29	0.94
Pressure Relief Valves	229	0.0088	0.0194	4.43	14.35
Open-Ended Lines	1264	0.0020	0.0044	5.56	18.01
Total				**43.90**	**142.12**

Number of components are provided by WFC
Emission factors taken from the EPA "1995 Protocol for Equipment Leak Emission Estimates"
Emission factors (lb/hr/source) = Emission factors (kg/hr/source) x 2.2 lb/kg
Uncontrolled TOC Emission Rates (pph) = lb/hr/source x # of sources
Uncontrolled TOC Emission Rates (tpy) = Uncontrolled TOC Emission Rates (pph) x 6,475 hr/yr / 2,000 lb/ton

Components	Mole Percents, %	Molecular Weights, lb/lb-mole	Component Weights, lb/lb-mole	Weight Percent of TOC, %	Uncontrolled Emission Rates, pph	tpy
Carbon dioxide	11.0975	44.010				
Hydrogen sulfide	0.0000	34.070				
Nitrogen	0.0769	28.013				
Methane	87.4628	16.043	1403.166	96.608		
Ethane	0.9889	30.070	29.736	2.047		
Propane	0.2303	44.097	10.156	0.699	3.07E-01	9.94E-01
Isobutane	0.0396	58.123	2.302	0.158	6.96E-02	2.25E-01
n-Butane	0.0466	58.123	2.709	0.186	8.19E-02	2.65E-01
Isopentane	0.0337	72.150	2.431	0.167	7.35E-02	2.38E-01
n-Pentane	0.0123	72.150	0.887	0.061	2.68E-02	8.68E-02
Cyclopentane	0.0002	70.134	0.014	0.001	4.24E-04	1.37E-03
n-Hexane	0.0016	86.177	0.138	0.009	4.17E-03	1.35E-02
Cyclohexane	0.0005	84.161	0.042	0.003	1.27E-03	4.12E-03
Other hexanes	0.0034	86.177	0.293	0.020	8.86E-03	2.87E-02
Heptanes	0.0014	100.204	0.140	0.010	4.24E-03	1.37E-02
Methylcyclohexane	0.0013	98.188	0.128	0.009	3.86E-03	1.25E-02
2,2,4-Trimethylpentane	0.0000	114.231	0.000	0.000	0.00E+00	0.00E+00
Benzene	0.0002	78.114	0.016	0.001	4.72E-04	1.53E-03
Toluene	0.0006	92.141	0.055	0.004	1.67E-03	5.41E-03
Ethylbenzene	0.0000	106.167	0.000	0.000	0.00E+00	0.00E+00
Xylenes	0.0004	106.167	0.042	0.003	1.28E-03	4.16E-03
C8+ Heavies	0.0015	114.231	0.171	0.012	5.18E-03	1.68E-02
Total	100.00		1452.426			
Total VOC				1.344	5.90E-01	1.91

Gas stream composition obtained from Milagro (Plant Inlet) extended gas analysis dated 07/15/2025
Component Weights (lb/lb-mole) = (% / 100) * Molecular Weights (lb/lb-mole)
Weight Percent of TOC (%) = 100 x Component Weights (lb/lb-mole) / Total Component Weight (lb/lb-mole)
Uncontrolled Emission Rates (pph) = Total Uncontrolled TOC Emission Rate (pph) x (% / 100)
Uncontrolled Emission Rates (tpy) = Total Uncontrolled TOC Emission Rate (tpy) x (% / 100)

Equipment Leaks Emissions Calculations

Unit Number: F1
Description: Valves, Connectors, Seals & Open-Ended Lines (During Ignacio Plant Outages)

Steady-State Emission Rates

Equipment	Number of Components, # of sources	Emission Factors, kg/hr/source	Emission Factors, lb/hr/source	Uncontrolled TOC Emission Rates, pph	tpy
Valves	3176	0.0045	0.0099	31.44	35.92
Connectors	3517	0.0002	0.0004	1.55	1.77
Pump Seals	118	0.0024	0.0053	0.62	0.71
Compressor Seals	15	0.0088	0.0194	0.29	0.33
Pressure Relief Valves	229	0.0088	0.0194	4.43	5.07
Open-Ended Lines	1264	0.0020	0.0044	5.56	6.35
Total				**43.90**	**50.15**

Number of components are provided by WFC
Emission factors taken from the EPA "1995 Protocol for Equipment Leak Emission Estimates"
Emission factors (lb/hr/source) = Emission factors (kg/hr/source) x 2.2 lb/kg
Uncontrolled TOC Emission Rates (pph) = lb/hr/source x # of sources
Uncontrolled TOC Emission Rates (tpy) = Uncontrolled TOC Emission Rates (pph) x 2,285 hr/yr / 2,000 lb/ton

Components	Mole Percents, %	Molecular Weights, lb/lb-mole	Component Weights, lb/lb-mole	Weight Percent of TOC, %	Uncontrolled Emission Rates, pph	tpy
Carbon dioxide	10.1116	44.010				
Hydrogen sulfide	0.0000	34.070				
Nitrogen	0.0603	28.013				
Methane	88.5773	16.043	1421.046	97.072		
Ethane	0.9703	30.070	29.177	1.993		
Propane	0.2090	44.097	9.216	0.630	2.76E-01	3.16E-01
Isobutane	0.0310	58.123	1.802	0.123	5.40E-02	6.17E-02
n-Butane	0.0259	58.123	1.505	0.103	4.51E-02	5.16E-02
Isopentane	0.0060	72.150	0.433	0.030	1.30E-02	1.48E-02
n-Pentane	0.0028	72.150	0.202	0.014	6.06E-03	6.92E-03
Cyclopentane	0.0001	70.134	0.007	0.000	2.10E-04	2.40E-04
n-Hexane	0.0008	86.177	0.069	0.005	2.07E-03	2.36E-03
Cyclohexane	0.0003	84.161	0.025	0.002	7.57E-04	8.65E-04
Other hexanes	0.0016	86.177	0.138	0.009	4.13E-03	4.72E-03
Heptanes	0.0007	100.204	0.070	0.005	2.10E-03	2.40E-03
Methylcyclohexane	0.0007	98.188	0.069	0.005	2.06E-03	2.35E-03
2,2,4-Trimethylpentane	0.0000	114.231	0.000	0.000	0.00E+00	0.00E+00
Benzene	0.0001	78.114	0.008	0.001	2.34E-04	2.68E-04
Toluene	0.0004	92.141	0.037	0.003	1.11E-03	1.26E-03
Ethylbenzene	0.0000	106.167	0.000	0.000	0.00E+00	0.00E+00
Xylenes	0.0002	106.167	0.021	0.001	6.37E-04	7.27E-04
C8+ Heavies	0.0008	114.231	0.091	0.006	2.74E-03	3.13E-03
Total	100.00		1463.916			
Total VOC				0.935	0.41	0.47

Gas stream composition obtained from Milagro (Plant Inlet) extended gas analysis dated 05/07/2025
Component Weights (lb/lb-mole) = (% / 100) * Molecular Weights (lb/lb-mole)
Weight Percent of TOC (%) = 100 x Component Weights (lb/lb-mole) / Total Component Weight (lb/lb-mole)
Uncontrolled Emission Rates (pph) = Total Uncontrolled TOC Emission Rate (pph) x (% / 100)
Uncontrolled Emission Rates (tpy) = Total Uncontrolled TOC Emission Rate (tpy) x (% / 100)

SSM Blowdown Emissions Calculations

Unit Number: SSM1
Description: Treating Trains SSM

Throughput

38,731,000	scf/yr	Annual gas loss	
8,760	hr/yr	Minimum normal operating time	Calculated on Amine Units tab
38,731,000	scf/yr	Annual gas loss during normal operations	scf/yr x (hr/yr / 8,760 hr/yr)

Emission Rates

Pollutants	Emission Factors		Uncontrolled Emission Rates		
	Normal, lb/scf	Igancio Plant Outages, lb/scf	Normal, tpy	Ignacio Plant Outages, tpy	Total, tpy
VOC	5.145E-04	3.609E-04	9.96	0.00	9.96
2,2,4-Trimethylpentane	0.000E+00	0.000E+00	0.00E+00	0.00E+00	0.00E+00
Benzene	4.119E-07	2.059E-07	7.98E-03	0.00E+00	7.98E-03
Ethylbenzene	0.000E+00	0.000E+00	0.00E+00	0.00E+00	0.00E+00
n-Hexane	3.635E-06	1.817E-06	7.04E-02	0.00E+00	7.04E-02
Toluene	1.458E-06	9.717E-07	2.82E-02	0.00E+00	2.82E-02
Xylene	1.120E-06	5.598E-07	2.17E-02	0.00E+00	2.17E-02

Emission factors calculated from gas compositions (see tables below)
Normal and Ignacio Plant Outages Uncontrolled Emission Rates (tpy) = scf/yr x lb/scf / 2,000 lb/ton
Total Uncontrolled Emission Rates (tpy) = Normal Uncontrolled Emission Rates (tpy)
+ Ignacio Plant Outages Uncontrolled Emission Rates (tpy)

Gas Composition (During Normal Operations)

Components	Mole Percents, %	Molecular Weights, lb/lb-mole	Emission Factors, lb/scf
Carbon dioxide	11.0975	44.01	1.288E-02
Hydrogen sulfide	0.0000	34.07	0.000E+00
Nitrogen	0.0769	28.01	5.679E-05
Methane	87.4628	16.04	3.699E-02
Ethane	0.9889	30.07	7.840E-04
Propane	0.2303	44.09	2.677E-04
Isobutane	0.0396	58.12	6.068E-05
n-Butane	0.0466	58.12	7.141E-05
Isopentane	0.0337	72.15	6.410E-05
n-Pentane	0.0123	72.15	2.340E-05
Cyclopentane	0.0002	70.14	3.698E-07
n-Hexane	0.0016	86.17	3.635E-06
Cyclohexane	0.0005	84.16	1.109E-06
Other hexanes	0.0034	86.18	7.725E-06
Heptanes	0.0014	100.20	3.698E-06
Methylcyclohexane	0.0013	98.19	3.365E-06
2,2,4-Trimethylpentane	0.0000	100.21	0.000E+00
Benzene	0.0002	78.11	4.119E-07
Toluene	0.0006	92.14	1.458E-06
Ethylbenzene	0.0000	106.17	0.000E+00
Xylenes	0.0004	106.17	1.120E-06
C8+ Heavies	0.0015	110.00	4.350E-06
Total	100.000		
Total VOC			5.145E-04

Gas stream composition obtained from Milagro (Plant Inlet) extended gas analysis dated 07/15/2025
Emission Factors (lb/scf) = (% / 100) x lb/lb-mole / 379.3 scf/lb-mole

SSM Blowdown Emissions Calculations

Gas Composition (During Ignacio Plant Outages)

Components	Mole Percents, %	Molecular Weights, lb/lb-mole	Emission Factors, lb/scf
Carbon dioxide	10.1116	44.01	1.173E-02
Hydrogen sulfide	0.0000	34.07	0.000E+00
Nitrogen	0.0603	28.01	4.453E-05
Methane	88.5773	16.04	3.746E-02
Ethane	0.9703	30.07	7.692E-04
Propane	0.2090	44.09	2.429E-04
Isobutane	0.0310	58.12	4.750E-05
n-Butane	0.0259	58.12	3.969E-05
Isopentane	0.0060	72.15	1.141E-05
n-Pentane	0.0028	72.15	5.326E-06
Cyclopentane	0.0001	70.14	1.849E-07
n-Hexane	0.0008	86.17	1.817E-06
Cyclohexane	0.0003	84.16	6.656E-07
Other hexanes	0.0016	86.18	3.635E-06
Heptanes	0.0007	100.20	1.849E-06
Methylcyclohexane	0.0007	98.19	1.812E-06
2,2,4-Trimethylpentane	0.0000	100.21	0.000E+00
Benzene	0.0001	78.11	2.059E-07
Toluene	0.0004	92.14	9.717E-07
Ethylbenzene	0.0000	106.17	0.000E+00
Xylenes	0.0002	106.17	5.598E-07
C8+ Heavies	0.0008	110.00	2.320E-06
Total	100.000		
Total VOC			3.609E-04

Gas stream composition obtained from Milagro (Plant Inlet) extended gas analysis dated 05/07/2025
Emission Factors (lb/scf) = (% / 100) x lb/lb-mole / 379.3 scf/lb-mole

Unit Number: SSM2
Description: Dehydator Venting SSM

Throughput

8,858,654	scf/yr	Calculated based on actual scf/yr * (hr/yr / 8760 hr/yr)
334	hr/yr	Hours required to reach 5 tpy VOC
232,306,440	scf/yr	Annual gas loss during normal operations

Component	Units 9b lb/hr	Units 10b lb/hr	Unit 11b lb/hr	Unit 14[1] lb/hr	Unit 15 lb/hr	Combined tpy
Methane	4.47	4.47	4.65	15.97	3.34	5.49
Ethane	0.99	0.99	1.04	1.13	0.77	0.82
Propane	0.88	0.88	0.93	0.60	0.69	0.67
Isobutane	0.34	0.34	0.31	0.21	0.31	0.25
n-Butane	0.49	0.49	0.40	0.22	0.38	0.33
Isopentane	0.13	0.13	0.08	0.08	0.14	0.09
n-Pentane	0.21	0.21	0.13	0.07	0.13	0.13
Cyclopentane	0.03	0.03	0.04	0.00	0.00	0.02
n-Hexane	0.08	0.08	0.12	0.00	0.00	0.05
Cyclohexane	0.15	0.15	0.19	0.00	0.00	0.08
Other Hexanes	0.11	0.11	0.17	0.00	0.00	0.06
Heptanes	0.12	0.12	0.23	0.00	0.00	0.08
Methylcyclohexane	0.48	0.48	0.72	0.00	0.00	0.28
2,2,4-Trimethylpentane	0.01	0.01	0.01	0.00	0.00	0.003
Benzene	0.00	0.00	0.44	0.00	0.00	0.07
Toluene	1.25	1.25	2.96	0.00	0.00	0.91
Ethylbenzene	0.00	0.00	0.54	0.00	0.00	0.09
Xylenes	0.77	0.77	4.18	0.00	0.00	0.96
C8+ Heavies	0.87	0.87	2.90	0.00	1.66	1.05
Total VOC Emissions	5.92	5.92	14.33	1.17	3.31	5.12
Total HAP Emissions	2.11	2.11	8.24	0.00	0.00	2.08

[1] Unit 14 does not have a flash tank and only a regenerator.

Section 6

Subsection 2 – Emission Calculations for All Other Units at this Facility Not Affected by this Application

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For clarity, Subsection 2 contains emission calculations for all other units at this facility that were not affected by this application (i.e. all units except for Units 2A, 9b, 10b, 11b, 14, 15, 16a, 16b, 17, 18, 19, F1, SSM1, and SSM2). For pertinent calculations relevant to the changes at the facility in this application, please refer to Section 6 Subsection 1.

Boiler Exhaust Emissions Calculations

Unit Number: 1
Description: Holman Boiler

Note: The data on this worksheet applies to each individual emissions unit identified above.

Fuel Consumption

137.98	MMBtu/hr	Capacity	Mfg. data
153,311	scf/hr	Hourly fuel consumption	MMBtu/hr x 1,000,000 / Btu/scf
8,760	hr/yr	Annual operating time	
1,208,705	MMBtu/yr	Annual fuel consumption	MMBtu/hr x hr/yr
1,343.01	MMscf/yr	Annual fuel consumption	scf/hr x hr/yr / 1,000,000
900	Btu/scf	Field gas heating value	Nominal heat content

Steady-State Emission Rates

Pollutants	Emission Factors, ppmv	Emission Factors, lb/MMBtu	Uncontrolled Emission Rates, pph	Uncontrolled Emission Rates, tpy
NOX	30	0.037	5.45	23.88
CO	100	0.075	11.05	48.42
VOC		0.004	0.60	2.65
PM		0.005	0.76	3.31

Emission factors taken from manufacturers data
Emission factors (lb/MMBtu) = ppmv / 10^6 / molar volume * MW (NO_x /CO) * F_d Factor * 20.9 / (20.9 -3%O_2)
Molar Volume (dscf/lb-mol) = 379.5
MW (lb/lb-mol) = 46.01 NO_x & 28.01 CO
F_d (dscf/MMBtu) = 8710 (40 CFR 60 Appendix A Method 19 Table 19-2)
Uncontrolled Emission Rates (pph) = lb/MMBtu x MMBtu/hr
Uncontrolled Emission Rates (tpy) = Uncontrolled Emission Rates (pph) x hr/yr / 2,000 lb/ton
A safety factor of 7% was applied to NO_x.
A safety factor of 7% was applied to CO.

Pollutants	Emission Factors, lb/MMscf	Uncontrolled Emission Rates, pph	Uncontrolled Emission Rates, tpy
SO2	0.60	9.20E-02	4.03E-01

Emission factors taken from AP-42, Table 1.4-2, 07/98
Uncontrolled Emission Rates (pph) = lb/MMscf x scf/hr / 1,000,000
Uncontrolled Emission Rates (tpy) = Uncontrolled Emission Rates (pph) x hr/yr / 2,000 lb/ton

Pollutants	Emission Factors, lb/MMBtu	Uncontrolled Emission Rates, pph	Uncontrolled Emission Rates, tpy
Benzene	2.06E-06	2.84E-04	1.24E-03
Dichlorobenzene	1.18E-06	1.62E-04	7.11E-04
Formaldehyde	7.35E-05	1.01E-02	4.44E-02
n-Hexane	1.76E-03	2.43E-01	1.07
Napthalene	5.98E-07	8.25E-05	3.61E-04
Polycyclics	8.65E-08	1.19E-05	5.23E-05
Toluene	3.33E-06	4.60E-04	2.01E-03

Emission factors taken from AP-42, Table 1.4-3, 07/98
Emission factors (lb/MMscf) divided by 1,020 (per AP-42) to convert to lb/MMBtu
Uncontrolled Emission Rates (pph) = lb/MMBtu x MMBtu/hr
Uncontrolled Emission Rates (tpy) = Uncontrolled Emission Rates (pph) x hr/yr / 2,000 lb/ton

Exhaust Parameters

300	°F	Exhaust temperature	Mfg. specification
52,944	acfm	Stack flowrate	Mfg. specification
5.00	ft	Stack exit diameter	Mfg. specification
19.63	ft^2	Stack exit area	3.1416 x ((ft / 2) ^2)
44.94	fps	Stack exit velocity	acfm / ft^2 / 60 sec/min
45.00	ft	Stack height	Mfg. specification

Boiler Exhaust Emissions Calculations

Unit Number: 3
Description: Holman Boiler

Note: The data on this worksheet applies to each individual emissions unit identified above.

Fuel Consumption

137.98	MMBtu/hr	Capacity	Mfg. data
153,311	scf/hr	Hourly fuel consumption	MMBtu/hr x 1,000,000 / Btu/scf
8,760	hr/yr	Annual operating time	
1,208,705	MMBtu/yr	Annual fuel consumption	MMBtu/hr x hr/yr
1,343.01	MMscf/yr	Annual fuel consumption	scf/hr x hr/yr / 1,000,000
900	Btu/scf	Field gas heating value	Nominal heat content

Steady-State Emission Rates

Pollutants	Emission Factors, ppmv	Emission Factors, lb/MMBtu	Uncontrolled Emission Rates, pph	Uncontrolled Emission Rates, tpy
NOX	30	0.037	5.45	23.87
CO	100	0.075	11.05	48.42
VOC		0.004	0.60	2.65
PM		0.005	0.76	3.31

Emission factors taken from manufacturers data
Emission factors (lb/MMBtu) = ppmv / 10^6 / molar volume * MW (NO_x /CO) * F_d Factor * 20.9 / (20.9 -3%O_2)
Molar Volume (dscf/lb-mol) = 379.5
MW (lb/lb-mol) = 46.01 NO_x & 28.01 CO
F_d (dscf/MMBtu) = 8710 (40 CFR 60 Appendix A Method 19 Table 19-2)
Uncontrolled Emission Rates (pph) = lb/MMBtu x MMBtu/hr
Uncontrolled Emission Rates (tpy) = Uncontrolled Emission Rates (pph) x hr/yr / 2,000 lb/ton
A safety factor of 7% was applied to NO_x.
A safety factor of 7% was applied to CO.

Pollutants	Emission Factors, lb/MMscf	Uncontrolled Emission Rates, pph	Uncontrolled Emission Rates, tpy
SO2	0.60	9.20E-02	4.03E-01

Emission factors taken from AP-42, Table 1.4-2, 07/98
Uncontrolled Emission Rates (pph) = lb/MMscf x scf/hr / 1,000,000
Uncontrolled Emission Rates (tpy) = Uncontrolled Emission Rates (pph) x hr/yr / 2,000 lb/ton

Pollutants	Emission Factors, lb/MMBtu	Uncontrolled Emission Rates, pph	Uncontrolled Emission Rates, tpy
Benzene	2.06E-06	2.84E-04	1.24E-03
Dichlorobenzene	1.18E-06	1.62E-04	7.11E-04
Formaldehyde	7.35E-05	1.01E-02	4.44E-02
n-Hexane	1.76E-03	2.43E-01	1.07
Napthalene	5.98E-07	8.25E-05	3.61E-04
Polycyclics	8.65E-08	1.19E-05	5.23E-05
Toluene	3.33E-06	4.60E-04	2.01E-03

Emission factors taken from AP-42, Table 1.4-3, 07/98
Emission factors (lb/MMscf) divided by 1,020 (per AP-42) to convert to lb/MMBtu
Uncontrolled Emission Rates (pph) = lb/MMBtu x MMBtu/hr
Uncontrolled Emission Rates (tpy) = Uncontrolled Emission Rates (pph) x hr/yr / 2,000 lb/ton

Exhaust Parameters

300	°F	Exhaust temperature	Mfg. specification
52,944	acfm	Stack flowrate	Mfg. specification
5.00	ft	Stack exit diameter	Mfg. specification
19.63	ft^2	Stack exit area	3.1416 x ((ft / 2) ^2)
44.94	fps	Stack exit velocity	acfm / ft^2 / 60 sec/min
45.00	ft	Stack height	Mfg. specification

Boiler Exhaust Emissions Calculations

Unit Number: 20
Description: Rentech Boiler

Fuel Consumption

245.00	MMBtu/hr	Capacity	Mfg. data
272,222	scf/hr	Hourly fuel consumption	MMBtu/hr x 1,000,000 / Btu/scf
8,760	hr/yr	Annual operating time	
2,146,200	MMBtu/yr	Annual fuel consumption	MMBtu/hr x hr/yr
2,384.67	MMscf/yr	Annual fuel consumption	scf/hr x hr/yr / 1,000,000
900	Btu/scf	Field gas heating value	Nominal heat content

Steady-State Emission Rates

Pollutants	Emission Factors, lb/MMBtu	Uncontrolled Emission Rates, pph	tpy
NOX	0.0400	9.80	42.92
CO	0.08387	20.55	90.00
VOC	0.0042	1.03	4.51

Emission factors are taken from manufacturers data (with safety factor for NOX)
Uncontrolled Emission Rates (pph) = lb/MMBtu x MMBtu/hr
Uncontrolled Emission Rates (tpy) = Uncontrolled Emission Rates (pph) x hr/yr / 2,000 lb/ton

Pollutants	Emission Factors, lb/MMscf	Uncontrolled Emission Rates, pph	tpy
SO2	0.6	1.63E-01	7.15E-01
TSP	7.60	2.07	9.06
PM10	7.60	2.07	9.06
PM2.5	7.60	2.07	9.06

Emission factors taken from AP-42, Table 1.4-2, 07/98
Uncontrolled Emission Rates (pph) = lb/MMscf x scf/hr / 1,000,000
Uncontrolled Emission Rates (tpy) = Uncontrolled Emission Rates (pph) x hr/yr / 2,000 lb/ton

Pollutants	Emission Factors, lb/MMBtu	Controlled Emission Rates, pph	tpy
Benzene	2.06E-06	5.04E-04	2.21E-03
Dichlorobenzene	1.18E-06	2.88E-04	1.26E-03
Formaldehyde	7.35E-05	1.80E-02	7.89E-02
n-Hexane	1.76E-03	4.32E-01	1.89
Napthalene	5.98E-07	1.47E-04	6.42E-04
Polycyclics	8.65E-08	2.12E-05	9.28E-05
Toluene	3.33E-06	8.17E-04	3.58E-03

Emission factors taken from AP-42, Table 1.4-3, 07/98
Emission factors (lb/MMscf) divided by 1,020 (per AP-42) to convert to lb/MMBtu
Controlled Emission Rates (pph) = lb/MMBtu x MMBtu/hr
Controlled Emission Rates (tpy) = Controlled Emission Rates (pph) x hr/yr / 2,000 lb/ton

Exhaust Parameters

276.00	°F	Exhaust temperature	Mfg. data
70,552	acfm	Stack flowrate	Mfg. data
5.17	ft	Stack exit diameter	Mfg. data
20.97	ft^2	Stack exit area	3.1416 x ((ft / 2) ^2)
56.08	fps	Stack exit velocity	acfm / ft^2 / 60 sec/min
60.00	ft	Stack height	

Engine Exhaust Emissions Calculations

Unit Number: 31b
Description: Caterpillar C27 Generator Engine

Note: The data on this worksheet applies to each individual emissions unit identified above.

Horsepower Calculations

5,700	ft above MSL	Elevation	
1,141	hp	Nameplate hp	Mfg. data
1,141	hp	Caterpillar Site-rated hp	Mfg. data

Fuel Consumption

53.6	gal/hr	Hourly fuel consumption	Mfg. data
7.40	MMBtu/hr	Hourly fuel consumption	gal/hr x Btu/gal / 1,000,000
3,350	hr/yr	Annual operating time	Harvest Four Corners, LLC
179,560	gal/yr	Hourly fuel consumption	gal/hr x hr/yr
24,779	MMBtu/yr	Annual fuel consumption	MMBtu/hr x hr/yr
138,000	Btu/gal	Field gas heating value	Nominal heat content

Steady-State Emission Rates

Pollutants	Uncontrolled Emission Rates, pph	tpy
NOX	15.83	26.52
CO	1.51	2.53
VOC	2.20E-01	3.69E-01
TSP	3.30E-01	5.53E-01
PM10	3.30E-01	5.53E-01
PM2.5	3.30E-01	5.53E-01

Emission factors (pph) taken from manufacturer's data
Uncontrolled Emission Rates (tpy) = Uncontrolled Emission Rates (pph) x hr/yr / 2,000 lb/ton

Pollutants	Emission Factors, lb/MMBtu	Uncontrolled Emission Rates, pph	tpy
SO2	1.52E-03	1.12E-02	1.88E-02
Acetaldehyde	2.52E-05	1.86E-04	3.12E-04
Acrolein	7.88E-06	5.83E-05	9.76E-05
Benzene	7.76E-04	5.74E-03	9.61E-03
Formaldehyde	7.89E-05	5.84E-04	9.78E-04
Naphthalene	1.30E-04	9.62E-04	1.61E-03
Polycyclics	2.12E-04	1.57E-03	2.63E-03
Toluene	2.81E-04	2.08E-03	3.48E-03
Xylene	1.93E-04	1.43E-03	2.39E-03

Emission factors taken from AP-42, Tables 3.4-1, 3.4-3 & 3.4-4, 10/96
The sulfur content is estimated at 0.0015 percent (15 ppm)
Uncontrolled Emission Rates (pph) = lb/MMBtu x MMBtu/hr
Uncontrolled Emission Rates (tpy) = Uncontrolled Emission Rates (pph) x hr/yr / 2,000 lb/ton

Exhaust Parameters

948.70	°F	Stack exit temperature	Mfg. data
5,610.2	acfm	Stack flowrate	Mfg. data
0.67	ft	Stack exit diameter	Harvest Four Corners LLC
0.35	ft^2	Stack exit area	3.1416 x ((ft / 2) ^2)
267.87	fps	Stack exit velocity	acfm / ft^2 / 60 sec/min
30.00	ft	Stack height	Harvest Four Corners LLC

Dehydrator Reboiler Exhaust Emissions Calculations

Unit Number: 9a & 11a
Description: Reboiler Burner

Note: The data on this worksheet applies to each individual emissions unit identified above.

Fuel Consumption

3.00	MMBtu/hr	Capacity	Mfg. data
3,333	scf/hr	Hourly fuel consumption	MMBtu/hr x 1,000,000 / Btu/scf
8,760	hr/yr	Annual operating time	
26,280	MMBtu/yr	Annual fuel consumption	MMBtu/hr x hr/yr
29.20	MMscf/yr	Annual fuel consumption	scf/hr x hr/yr / 1,000,000
900	Btu/scf	Field gas heating value	Nominal heat content

Steady-State Emission Rates

Pollutants	Emission Factors, lb/MMscf	Uncontrolled Emission Rates, pph	tpy
NOX	100	3.33E-01	1.46
CO	84	2.80E-01	1.23
VOC	5.5	1.83E-02	8.03E-02
SO2	0.6	2.00E-03	8.76E-03
TSP	7.6	2.53E-02	1.11E-01
PM10	7.6	2.53E-02	1.11E-01
PM2.5	7.6	2.53E-02	1.11E-01
Lead	5.00E-04	1.67E-06	7.30E-06

Emission factors taken from AP-42, Tables 1.4-1 & 1.4-2, 07/98
Uncontrolled Emission Rates (pph) = lb/MMscf x (scf/hr / 1,000,000)
Uncontrolled Emission Rates (tpy) = Uncontrolled Emission Rates (pph) x hr/yr / 2,000 lb/ton

Exhaust Parameters

650.00	°F	Exhaust temperature	Previous application
954	cfm	Stack flowrate	Previous application
1.50	ft	Stack diameter	Previous application
1.77	ft^2	Stack exit area	3.1416 x ((ft / 2) ^2)
9.00	fps	Stack velocity	acfm / ft^2 / 60 sec/min
30.00	ft	Stack height	Previous application

Dehydrator Reboiler Exhaust Emissions Calculations

Unit Number: 10a
Description: Reboiler Burner

Fuel Consumption

2.25	MMBtu/hr	Capacity	Mfg. data
2,500	scf/hr	Hourly fuel consumption	MMBtu/hr x 1,000,000 / Btu/scf
8,760	hr/yr	Annual operating time	
19,710	MMBtu/yr	Annual fuel consumption	MMBtu/hr x hr/yr
21.90	MMscf/yr	Annual fuel consumption	scf/hr x hr/yr / 1,000,000
900	Btu/scf	Field gas heating value	Nominal heat content

Steady-State Emission Rates

Pollutants	Emission Factors, lb/MMscf	Uncontrolled Emission Rates, pph	tpy
NOX	100	2.500E-01	1.10
CO	84	2.100E-01	9.20E-01
VOC	5.5	1.38E-02	6.02E-02
SO2	0.6	1.50E-03	6.57E-03
TSP	7.60	1.900E-02	8.32E-02
PM10	7.60	1.90E-02	8.32E-02
PM2.5	7.60	1.90E-02	8.32E-02
Lead	5.00E-04	1.25E-06	5.48E-06

Emission factors taken from AP-42, Tables 1.4-1 & 1.4-2, 07/98
Uncontrolled Emission Rates (pph) = lb/MMscf x (scf/hr / 1,000,000)
Uncontrolled Emission Rates (tpy) = Uncontrolled Emission Rates (pph) x hr/yr / 2,000 lb/ton

Exhaust Parameters

650.00	°F	Exhaust temperature	Previous application
954	cfm	Stack flowrate	Previous application
1.50	ft	Stack diameter	Previous application
1.77	ft^2	Stack exit area	3.1416 x ((ft / 2) ^2)
9.00	fps	Stack velocity	acfm / ft^2 / 60 sec/min
30.00	ft	Stack height	Previous application

Storage Tank Emissions Calculations

Unit Number: T33
Description: Produced Water Tank

Note: The data on this worksheet applies to each individual emissions unit identified above.

Throughput

120	bbl/turnover	Tank capacity	
125	turnover/yr	Turnovers per year	
15,000	bbl/yr	Annual liquid throughput	bbl/turnover x turnover/yr

Emission Rates

Pollutant	Emission Factor, lb/bbl	Uncontrolled, Emission Rate, tpy
VOC	0.262	1.97
Benzene	0.007	5.25E-02
Ethylbenzene	0.0007	5.25E-03
n-Hexane	0.022	1.65E-01
Toluene	0.009	6.75E-02
Xylene	0.006	4.50E-02

VOC, Benzene, and n-Hexane emission factors are taken from the CDPHE PS Memo 09-02 (Oil & Gas Produced Water Tank Batteries - Regulatory Definitions & Permitting Guidance)
Ethylbenzene, toluene, and xylene emissions factors (Non-Texas) are taken from the TCEQ Project 2010-29 (Emission Factor Determination for Produced Water Storage Tanks) report
Uncontrolled Emission Rates (tpy) = lb/bbl x bbl/yr / 2,000 lb/ton

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)

Green House Gas Emissions Data and Calculations

Sources	Facility Total Emissions				
	CO2, tpy	CH4, tpy	N2O, tpy	GHG, tpy	CO2e, tpy
Engine Exhaust Emissions	2,016.82	8.18E-02	1.64E-02	2,016.91	2,023.74
SSM Emissions	249.36	716.26	--	965.62	18,155.98
Heater & Boiler Exhaust Emissions	372,761.70	7.03	7.03E-01	372,769.42	373,146.68
Dehydrator Emissions	1.55	4.40	--	5.95	111.64
Reboiler Exhaust Emissions	4,686.79	8.83E-02	8.83E-03	4,686.89	4,691.63
Acid Gas Removal Emissions	914,631.20	546.50	--	915,177.70	928,293.68
Equipment Leak Emissions	29.73	85.53	--	115.26	2,168.00
Total	1,294,377.14	1,359.89	7.28E-01	1,295,737.76	1,328,591.35

Engine Exhaust Emissions

Unit Numbers	Description	Emission Factors			Emission Rates		
		CO2, kg/MMBtu	CH4, kg/MMBtu	N2O, kg/MMBtu	CO2, tpy	CH4, tpy	N2O, tpy
31b	Caterpillar C27	73.96	3.00E-03	6.00E-04	2,016.82	0.08	0.02
	Total				2,016.82	0.08	0.02

The emissions factors are taken from 40 CFR 98, Subpart C, Tables C-1 & C-2
Emission Rates (tpy) = kg/MMBtu x 2.2 lb/kg x MMBtu/yr / 2,000 lb/ton

Unit Numbers	Description	Fuel Types	Operating Times, hr/yr	LHV Design Heat Rates, MMBtu/hr	HHV	
					Design Heat Rates, MMBtu/hr	Fuel Usages, MMBtu/yr
31b	Caterpillar C27	Diesel	3,350	6.66	7.40	24,790.00

The fuel type and operating time are provided Harvest Midstream.
HHV Design Heat Rates (MMBtu/hr) = LHV Design Heat Rate (MMBtu/hr) / 0.9 LHV/HHV
HHV Fuel Usages (MMBtu/yr) = HHV Design Heat Rates (MMBtu/hr) x hr/yr

SSM Emissions

Unit Numbers	Description	Total Gas Losses, scf/yr	CO2 Emission Factors, lb/scf	CH4 Emission Factors, lb/scf	Emission Rates	
					CO2, tpy	CH4, tpy
SSM1	SSM	38,731,000	0.0129	0.0370	249.36	716.26

The annual blowdown volume is calculated from data provided by Harvest Midstream.
The CO2 and CH4 emission factors are calculated from the facility extended gas analysis. The values are taken from the gas stream for normal operation (rather than during Igncaio plant outages), since this produces the highest emission rates and since the operating time for Ignacio plant outages is variable and unknown
Emission Rates (tpy) = scf/yr x lb/scf / 2,000 lb/ton

Green House Gas Emissions Data and Calculations

Heater & Boiler Exhaust Emissions

Unit Numbers	Description	Emission Factors			Emission Rates		
		CO2, kg/MMBtu	CH4, kg/MMBtu	N2O, kg/MMBtu	CO2, tpy	CH4, tpy	N2O, tpy
1	Holman Boiler	53.06	1.00E-03	1.00E-04	78,385.85	1.48	1.48E-01
2A	Babcock & Wilcox Boiler	53.06	1.00E-03	1.00E-04	76,806.54	1.45	1.45E-01
3	Holman Boiler	53.06	1.00E-03	1.00E-04	78,385.85	1.48	1.48E-01
20	Rentech Boiler	53.06	1.00E-03	1.00E-04	139,183.45	2.62	2.62E-01
	Total				372,761.70	7.03	7.03E-01

The emissions factors are taken from 40 CFR 98, Subpart C, Tables C-1 & C-2
Emission Rates (tpy) = kg/MMBtu x 2.2 lb/kg x MMBtu/yr / 2,000 lb/ton

Unit Numbers	Description	Fuel Types	Operating Times, hr/yr	LHV Design Heat Rates, MMBtu/hr	HHV	
					Design Heat Rates, MMBtu/hr	Fuel Usages, MMBtu/yr
1	Holman Boiler	Nat. Gas	8,760	138.0	153.311	1,343,005
2A	Babcock & Wilcox Boiler	Nat. Gas	8,760	135.2	150.222	1,315,947
3	Holman Boiler	Nat. Gas	8,760	138.0	153.311	1,343,005
20	Rentech Boiler	Nat. Gas	8,760	245.0	272.222	2,384,667

The fuel types and operating times are provided by Harvest Midstream.
The LHV design heat rates are taken from manufacturers data
HHV Design Heat Rates (MMBtu/hr) = LHV Design Heat Rate (MMBtu/hr) / 0.9 LHV/HHV
HHV Fuel Usages (MMBtu/yr) = HHV Design Heat Rate (MMBtu/hr) x hr/yr

Dehydrator Emissions (SSM2)

Unit Numbers	Description	Emission Rates	
		CO2, tpy	CH4, tpy
9b	Dehydrator (145 MMSCFD)	0.00E+00	6.07E-01
10b	Dehydrator (145 MMSCFD)	0.00E+00	6.07E-01
11b	Dehydrator (145 MMSCFD)	1.53	5.70E-01
14	Dehydrator (90 MMSCFD)	0.00E+00	2.10
15	Dehydrator (120 MMSCFD)	1.83E-02	5.20E-01
	Total	1.55	4.40

The emission rates are taken from the GRI-GLYCalc output file

Reboiler Exhaust Emissions

Unit Numbers	Description	Emission Factors			Emission Rates		
		CO2, kg/MMBtu	CH4, kg/MMBtu	N2O, kg/MMBtu	CO2, tpy	CH4, tpy	N2O, tpy
9a	Reboiler (145 MMSCFD)	53.06	1.00E-03	1.00E-04	1704.29	3.21E-02	3.21E-03
10a	Reboiler (145 MMSCFD)	53.06	1.00E-03	1.00E-04	1278.22	2.41E-02	2.41E-03
11a	Reboiler (145 MMSCFD)	53.06	1.00E-03	1.00E-04	1704.29	3.21E-02	3.21E-03
	Total				4686.79	8.83E-02	8.83E-03

The emissions factors are taken from 40 CFR 98, Subpart C, Tables C-1 & C-2
Emission Rates (tpy) = kg/MMBtu x 2.2 lb/kg x MMBtu/yr / 2,000 lb/ton

Unit Numbers	Description	Fuel Types	Operating Times hr/yr	LHV Design Heat Rates, MMBtu/hr	HHV	
					Design Heat Rates, MMBtu/hr	Fuel Usages, MMBtu/yr
9a	Reboiler (145 MMSCFD)	Nat. Gas	8,760	3.0	3.333	29,200
10a	Reboiler (145 MMSCFD)	Nat. Gas	8,760	2.25	2.500	21,900
11a	Reboiler (145 MMSCFD)	Nat. Gas	8,760	3.0	3.333	29,200

The fuel types and operating times are provided by Harvest Midstream.
The LHV design heat rates are taken from manufacturers data
HHV Design Heat Rates (MMBtu/hr) = LHV Design Heat Rate (MMBtu/hr) / 0.9 LHV/HHV
HHV Fuel Usages (MMBtu/yr) = HHV Design Heat Rate (MMBtu/hr) x hr/yr

Green House Gas Emissions Data and Calculations

Acid Gas Removal Emissions

Unit Numbers	Description	Emission Rates	
		CO2, tpy	CH4, tpy
16a	Amine Unit	208,335.50	128.39
16b	Amine Unit	208,335.50	128.39
17	Amine Unit	208,335.50	128.39
18	Amine Unit	119,032.80	45.11
19	Amine Unit	170,591.90	116.23
	Total	914,631.20	546.50

The emission rates are taken from the AmineCalc output files. The rates are taken from the output files for normal operation (rather than during Ignacio plant outages), since this produces the highest emission rates and since the operating time for Ignacio plant outages is variable and unknown

Equipment Leaks Emissions (Normal Operation)

Unit Numbers	Description	Emission Rates	
		CO2, tpy	CH4, tpy
NA	Valves	21.66	62.32
NA	Connectors	3.37	9.70
NA	Open-Ended Lines	2.21	6.35
NA	Pressure Relief Valves	2.49	7.17
	Total	29.73	85.53

A combination of equations W-31 & W-36 (Subpart W) is used to calculate uncombusted CO2 & CH4 emissions

As the NMED requires CO2 & CH4 emissions rather than CO2e emissions, it is not necessary to include the global warming potential from equation W-36

CO2 Emission Rate (tpy) = # x scf/hr/component x (CO2 Content (mole %) / 100) x hr/yr x CO2 Density (kg/scf) x (2,204.6 lb/tonne / 2,000 lb/ton) / 1,000 kg/tonne

CH4 Emission Rate (tpy) = # x scf/hr/component x (CH4 Content (mole %) / 100) x hr/yr x CH4 Density (kg/scf) x (2,204.6 lb/tonne / 2,000 lb/ton) / 1,000 kg/tonne

Unit Numbers	Description	Number of Components, #	Emission Factors, scf/hr /component	CO2 Contents, mole %	CH4 Contents, mole %	Operating Times, hr/yr	CO2 Density, kg/scf	CH4 Density, kg/scf
NA	Valves	3176	0.121	11.10	87.46	8,760	0.0526	0.0192
NA	Connectors	3517	0.017	11.10	87.46	8,760	0.0526	0.0192
NA	Open-Ended Lines	1264	0.031	11.10	87.46	8,760	0.0526	0.0192
NA	Pressure Relief Valves	229	0.193	11.10	87.46	8,760	0.0526	0.0192

The number of sources are calculated based on the number of compressors and dehydrators at the station (see criteria pollutant and HAP equipment leaks calculations)

The emission factors are taken from Subpart W, Table W-1A (Western U.S. - Gas Service)

The facility CO2 and CH4 contents are taken from the facility extended gas analysis

All the operating time is assigned to normal operation (rather than during Ignacio plant outages), since this produces the highest emission rates and since the operating time for Ignacio plant outages is variable and unknown

The CO2 & CH4 densities are taken from Subpart W, Paragraph 98.233(v)

Green House Gas Emissions Data and Calculations

Gas Stream Composition (During Normal Operation)

Components	Mole Percents, %	Molecular Weights, lb/lb-mole	Component Weights, lb/lb-mole	Weight Percent of Total, %	Emission Factors, lb/scf
Carbon Dioxide	11.0975	44.01	4.88	25.1402	0.0129
Hydrogen Sulfide	0.0000	34.07	0.00	0.0000	0.0000
Nitrogen	0.0769	28.01	0.02	0.1109	0.0001
Methane	87.4628	16.04	14.03	72.2137	0.0370
Ethane	0.9889	30.07	0.30	1.5307	0.0008
Propane	0.2303	44.09	0.10	0.5227	0.0003
IsoButane	0.0396	58.12	0.02	0.1185	0.0001
Normal Butane	0.0466	58.12	0.03	0.1394	0.0001
IsoPentane	0.0337	72.15	0.02	0.1252	0.0001
Normal Pentane	0.0123	72.15	0.01	0.0457	0.0000
Cyclopentane	0.0002	70.14	0.00	0.0007	0.0000
n-Hexane	0.0016	86.17	0.00	0.0071	0.0000
Cyclohexane	0.0005	84.16	0.00	0.0022	0.0000
Other Hexanes	0.0034	86.18	0.00	0.0151	0.0000
Heptanes	0.0014	100.20	0.00	0.0072	0.0000
Methylcyclohexane	0.0013	98.19	0.00	0.0066	0.0000
2,2,4-Trimethylpentane	0.0000	100.21	0.00	0.0000	0.0000
Benzene	0.0002	78.11	0.00	0.0008	0.0000
Toluene	0.0006	92.14	0.00	0.0028	0.0000
Ethylbenzene	0.0000	106.17	0.00	0.0000	0.0000
Xylenes	0.0004	106.17	0.00	0.0022	0.0000
C8+ heavies	0.0015	110.00	0.00	0.0085	0.0000
Total	100.000		19.43	100.0000	0.0512
VOC			0.20	--	0.0005

Gas stream composition obtained from Milagro (Plant Inlet) extended gas analysis dated 07/15/2025
Component Weights (lb/lb-mole) = [Mole Percents (%) / 100] x Molecular Weights (lb/lb-mole)
Weight Percent of Total (%) = 100 x Component Weights (lb/lb-mole) / Total Component Weight (lb/lb-mole)
Emission Factors (lb/scf) = [Mole Percents (%) / 100] x Molecular Weights (lb/lb-mole) / 379.3 scf/lb-mole

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.

Subsection 1 – Documentation used to support calculations of units added or modified in this application.

- Current version of AP-42 located online at: US EPA AP-42 Compilation of Air Emissions Factors
- Specific sections used in this application:
  - Section 1.4 – Natural Gas Combustion (Tables 1.4-2 & 1.4-3)
- Boiler manufacturer guarantee (Unit 2A)
- GRI-GLYCalc reports dated 11/4/2025 (Units 9b, 10b, 11b, 14 & 15)
- Amine Calc reports (Units 16a, 16b, 17, 18 & 19)
- Gas Analysis Services inlet gas analysis from Milagro Plant Inlet dated 7/15/2025
- Gas Analysis Services inlet gas analysis from Milagro Plant Inlet dated 3/13/2025
- Gas Analysis Services inlet gas analysis from Train #2 inlet gas dated 07/15/2025
- Gas Analysis Service inlet gas analysis from Milagro Plant Train 3 Dehy Gas Company dated 10/8/2025
- Gas Analysis inlet gas analysis from Milagro Plant Train 5 Dehy dated 7/15/2025
- EPA Protocol for Equipment Leak Emissions Estimates, 1995 Table 2-4

Subsection 2 – Documentation used to support calculations for all other units not affected by this application.

- Current version of AP-42 located online at: US EPA AP-42 Compilation of Air Emissions Factors
- Specific sections used in this application:
  - Section 3.4 – Large Stationary Diesel and All Stationary Dual-fuel Engines (Tables 3.4-1, 3.4-3 & 3.4-4)
- Boiler manufacturer guarantee (Units 1 and 3)
- Rentech boiler manufacturer specification sheet (Unit 20)
- TANKS 4.0.9d reports dated 10/25/2018 (Units T7, T25, T29 & T30)
- Caterpillar manufacturer specifications and guarantees (Unit 31b)

Section 7

Subsection 1 – Information Used to Determine Emissions for Units Added or Modified with this Application

For clarity, this Subsection 1 contains information used to determine emissions for units that were either added or modified with this application. (i.e. Units 2A, 9b, 10b, 11b, 14, 15, 16a, 16b, 17, 18, 19, F1, SSM1, and SSM2). For information pertinent to all other units that were not affected by this application, please refer to Subsection 2.

Nationwide Environmental Solutions
42400 Christy Street, Fremont, CA 94538 | 1-800-227-1966 | 510-490-7100 | Fax: 510-490-0571

January 29, 2026

Harvest Midstream
1835 Arizona
Bloomfield, NM 87413

To: Dan Dietz

Subject / Location: CataStak™ SCR Budget Quote
NBI Ref: B961

Dear Mr. Dietz:

Thank you for your recent equipment inquiry. Nationwide Environmental Solutions appreciates the opportunity to respond to your needs as a proven ultra low NOx solutions provider, and am pleased to submit the enclosed proposal and attachments for your review.

This proposal describes a SCR system designed to your unique requirements. Nationwide is proud to have installed over 250 CataStak™ SCR systems in various demanding industries, each having performed with outstanding results. We are confident that our equipment will do the same for your plant operations.

Benefits of the CataStak™ SCR system include:

- Installation simplicity – easy, safe and simple
- Cost effective – no need to increase fan size or change burner controls
- Ultra Low NOx emissions
- Reliable operations – no concern with flame stability, low response time or turndown
- 100% Made in USA – catalyst and system made in the USA

Our complete line of products and services, including low NOx boilers, mobile rental units, EconoStak economizers and CataStak™ SCR systems, have satisfied thousands of customers in many demanding industries. We are confident that our equipment will do the same for you and we will continue to utilize our extensive experience and expertise to offer quality products backed by the best service in the industry.

I hope that after reviewing this proposal, you will entrust Nationwide Environmental Solutions to be your solution provider. Should you have any questions or need further information please do not hesitate to contact me at (510) 708-9615. I look forward to your favorable reply.

Sincerely,

NATIONWIDE ENVIRONMENTAL SOLUTIONS



Brett Barnes
Sales / Project Engineer

1.0 Overview

Nationwide Environmental Solutions understands that Harvest Midstream needs to meet 9 ppm NOx on the boiler just purchased (our B961). NBI has a standard design with this boiler adding a SCR module. See drawing below. The design is mostly done we would just have to have the extra pieces fabricated.

Using proven SCR (selective catalytic reduction) technology, this NOx level can easily be met without any compromises (i.e. compromises may include high burner FGR, sophisticated burner controls, reduced boiler turndown etc.).

Our proposed solution for this project is to install a new CataStak™ SCR system in a vertical flow configuration. The CataStak™ system will include a reactor housing (this houses the catalyst) located in the breaching going to the stack and will include transition pieces.

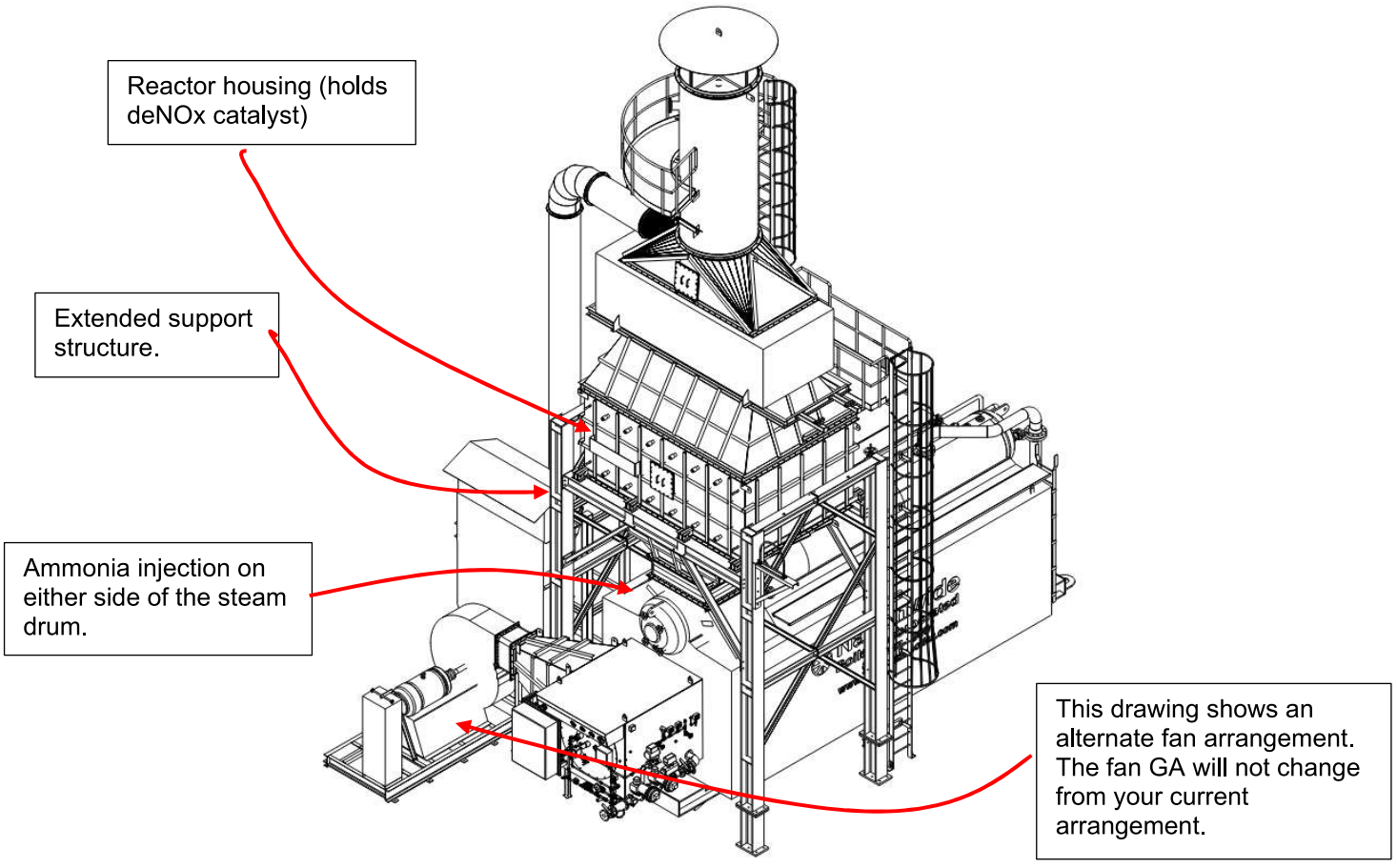


Figure 1: Standard design with B961 boiler and CataStak™unit.

2.0 Scope of Supply

The Nationwide Environmental Solutions CataStak™ SCR system is designed for low cost operation and maximum stand-alone operation with minimum operator intervention. It includes all critical components to enable startup, control and shutdown.

The CataStak™ is a selective catalytic reduction (SCR) system to reduce NOx emissions below the required NOx level. Your catalyst (flue gas) operating temperature of 680°F has been proven to be an excellent application for the CataStak™.

We have experienced and evaluated alternative approaches for NOx reductions, and are confident that we are proposing the most efficient and trouble-free solution available. This solution ensures that the reduction of NOx in the stack does not impede combustion or burner operation, nor is flame stability, load response, and turndown compromised.

Nationwide proposes to furnish the following scope:

Item	Description

1 SCR catalyst will be supplied in a carbon steel reactor housing which will be installed in the breaching going to the stack. The housing will be designed for a vertical flow configuration. Transition pieces will also be provided, as required, to connect to the outlet breaching and breaching going to stack. The catalyst is typically supplied in square steel elements, each about 18” x 18” x 21” high (see Figure 2 and Figure 3 below). The following is included:

- (1) Carbon steel reactor housing (external insulation is by others)
- (lot) Carbon steel transition pieces (external insulation is by others)



Figure 2: Catalyst Element

The DeNOx catalysts feature:

- High NOx removal activity
- Low pressure drop
- Low SO_2 oxidation rate
- Excellent durability

DeNOx SCR catalysts are based on a corrugated, fiber reinforced titanium dioxide (TiO_2) carrier. The carrier is impregnated with the active components: vanadium pentoxide (V_2O_5) and tungsten trioxide (WO_3). The catalyst is shaped to a monolithic structure with a large number of parallel channels.

The unique catalyst design provides a highly porous structure with a large surface area and an ensuing large number of active sites. The high and well-defined porosity is the key to:

- A high NOx removal level with minimum ammonia slip
- A low activity towards SO_2 oxidation, minimizing the risk of fouling downstream equipment
- A high poison resistance ensuring a long and stable service life

- A substantially lower weight than for conventional plate or extruded catalysts, allowing a fast response to changes in operation

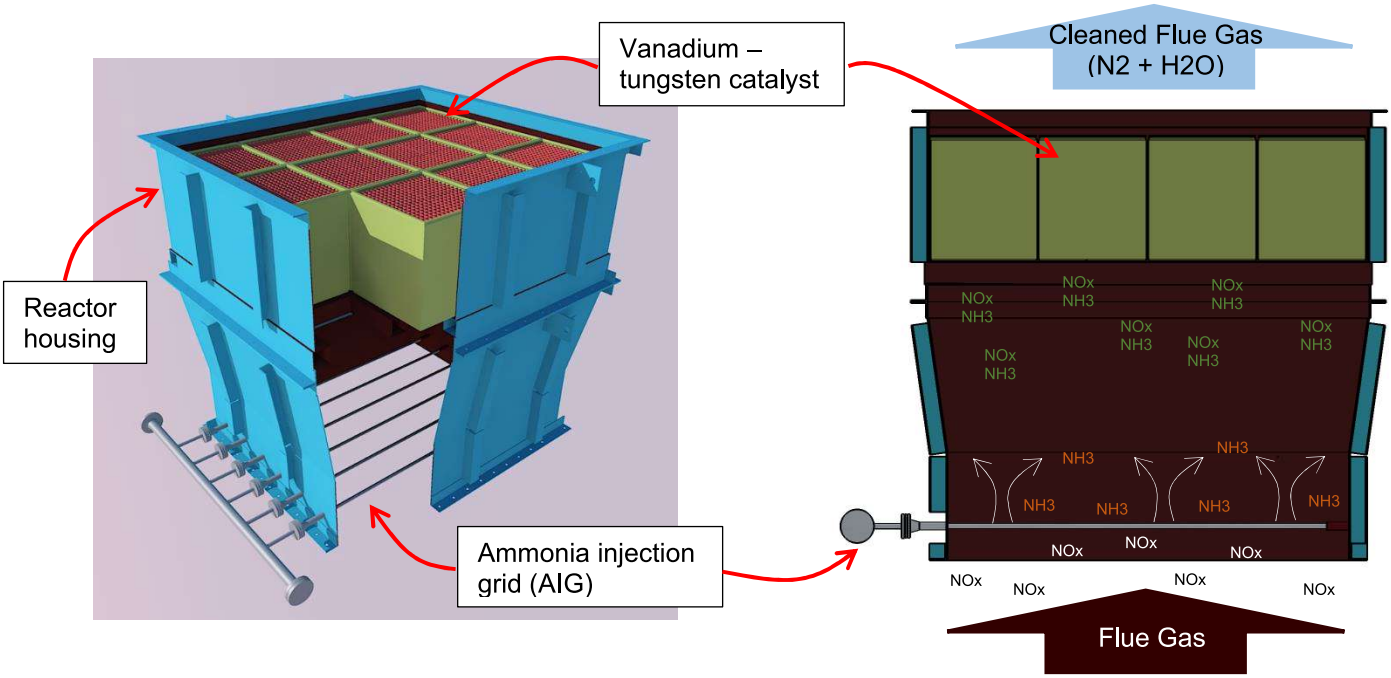


Figure 3: Sketch and flow diagram of sample CataStak™ unit.

2 The ammonia delivery system consists of the following components:

- Anhydrous ammonia storage (by others)
- Ammonia Flow Control Unit (AFCU)
- Ammonia Injection Grid (AIG)

<u>Anhydrous Ammonia Storage (by others)</u>

The ammonia flow rate is 3.3 lb/hr (at full boiler load) and for a refill frequency of 30 days, you would need a 550 gallon storage tank. Typically, you can rent one from your gas supplier.

Or if you can tolerate a fewer day refill cycle (about 5 days), we can quote our standard 3 bottle rack system which holds (3) 150 lb bottles or 450 lbs (88 gallons with about 79 gallon useable volume before refills). See the price adder below.

Ammonia Flow Control Unit (AFCU)

Ammonia flow control components will be skid mounted in a compact space-saving arrangement where all operating devices are within close proximity and provide easy access for the operator.



Figure 5A: Sample ammonia control skid

Ammonia flow rate will be precisely controlled based on a feed forward signal from a fuel flow transmitter and the predetermined uncontrolled NOx emissions. Control of ammonia flow vs. NOx is obtained throughout the entire turndown range to minimum NOx and ammonia slip. Ammonia vapor from the ammonia storage will be diluted with air before entering the Ammonia Injection Grid (AIG) located upstream of the SCR Catalyst. See below details on the components all pre-piped and wired.

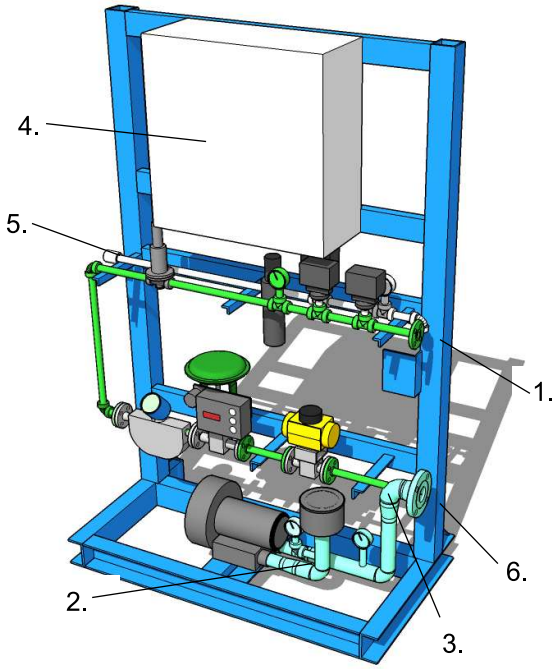


Figure 5B: 3D graphic of sample skid (shows one dilution air blower).

1. Ammonia valve train (shown in green), stainless steel, including: Control valve, flow meter, shutoff valve, pressure regulator, high and low pressure switches.
2. Dilution air (shown in light blue) with blower, air inlet filter and air pressure switch.
3. Ammonia / dilution air mixer.
4. Nema 4 control panel with a PLC / HMI.
5. Instrument air train (shown in white).
6. Diluted anhydrous ammonia outlet.

3 Ammonia Injection Grid

The Ammonia Injection Grid (AIG) consists of a header feeding a group of injection lances distributed across the flue gas duct. The AIG provides uniform injection of the ammonia/air mixture over the duct cross section.

4 Engineering drawing package including:

- Bill of materials
- General arrangement drawings
- Wiring diagram for ammonia control skid panel

2.1. Scope of Supply by Others

- Installation of CataStak™ system
- Interconnecting reagent piping from control skid to AIG
- Interconnecting reagent piping from bottle rack to the AFCU
- Nuts / bolts / gaskets required or assembly of the CataStak Systems
- Reagent source / storage tank
- Insulation
- Power supply
- Instrument air
- Permits
- Source test
- CEMS or alternative monitoring system (if required)
- Any hardware or instrumentation required for permit requests
- Site preparation, civil work, platforms and ladders
- Commissioning is not included but is available at our per diem rates.
- Any components or tasks not specifically included within this proposal

3.0 Design Conditions

Number of units	One (1)
Boiler manufacturer	B&W
Elevation (feet above sea level)	~5700
Primary fuel	Natural gas
Electrical classification	NEMA 4
Panel enclosure classification	NEMA 4
Area classification	Non-hazardous
Control voltage (volts / phase / hertz)	120/1/60
Flue gas mass flow at 100% load (lb/hr)	136,000
CataStak™ operating (flue gas) temperature 100% load (°F)	680
Flue gas outlet NOx (ppm, ref. 3% O2 dry)	40
Instrument air requirement, dry and clean (psig)	100
Flow configuration	Vertical

Reagent ..... Anhydrous ammonia
Reagent flow (lbs/hr) 3.3

4.0 CataStak™ Performance

NOx guarantee (ppm, ref. 3% O2 dry) ..... <=9.0
SCR pressure drop at 100% firing rate (“w.c.) ..... <=2.5
Ammonia slip (ppm, ref. 3% O2 dry)..... <=10

Notes:

1. Performance warranty is at the design conditions listed in Section 3.0.
2. Performance testing methods need to be confirmed before prior to final design.
3. Performance is based on steady state operation.
4. Emissions guarantees are based on 15 minute rolling average.
5. NOx from combustion is assumed to be no less than 90% NO and 10% NO2.

Nationwide Boiler makes no guarantees or representations on the existing equipment, equipment performance, capacity, current emission loads, load swings, fan static or capacity, inlet NOx, pressure drop nor the ability of the modified system to perform as expected (except what is listed above). No other implied or assumed guarantees shall apply. However, we require fully developed and uniform flow at the SCR inlet.

Nationwide Boiler Incorporated
42400 Christy Street Fremont, CA 94538-3141 1-800-227-1966 510-490-7100 Fax: 510-490-0571

PREDICTED BOILER EMISSION DATA

NATURAL GAS

BOILER MFG AND MODEL	**BABCOCK & WILCOX FMO-80**
BOILER CAPACITY, LB/HR	**95,000 (at 5,700 ft. elevation)**
DESIGN PRESSURE, PSIG	**750**
BURNER MFG AND MODEL	**Faber WB-1-36**
FUEL FLOW, SCFH	**135,000**
FUEL HEAT INPUT, MMBTU	**135.0**
FLUE GAS OUTLET TEMP, DEG F	**329**
FLUE GAS FLOW, LB/HR	**119,254**
FLUE GAS SPECIFIC VOLUME, CF/LB	**20.0**
STACK OUTLET SIZE	**60" diameter**
STACK OUTLET FLOW AREA, SQ FT	**19.63**
STACK GAS EXIT VELOCITY, FPM	**2025**
STACK GAS EXIT FLOW, ACFM	**39,741**

	PPMVD	**#/MMBTU**
NOx @ 3% O_2*	30	0.036
CO @ 3% O_2	50	0.04
VOC @ 3% O_2	10	0.004
PM10 @ 3% O_2		0.005
EXCESS AIR, %	15	

NOTE: ABOVE PERFORMANCE IS BASED WITH A STACK ECONOMIZER

*Please note these are pre-SCR emissions for NOx

DATE: 10/13/2025

B960/B961

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-Methylcholanthrene[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
207-08-9	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
74-98-6	Propane	1.6E+00	E

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
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-GLYCalc VERSION 4.0 - SUMMARY OF INPUT VALUES

Case Name: Milagro TEG Dehydrators
File Name: P:\Harvest Midstream\New Mexico\Milagro\2025_Update\Dehy\Trains1-2.ddf
Date: November 04, 2025

DESCRIPTION:

Description: Units 9b & 10b
Capacity 145 MMSCFD
Train 2 extended gas analysis sampled
7/15/2025

Annual Hours of Operation: 8760.0 hours/yr

WET GAS:

Temperature: 84.60 deg. F
Pressure: 837.00 psig
Wet Gas Water Content: Saturated

Component	Conc. (vol %)
Carbon Dioxide	1.3925
Nitrogen	0.1215
Methane	97.0833
Ethane	1.0737
Propane	0.2333
Isobutane	0.0371
n-Butane	0.0356
Isopentane	0.0068
n-Pentane	0.0082
Cyclopentane	0.0002
n-Hexane	0.0013
Cyclohexane	0.0005
Other Hexanes	0.0024
Heptanes	0.0008
Methylcyclohexane	0.0012
2,2,4-Trimethylpentane	0.0001
Toluene	0.0003
Xylenes	0.0001
C8+ Heavies	0.0011

DRY GAS:

Flow Rate: 145.0 MMSCF/day
Water Content: 7.0 lbs. H2O/MMSCF

LEAN GLYCOL:

Glycol Type: TEG
Water Content: 1.5 wt% H2O
Flow Rate: 33.2 gpm

PUMP:

Glycol Pump Type: Electric/Pneumatic

FLASH TANK:

Flash Control: Recycle/recompression
Temperature: 100.0 deg. F
Pressure: 60.0 psig

GRI-GLYCalc VERSION 4.0 - AGGREGATE CALCULATIONS REPORT

Case Name: Milagro TEG Dehydrators
File Name: P:\Harvest Midstream\New Mexico\Milagro\2025_Update\Dehy\Trains1-2.ddf
Date: November 04, 2025

DESCRIPTION:

Description: Units 9b & 10b
Capacity 145 MMSCFD
Train 2 extended gas analysis sampled
7/15/2025

Annual Hours of Operation: 8760.0 hours/yr

EMISSIONS REPORTS:

UNCONTROLLED REGENERATOR EMISSIONS

Component	lbs/hr	lbs/day	tons/yr
Methane	4.4677	107.225	19.5685
Ethane	0.9897	23.752	4.3348
Propane	0.8845	21.228	3.8740
Isobutane	0.3396	8.149	1.4872
n-Butane	0.4866	11.678	2.1313
Isopentane	0.1257	3.018	0.5507
n-Pentane	0.2143	5.143	0.9386
Cyclopentane	0.0274	0.657	0.1198
n-Hexane	0.0798	1.915	0.3495
Cyclohexane	0.1518	3.643	0.6649
Other Hexanes	0.1055	2.533	0.4622
Heptanes	0.1183	2.839	0.5182
Methylcyclohexane	0.4806	11.535	2.1051
2,2,4-Trimethylpentane	0.0065	0.155	0.0284
Toluene	1.2535	30.085	5.4905
Xylenes	0.7718	18.523	3.3805
C8+ Heavies	0.8740	20.977	3.8282
Total Emissions	11.3773	273.055	49.8325
Total Hydrocarbon Emissions	11.3773	273.055	49.8325
Total VOC Emissions	5.9199	142.078	25.9292
Total HAP Emissions	2.1116	50.679	9.2489
Total BTEX Emissions	2.0253	48.608	8.8710

FLASH GAS EMISSIONS

Note: Flash Gas Emissions are zero with the
Recycle/recompression control option.

FLASH TANK OFF GAS

Component	lbs/hr	lbs/day	tons/yr
Methane	47.0570	1129.368	206.1096
Ethane	2.6439	63.453	11.5801

Propane	1.0415	24.997	4.5619
Isobutane	0.2447	5.872	1.0716
n-Butane	0.2591	6.218	1.1348
Isopentane	0.0553	1.327	0.2421
n-Pentane	0.0730	1.753	0.3199
Cyclopentane	0.0023	0.056	0.0102
n-Hexane	0.0139	0.333	0.0607
Cyclohexane	0.0064	0.154	0.0281
Other Hexanes	0.0248	0.596	0.1087
Heptanes	0.0092	0.220	0.0402
Methylcyclohexane	0.0149	0.358	0.0653
2,2,4-Trimethylpentane	0.0010	0.025	0.0046
Toluene	0.0038	0.091	0.0167
Xylenes	0.0009	0.020	0.0037
C8+ Heavies	0.0062	0.149	0.0272
Total Emissions	51.4579	1234.989	225.3854
Total Hydrocarbon Emissions	51.4579	1234.989	225.3854
Total VOC Emissions	1.7570	42.168	7.6956
Total HAP Emissions	0.0196	0.470	0.0857
Total BTEX Emissions	0.0047	0.112	0.0204

COMBINED REGENERATOR VENT/FLASH GAS EMISSIONS

Component	lbs/hr	lbs/day	tons/yr
Methane	4.4677	107.225	19.5685
Ethane	0.9897	23.752	4.3348
Propane	0.8845	21.228	3.8740
Isobutane	0.3396	8.149	1.4872
n-Butane	0.4866	11.678	2.1313
Isopentane	0.1257	3.018	0.5507
n-Pentane	0.2143	5.143	0.9386
Cyclopentane	0.0274	0.657	0.1198
n-Hexane	0.0798	1.915	0.3495
Cyclohexane	0.1518	3.643	0.6649
Other Hexanes	0.1055	2.533	0.4622
Heptanes	0.1183	2.839	0.5182
Methylcyclohexane	0.4806	11.535	2.1051
2,2,4-Trimethylpentane	0.0065	0.155	0.0284
Toluene	1.2535	30.085	5.4905
Xylenes	0.7718	18.523	3.3805
C8+ Heavies	0.8740	20.977	3.8282
Total Emissions	11.3773	273.055	49.8325
Total Hydrocarbon Emissions	11.3773	273.055	49.8325
Total VOC Emissions	5.9199	142.078	25.9292
Total HAP Emissions	2.1116	50.679	9.2489
Total BTEX Emissions	2.0253	48.608	8.8710

COMBINED REGENERATOR VENT/FLASH GAS EMISSION CONTROL REPORT:

Component	Uncontrolled tons/yr	Controlled tons/yr	% Reduction
Methane	225.6781	19.5685	91.33

Ethane	15.9149	4.3348	72.76
Propane	8.4360	3.8740	54.08
Isobutane	2.5588	1.4872	41.88
n-Butane	3.2661	2.1313	34.74
Isopentane	0.7928	0.5507	30.54
n-Pentane	1.2585	0.9386	25.42
Cyclopentane	0.1300	0.1198	7.82
n-Hexane	0.4102	0.3495	14.79
Cyclohexane	0.6931	0.6649	4.06
Other Hexanes	0.5709	0.4622	19.04
Heptanes	0.5583	0.5182	7.20
Methylcyclohexane	2.1703	2.1051	3.01
2,2,4-Trimethylpentane	0.0330	0.0284	13.95
Toluene	5.5072	5.4905	0.30
Xylenes	3.3842	3.3805	0.11
C8+ Heavies	3.8554	3.8282	0.70
Total Emissions	275.2179	49.8325	81.89
Total Hydrocarbon Emissions	275.2179	49.8325	81.89
Total VOC Emissions	33.6249	25.9292	22.89
Total HAP Emissions	9.3346	9.2489	0.92
Total BTEX Emissions	8.8914	8.8710	0.23

EQUIPMENT REPORTS:

ABSORBER

NOTE: Because the Calculated Absorber Stages was below the minimum allowed, GRI-GLYCalc has set the number of Absorber Stages to 1.25 and has calculated a revised Dry Gas Dew Point.

Calculated Absorber Stages:	1.25	
Calculated Dry Gas Dew Point:	1.79	lbs. H2O/MMSCF
Temperature:	84.6	deg. F
Pressure:	837.0	psig
Dry Gas Flow Rate:	145.0000	MMSCF/day
Glycol Losses with Dry Gas:	0.7077	lb/hr
Wet Gas Water Content:	Saturated	
Calculated Wet Gas Water Content:	41.84	lbs. H2O/MMSCF
Calculated Lean Glycol Recirc. Ratio:	8.23	gal/lb H2O

Component	Remaining in Dry Gas	Absorbed in Glycol
Water	4.27%	95.73%
Carbon Dioxide	99.69%	0.31%
Nitrogen	99.98%	0.02%
Methane	99.98%	0.02%
Ethane	99.93%	0.07%
Propane	99.88%	0.12%
Isobutane	99.83%	0.17%
n-Butane	99.77%	0.23%
Isopentane	99.77%	0.23%
n-Pentane	99.70%	0.30%
Cyclopentane	98.67%	1.33%

n-Hexane	99.48%	0.52%
Cyclohexane	97.64%	2.36%
Other Hexanes	99.60%	0.40%
Heptanes	99.00%	1.00%
Methylcyclohexane	97.36%	2.64%
2,2,4-Trimethylpentane	99.59%	0.41%
Toluene	71.44%	28.56%
Xylenes	54.30%	45.70%
C8+ Heavies	97.05%	2.95%

FLASH TANK

Flash Control: Recycle/recompression
Flash Temperature: 100.0 deg. F
Flash Pressure: 60.0 psig

Component	Left in Glycol	Removed in Flash Gas
Water	99.99%	0.01%
Carbon Dioxide	58.30%	41.70%
Nitrogen	8.45%	91.55%
Methane	8.67%	91.33%
Ethane	27.24%	72.76%
Propane	45.92%	54.08%
Isobutane	58.12%	41.88%
n-Butane	65.26%	34.74%
Isopentane	69.62%	30.38%
n-Pentane	74.71%	25.29%
Cyclopentane	92.22%	7.78%
n-Hexane	85.28%	14.72%
Cyclohexane	96.07%	3.93%
Other Hexanes	81.15%	18.85%
Heptanes	92.84%	7.16%
Methylcyclohexane	97.11%	2.89%
2,2,4-Trimethylpentane	86.26%	13.74%
Toluene	99.72%	0.28%
Xylenes	99.90%	0.10%
C8+ Heavies	99.38%	0.62%

REGENERATOR

No Stripping Gas used in regenerator.

Component	Remaining in Glycol	Distilled Overhead
Water	53.65%	46.35%
Carbon Dioxide	0.00%	100.00%
Nitrogen	0.00%	100.00%
Methane	0.00%	100.00%
Ethane	0.00%	100.00%
Propane	0.00%	100.00%
Isobutane	0.00%	100.00%
n-Butane	0.00%	100.00%
Isopentane	0.72%	99.28%
n-Pentane	0.67%	99.33%
Cyclopentane	0.54%	99.46%

n-Hexane	0.59%	99.41%
Cyclohexane	3.33%	96.67%
Other Hexanes	1.23%	98.77%
Heptanes	0.54%	99.46%
Methylcyclohexane	4.12%	95.88%
2,2,4-Trimethylpentane	1.74%	98.26%
Toluene	7.92%	92.08%
Xylenes	12.92%	87.08%
C8+ Heavies	12.10%	87.90%

STREAM REPORTS:

WET GAS STREAM

Temperature: 84.60 deg. F
Pressure: 851.70 psia
Flow Rate: 6.05e+006 scfh

Component	Conc. (vol%)	Loading (lb/hr)
Water	8.81e-002	2.53e+002
Carbon Dioxide	1.39e+000	9.76e+003
Nitrogen	1.21e-001	5.42e+002
Methane	9.70e+001	2.48e+005
Ethane	1.07e+000	5.14e+003
Propane	2.33e-001	1.64e+003
Isobutane	3.71e-002	3.43e+002
n-Butane	3.56e-002	3.30e+002
Isopentane	6.79e-003	7.81e+001
n-Pentane	8.19e-003	9.42e+001
Cyclopentane	2.00e-004	2.23e+000
n-Hexane	1.30e-003	1.78e+001
Cyclohexane	5.00e-004	6.70e+000
Other Hexanes	2.40e-003	3.29e+001
Heptanes	7.99e-004	1.28e+001
Methylcyclohexane	1.20e-003	1.88e+001
2,2,4-Trimethylpentane	9.99e-005	1.82e+000
Toluene	3.00e-004	4.40e+000
Xylenes	9.99e-005	1.69e+000
C8+ Heavies	1.10e-003	2.98e+001
Total Components	100.00	2.66e+005

DRY GAS STREAM

Temperature: 84.60 deg. F
Pressure: 851.70 psia
Flow Rate: 6.04e+006 scfh

Component	Conc. (vol%)	Loading (lb/hr)
Water	3.76e-003	1.08e+001
Carbon Dioxide	1.39e+000	9.73e+003
Nitrogen	1.21e-001	5.42e+002
Methane	9.71e+001	2.48e+005
Ethane	1.07e+000	5.14e+003

Propane	2.33e-001	1.64e+003
Isobutane	3.70e-002	3.43e+002
n-Butane	3.55e-002	3.29e+002
Isopentane	6.79e-003	7.80e+001
n-Pentane	8.18e-003	9.39e+001
Cyclopentane	1.97e-004	2.20e+000
n-Hexane	1.29e-003	1.77e+001
Cyclohexane	4.88e-004	6.54e+000
Other Hexanes	2.39e-003	3.28e+001
Heptanes	7.92e-004	1.26e+001
Methylcyclohexane	1.17e-003	1.83e+001
2,2,4-Trimethylpentane	9.96e-005	1.81e+000
Toluene	2.14e-004	3.15e+000
Xylenes	5.43e-005	9.18e-001
C8+ Heavies	1.07e-003	2.90e+001
Total Components	100.00	2.66e+005

LEAN GLYCOL STREAM

Temperature: 84.60 deg. F
Flow Rate: 3.32e+001 gpm

Component	Conc. (wt%)	Loading (lb/hr)
TEG	9.85e+001	1.84e+004
Water	1.50e+000	2.80e+002
Carbon Dioxide	1.64e-011	3.07e-009
Nitrogen	6.69e-014	1.25e-011
Methane	9.26e-018	1.73e-015
Ethane	9.18e-009	1.72e-006
Propane	4.19e-010	7.84e-008
Isobutane	9.38e-011	1.75e-008
n-Butane	9.89e-011	1.85e-008
Isopentane	4.87e-006	9.10e-004
n-Pentane	7.72e-006	1.44e-003
Cyclopentane	7.98e-007	1.49e-004
n-Hexane	2.52e-006	4.71e-004
Cyclohexane	2.80e-005	5.23e-003
Other Hexanes	7.04e-006	1.32e-003
Heptanes	3.43e-006	6.41e-004
Methylcyclohexane	1.10e-004	2.06e-002
2,2,4-Trimethylpentane	6.13e-007	1.15e-004
Toluene	5.77e-004	1.08e-001
Xylenes	6.13e-004	1.15e-001
C8+ Heavies	6.44e-004	1.20e-001
Total Components	100.00	1.87e+004

RICH GLYCOL STREAM

Temperature: 84.60 deg. F
Pressure: 851.70 psia
Flow Rate: 3.39e+001 gpm
NOTE: Stream has more than one phase.

Component	Conc. (wt%)	Loading (lb/hr)

TEG	9.68e+001	1.84e+004
Water	2.75e+000	5.23e+002
Carbon Dioxide	1.61e-001	3.07e+001
Nitrogen	6.58e-004	1.25e-001
Methane	2.71e-001	5.15e+001
Ethane	1.91e-002	3.63e+000
Propane	1.01e-002	1.93e+000
Isobutane	3.07e-003	5.84e-001
n-Butane	3.92e-003	7.46e-001
Isopentane	9.56e-004	1.82e-001
n-Pentane	1.52e-003	2.89e-001
Cyclopentane	1.57e-004	2.98e-002
n-Hexane	4.95e-004	9.41e-002
Cyclohexane	8.59e-004	1.63e-001
Other Hexanes	6.92e-004	1.32e-001
Heptanes	6.73e-004	1.28e-001
Methylcyclohexane	2.71e-003	5.16e-001
2,2,4-Trimethylpentane	4.02e-005	7.64e-003
Toluene	7.18e-003	1.37e+000
Xylenes	4.66e-003	8.87e-001
C8+ Heavies	5.26e-003	1.00e+000
Total Components	100.00	1.90e+004

FLASH TANK OFF GAS STREAM

Temperature: 100.00 deg. F
Pressure: 74.70 psia
Flow Rate: 1.27e+003 scfh

Component	Conc. (vol%)	Loading (lb/hr)
Water	7.97e-002	4.81e-002
Carbon Dioxide	8.67e+000	1.28e+001
Nitrogen	1.22e-001	1.15e-001
Methane	8.75e+001	4.71e+001
Ethane	2.62e+000	2.64e+000
Propane	7.04e-001	1.04e+000
Isobutane	1.25e-001	2.45e-001
n-Butane	1.33e-001	2.59e-001
Isopentane	2.28e-002	5.53e-002
n-Pentane	3.02e-002	7.30e-002
Cyclopentane	9.86e-004	2.32e-003
n-Hexane	4.79e-003	1.39e-002
Cyclohexane	2.28e-003	6.42e-003
Other Hexanes	8.59e-003	2.48e-002
Heptanes	2.73e-003	9.17e-003
Methylcyclohexane	4.52e-003	1.49e-002
2,2,4-Trimethylpentane	2.74e-004	1.05e-003
Toluene	1.23e-003	3.81e-003
Xylenes	2.40e-004	8.54e-004
C8+ Heavies	1.09e-003	6.20e-003
Total Components	100.00	6.44e+001

FLASH TANK GLYCOL STREAM

Temperature: 100.00 deg. F
Flow Rate: 3.37e+001 gpm

Component	Conc. (wt%)	Loading (lb/hr)
TEG	9.71e+001	1.84e+004
Water	2.76e+000	5.23e+002
Carbon Dioxide	9.44e-002	1.79e+001
Nitrogen	5.58e-005	1.06e-002
Methane	2.36e-002	4.47e+000
Ethane	5.22e-003	9.90e-001
Propane	4.66e-003	8.84e-001
Isobutane	1.79e-003	3.40e-001
n-Butane	2.57e-003	4.87e-001
Isopentane	6.68e-004	1.27e-001
n-Pentane	1.14e-003	2.16e-001
Cyclopentane	1.45e-004	2.75e-002
n-Hexane	4.23e-004	8.03e-002
Cyclohexane	8.28e-004	1.57e-001
Other Hexanes	5.63e-004	1.07e-001
Heptanes	6.27e-004	1.19e-001
Methylcyclohexane	2.64e-003	5.01e-001
2,2,4-Trimethylpentane	3.48e-005	6.59e-003
Toluene	7.18e-003	1.36e+000
Xylenes	4.67e-003	8.86e-001
C8+ Heavies	5.24e-003	9.94e-001
Total Components	100.00	1.90e+004

FLASH GAS EMISSIONS

Control Method: Recycle/recompression
Control Efficiency: 100.00

Note: Flash Gas Emissions are zero with the Recycle/recompression control option.

REGENERATOR OVERHEADS STREAM

Temperature: 212.00 deg. F
Pressure: 14.70 psia
Flow Rate: 5.40e+003 scfh

Component	Conc. (vol%)	Loading (lb/hr)
Water	9.44e+001	2.42e+002
Carbon Dioxide	2.86e+000	1.79e+001
Nitrogen	2.65e-003	1.06e-002
Methane	1.96e+000	4.47e+000
Ethane	2.31e-001	9.90e-001
Propane	1.41e-001	8.84e-001
Isobutane	4.10e-002	3.40e-001
n-Butane	5.88e-002	4.87e-001
Isopentane	1.22e-002	1.26e-001
n-Pentane	2.09e-002	2.14e-001
Cyclopentane	2.74e-003	2.74e-002
n-Hexane	6.50e-003	7.98e-002
Cyclohexane	1.27e-002	1.52e-001

Other Hexanes	8.60e-003	1.06e-001
Heptanes	8.29e-003	1.18e-001
Methylcyclohexane	3.44e-002	4.81e-001
2,2,4-Trimethylpentane	3.98e-004	6.48e-003
Toluene	9.55e-002	1.25e+000
Xylenes	5.10e-002	7.72e-001
C8+ Heavies	3.60e-002	8.74e-001
Total Components	100.00	2.71e+002

GRI-GLYCalc VERSION 4.0 - SUMMARY OF INPUT VALUES

Case Name: Milagro TEG Dehydrators
File Name: P:\Harvest Midstream\New Mexico\Milagro\2025_BoilerUpdate\Dehy\Train3.ddf
Date: February 11, 2026

DESCRIPTION:

Description: Units 11b
Capacity 145 MMSCFD
Train 3 extended gas analysis sampled
10/8/25

Annual Hours of Operation: 8760.0 hours/yr

WET GAS:

Temperature: 92.00 deg. F
Pressure: 837.00 psig
Wet Gas Water Content: Saturated

Component	Conc. (vol %)
Carbon Dioxide	0.7666
Nitrogen	0.0725
Methane	97.6928
Ethane	1.1285
Propane	0.2480
Isobutane	0.0348
n-Butane	0.0309
Isopentane	0.0046
n-Pentane	0.0051
Cyclopentane	0.0003
n-Hexane	0.0021
Cyclohexane	0.0007
Other Hexanes	0.0042
Heptanes	0.0017
Methylcyclohexane	0.0020
2,2,4-Trimethylpentane	0.0001
Benzene	0.0002
Toluene	0.0008
Ethylbenzene	0.0001
Xylenes	0.0006
C8+ Heavies	0.0034

DRY GAS:

Flow Rate: 145.0 MMSCF/day
Water Content: 7.0 lbs. H2O/MMSCF

LEAN GLYCOL:

Glycol Type: TEG
Water Content: 1.5 wt% H2O
Flow Rate: 33.2 gpm

PUMP:

Glycol Pump Type: Electric/Pneumatic

FLASH TANK:

Flash Control: Recycle/recompression
Temperature: 100.0 deg. F
Pressure: 60.0 psig

GRI-GLYCalc VERSION 4.0 - AGGREGATE CALCULATIONS REPORT

Case Name: Milagro TEG Dehydrators
File Name: P:\Harvest Midstream\New Mexico\Milagro\2025_BoilerUpdate\Dehy\Train3.ddf
Date: February 11, 2026

DESCRIPTION:

Description: Units 11b
Capacity 145 MMSCFD
Train 3 extended gas analysis sampled
10/8/25

Annual Hours of Operation: 8760.0 hours/yr

EMISSIONS REPORTS:

UNCONTROLLED REGENERATOR EMISSIONS

Component	lbs/hr	lbs/day	tons/yr
Methane	4.6453	111.486	20.3462
Ethane	1.0389	24.933	4.5504
Propane	0.9299	22.317	4.0728
Isobutane	0.3084	7.401	1.3507
n-Butane	0.4047	9.712	1.7725
Isopentane	0.0807	1.937	0.3535
n-Pentane	0.1252	3.005	0.5484
Cyclopentane	0.0380	0.912	0.1664
n-Hexane	0.1187	2.849	0.5199
Cyclohexane	0.1933	4.640	0.8468
Other Hexanes	0.1715	4.115	0.7510
Heptanes	0.2272	5.453	0.9952
Methylcyclohexane	0.7224	17.337	3.1640
2,2,4-Trimethylpentane	0.0060	0.143	0.0262
Benzene	0.4359	10.462	1.9093
Toluene	2.9601	71.043	12.9654
Ethylbenzene	0.5399	12.958	2.3648
Xylenes	4.1765	100.235	18.2930
C8+ Heavies	2.8957	69.496	12.6831
Total Emissions	20.0181	480.435	87.6794
Total Hydrocarbon Emissions	20.0181	480.435	87.6794
Total VOC Emissions	14.3340	344.015	62.7828
Total HAP Emissions	8.2371	197.690	36.0784
Total BTEX Emissions	8.1124	194.698	35.5324

FLASH GAS EMISSIONS

Note: Flash Gas Emissions are zero with the
Recycle/recompression control option.

FLASH TANK OFF GAS

Component	lbs/hr	lbs/day	tons/yr

Methane	47.0498	1129.196	206.0782
Ethane	2.6893	64.542	11.7789
Propane	1.0505	25.211	4.6010
Isobutane	0.2137	5.128	0.9359
n-Butane	0.2072	4.973	0.9076
Isopentane	0.0342	0.820	0.1497
n-Pentane	0.0411	0.987	0.1801
Cyclopentane	0.0031	0.075	0.0137
n-Hexane	0.0199	0.478	0.0872
Cyclohexane	0.0080	0.191	0.0349
Other Hexanes	0.0390	0.935	0.1707
Heptanes	0.0171	0.410	0.0749
Methylcyclohexane	0.0218	0.524	0.0957
2,2,4-Trimethylpentane	0.0009	0.023	0.0041
Benzene	0.0022	0.052	0.0095
Toluene	0.0087	0.209	0.0381
Ethylbenzene	0.0009	0.020	0.0037
Xylenes	0.0045	0.107	0.0195
C8+ Heavies	0.0201	0.482	0.0879
Total Emissions	51.4318	1234.364	225.2714
Total Hydrocarbon Emissions	51.4318	1234.364	225.2714
Total VOC Emissions	1.6928	40.626	7.4143
Total HAP Emissions	0.0370	0.889	0.1622
Total BTEX Emissions	0.0162	0.388	0.0708

COMBINED REGENERATOR VENT/FLASH GAS EMISSIONS

Component	lbs/hr	lbs/day	tons/yr
Methane	4.6453	111.486	20.3462
Ethane	1.0389	24.933	4.5504
Propane	0.9299	22.317	4.0728
Isobutane	0.3084	7.401	1.3507
n-Butane	0.4047	9.712	1.7725
Isopentane	0.0807	1.937	0.3535
n-Pentane	0.1252	3.005	0.5484
Cyclopentane	0.0380	0.912	0.1664
n-Hexane	0.1187	2.849	0.5199
Cyclohexane	0.1933	4.640	0.8468
Other Hexanes	0.1715	4.115	0.7510
Heptanes	0.2272	5.453	0.9952
Methylcyclohexane	0.7224	17.337	3.1640
2,2,4-Trimethylpentane	0.0060	0.143	0.0262
Benzene	0.4359	10.462	1.9093
Toluene	2.9601	71.043	12.9654
Ethylbenzene	0.5399	12.958	2.3648
Xylenes	4.1765	100.235	18.2930
C8+ Heavies	2.8957	69.496	12.6831
Total Emissions	20.0181	480.435	87.6794
Total Hydrocarbon Emissions	20.0181	480.435	87.6794
Total VOC Emissions	14.3340	344.015	62.7828
Total HAP Emissions	8.2371	197.690	36.0784
Total BTEX Emissions	8.1124	194.698	35.5324

COMBINED REGENERATOR VENT/FLASH GAS EMISSION CONTROL REPORT:

Component	Uncontrolled tons/yr	Controlled tons/yr	% Reduction
Methane	226.4244	20.3462	91.01
Ethane	16.3293	4.5504	72.13
Propane	8.6738	4.0728	53.04
Isobutane	2.2866	1.3507	40.93
n-Butane	2.6801	1.7725	33.86
Isopentane	0.5032	0.3535	29.75
n-Pentane	0.7284	0.5484	24.72
Cyclopentane	0.1801	0.1664	7.63
n-Hexane	0.6071	0.5199	14.36
Cyclohexane	0.8818	0.8468	3.96
Other Hexanes	0.9217	0.7510	18.52
Heptanes	1.0700	0.9952	7.00
Methylcyclohexane	3.2597	3.1640	2.94
2,2,4-Trimethylpentane	0.0303	0.0262	13.58
Benzene	1.9188	1.9093	0.49
Toluene	13.0035	12.9654	0.29
Ethylbenzene	2.3685	2.3648	0.16
Xylenes	18.3125	18.2930	0.11
C8+ Heavies	12.7710	12.6831	0.69
Total Emissions	312.9507	87.6794	71.98
Total Hydrocarbon Emissions	312.9507	87.6794	71.98
Total VOC Emissions	70.1970	62.7828	10.56
Total HAP Emissions	36.2406	36.0784	0.45
Total BTEX Emissions	35.6032	35.5324	0.20

EQUIPMENT REPORTS:

ABSORBER

NOTE: Because the Calculated Absorber Stages was below the minimum allowed, GRI-GLYCalc has set the number of Absorber Stages to 1.25 and has calculated a revised Dry Gas Dew Point.

Calculated Absorber Stages:	1.25	
Calculated Dry Gas Dew Point:	2.46	lbs. H2O/MMSCF
Temperature:	92.0	deg. F
Pressure:	837.0	psig
Dry Gas Flow Rate:	145.0000	MMSCF/day
Glycol Losses with Dry Gas:	0.9825	lb/hr
Wet Gas Water Content:	Saturated	
Calculated Wet Gas Water Content:	52.26	lbs. H2O/MMSCF
Calculated Lean Glycol Recirc. Ratio:	6.62	gal/lb H2O

Component	Remaining in Dry Gas	Absorbed in Glycol
Water	4.70%	95.30%
Carbon Dioxide	99.70%	0.30%
Nitrogen	99.98%	0.02%
Methane	99.98%	0.02%
Ethane	99.93%	0.07%

Propane	99.89%	0.11%
Isobutane	99.84%	0.16%
n-Butane	99.79%	0.21%
Isopentane	99.78%	0.22%
n-Pentane	99.72%	0.28%
Cyclopentane	98.77%	1.23%
n-Hexane	99.52%	0.48%
Cyclohexane	97.85%	2.15%
Other Hexanes	99.63%	0.37%
Heptanes	99.10%	0.90%
Methylcyclohexane	97.62%	2.38%
2,2,4-Trimethylpentane	99.62%	0.38%
Benzene	82.39%	17.61%
Toluene	74.71%	25.29%
Ethylbenzene	68.02%	31.98%
Xylenes	58.78%	41.22%
C8+ Heavies	96.84%	3.16%

FLASH TANK

Flash Control: Recycle/recompression
Flash Temperature: 100.0 deg. F
Flash Pressure: 60.0 psig

Component	Left in Glycol	Removed in Flash Gas
Water	99.99%	0.01%
Carbon Dioxide	59.29%	40.71%
Nitrogen	8.73%	91.27%
Methane	8.99%	91.01%
Ethane	27.87%	72.13%
Propane	46.96%	53.04%
Isobutane	59.07%	40.93%
n-Butane	66.14%	33.86%
Isopentane	70.40%	29.60%
n-Pentane	75.40%	24.60%
Cyclopentane	92.41%	7.59%
n-Hexane	85.71%	14.29%
Cyclohexane	96.17%	3.83%
Other Hexanes	81.67%	18.33%
Heptanes	93.04%	6.96%
Methylcyclohexane	97.18%	2.82%
2,2,4-Trimethylpentane	86.62%	13.38%
Benzene	99.53%	0.47%
Toluene	99.73%	0.27%
Ethylbenzene	99.86%	0.14%
Xylenes	99.91%	0.09%
C8+ Heavies	99.39%	0.61%

REGENERATOR

No Stripping Gas used in regenerator.

Component	Remaining in Glycol	Distilled Overhead

Water	48.21%	51.79%
Carbon Dioxide	0.00%	100.00%
Nitrogen	0.00%	100.00%
Methane	0.00%	100.00%
Ethane	0.00%	100.00%
Propane	0.00%	100.00%
Isobutane	0.00%	100.00%
n-Butane	0.00%	100.00%
Isopentane	0.71%	99.29%
n-Pentane	0.66%	99.34%
Cyclopentane	0.54%	99.46%
n-Hexane	0.58%	99.42%
Cyclohexane	3.33%	96.67%
Other Hexanes	1.22%	98.78%
Heptanes	0.54%	99.46%
Methylcyclohexane	4.12%	95.88%
2,2,4-Trimethylpentane	1.73%	98.27%
Benzene	5.02%	94.98%
Toluene	7.92%	92.08%
Ethylbenzene	10.42%	89.58%
Xylenes	12.92%	87.08%
C8+ Heavies	12.10%	87.90%

STREAM REPORTS:

WET GAS STREAM

Temperature: 92.00 deg. F
Pressure: 851.70 psia
Flow Rate: 6.05e+006 scfh

Component	Conc. (vol%)	Loading (lb/hr)
Water	1.10e-001	3.16e+002
Carbon Dioxide	7.66e-001	5.37e+003
Nitrogen	7.24e-002	3.23e+002
Methane	9.76e+001	2.50e+005
Ethane	1.13e+000	5.40e+003
Propane	2.48e-001	1.74e+003
Isobutane	3.48e-002	3.22e+002
n-Butane	3.09e-002	2.86e+002
Isopentane	4.59e-003	5.29e+001
n-Pentane	5.09e-003	5.86e+001
Cyclopentane	3.00e-004	3.35e+000
n-Hexane	2.10e-003	2.88e+001
Cyclohexane	6.99e-004	9.38e+000
Other Hexanes	4.20e-003	5.76e+001
Heptanes	1.70e-003	2.71e+001
Methylcyclohexane	2.00e-003	3.13e+001
2,2,4-Trimethylpentane	9.99e-005	1.82e+000
Benzene	2.00e-004	2.49e+000
Toluene	7.99e-004	1.17e+001
Ethylbenzene	9.99e-005	1.69e+000
Xylenes	5.99e-004	1.01e+001

C8+ Heavies	3.40e-003	9.22e+001
Total Components	100.00	2.64e+005

DRY GAS STREAM

Temperature: 92.00 deg. F
Pressure: 851.70 psia
Flow Rate: 6.04e+006 scfh

Component	Conc. (vol%)	Loading (lb/hr)
Water	5.18e-003	1.49e+001
Carbon Dioxide	7.64e-001	5.36e+003
Nitrogen	7.25e-002	3.23e+002
Methane	9.77e+001	2.50e+005
Ethane	1.13e+000	5.40e+003
Propane	2.48e-001	1.74e+003
Isobutane	3.48e-002	3.22e+002
n-Butane	3.08e-002	2.85e+002
Isopentane	4.59e-003	5.27e+001
n-Pentane	5.09e-003	5.84e+001
Cyclopentane	2.96e-004	3.31e+000
n-Hexane	2.09e-003	2.87e+001
Cyclohexane	6.85e-004	9.18e+000
Other Hexanes	4.19e-003	5.74e+001
Heptanes	1.69e-003	2.69e+001
Methylcyclohexane	1.95e-003	3.05e+001
2,2,4-Trimethylpentane	9.96e-005	1.81e+000
Benzene	1.65e-004	2.05e+000
Toluene	5.98e-004	8.77e+000
Ethylbenzene	6.80e-005	1.15e+000
Xylenes	3.53e-004	5.96e+000
C8+ Heavies	3.29e-003	8.93e+001
Total Components	100.00	2.63e+005

LEAN GLYCOL STREAM

Temperature: 92.00 deg. F
Flow Rate: 3.32e+001 gpm

Component	Conc. (wt%)	Loading (lb/hr)
TEG	9.85e+001	1.84e+004
Water	1.50e+000	2.80e+002
Carbon Dioxide	8.54e-012	1.60e-009
Nitrogen	3.96e-014	7.40e-012
Methane	9.29e-018	1.74e-015
Ethane	9.41e-009	1.76e-006
Propane	4.31e-010	8.06e-008
Isobutane	8.38e-011	1.57e-008
n-Butane	8.12e-011	1.52e-008
Isopentane	3.09e-006	5.77e-004
n-Pentane	4.47e-006	8.36e-004
Cyclopentane	1.11e-006	2.07e-004
n-Hexane	3.73e-006	6.96e-004
Cyclohexane	3.56e-005	6.65e-003

Other Hexanes	1.14e-005	2.13e-003
Heptanes	6.57e-006	1.23e-003
Methylcyclohexane	1.66e-004	3.10e-002
2,2,4-Trimethylpentane	5.63e-007	1.05e-004
Benzene	1.23e-004	2.31e-002
Toluene	1.36e-003	2.55e-001
Ethylbenzene	3.36e-004	6.28e-002
Xylenes	3.32e-003	6.20e-001
C8+ Heavies	2.13e-003	3.99e-001
Total Components	100.00	1.87e+004

RICH GLYCOL STREAM

Temperature: 92.00 deg. F
Pressure: 851.70 psia
Flow Rate: 3.40e+001 gpm
NOTE: Stream has more than one phase.

Component	Conc. (wt%)	Loading (lb/hr)
TEG	9.65e+001	1.84e+004
Water	3.05e+000	5.82e+002
Carbon Dioxide	8.37e-002	1.60e+001
Nitrogen	3.88e-004	7.40e-002
Methane	2.71e-001	5.17e+001
Ethane	1.95e-002	3.73e+000
Propane	1.04e-002	1.98e+000
Isobutane	2.74e-003	5.22e-001
n-Butane	3.21e-003	6.12e-001
Isopentane	6.05e-004	1.15e-001
n-Pentane	8.76e-004	1.67e-001
Cyclopentane	2.17e-004	4.13e-002
n-Hexane	7.30e-004	1.39e-001
Cyclohexane	1.09e-003	2.08e-001
Other Hexanes	1.11e-003	2.13e-001
Heptanes	1.29e-003	2.46e-001
Methylcyclohexane	4.06e-003	7.75e-001
2,2,4-Trimethylpentane	3.68e-005	7.02e-003
Benzene	2.42e-003	4.61e-001
Toluene	1.69e-002	3.22e+000
Ethylbenzene	3.16e-003	6.04e-001
Xylenes	2.52e-002	4.80e+000
C8+ Heavies	1.74e-002	3.31e+000
Total Components	100.00	1.91e+004

FLASH TANK OFF GAS STREAM

Temperature: 100.00 deg. F
Pressure: 74.70 psia
Flow Rate: 1.22e+003 scfh

Component	Conc. (vol%)	Loading (lb/hr)
Water	8.88e-002	5.14e-002
Carbon Dioxide	4.60e+000	6.50e+000
Nitrogen	7.52e-002	6.76e-002

Methane	9.14e+001	4.70e+001
Ethane	2.79e+000	2.69e+000
Propane	7.42e-001	1.05e+000
Isobutane	1.15e-001	2.14e-001
n-Butane	1.11e-001	2.07e-001
Isopentane	1.48e-002	3.42e-002
n-Pentane	1.78e-002	4.11e-002
Cyclopentane	1.39e-003	3.14e-003
n-Hexane	7.20e-003	1.99e-002
Cyclohexane	2.95e-003	7.98e-003
Other Hexanes	1.41e-002	3.90e-002
Heptanes	5.31e-003	1.71e-002
Methylcyclohexane	6.93e-003	2.18e-002
2,2,4-Trimethylpentane	2.56e-004	9.39e-004
Benzene	8.64e-004	2.17e-003
Toluene	2.94e-003	8.70e-003
Ethylbenzene	2.51e-004	8.54e-004
Xylenes	1.31e-003	4.45e-003
C8+ Heavies	3.67e-003	2.01e-002
Total Components	100.00	5.81e+001

FLASH TANK GLYCOL STREAM

Temperature: 100.00 deg. F
Flow Rate: 3.39e+001 gpm

Component	Conc. (wt%)	Loading (lb/hr)
TEG	9.68e+001	1.84e+004
Water	3.06e+000	5.82e+002
Carbon Dioxide	4.98e-002	9.47e+000
Nitrogen	3.40e-005	6.46e-003
Methane	2.44e-002	4.65e+000
Ethane	5.46e-003	1.04e+000
Propane	4.89e-003	9.30e-001
Isobutane	1.62e-003	3.08e-001
n-Butane	2.13e-003	4.05e-001
Isopentane	4.27e-004	8.13e-002
n-Pentane	6.63e-004	1.26e-001
Cyclopentane	2.01e-004	3.82e-002
n-Hexane	6.28e-004	1.19e-001
Cyclohexane	1.05e-003	2.00e-001
Other Hexanes	9.13e-004	1.74e-001
Heptanes	1.20e-003	2.28e-001
Methylcyclohexane	3.96e-003	7.53e-001
2,2,4-Trimethylpentane	3.20e-005	6.08e-003
Benzene	2.41e-003	4.59e-001
Toluene	1.69e-002	3.21e+000
Ethylbenzene	3.17e-003	6.03e-001
Xylenes	2.52e-002	4.80e+000
C8+ Heavies	1.73e-002	3.29e+000
Total Components	100.00	1.90e+004

FLASH GAS EMISSIONS

Control Method: Recycle/recompression
Control Efficiency: 100.00

Note: Flash Gas Emissions are zero with the
Recycle/recompression control option.

REGENERATOR OVERHEADS STREAM

Temperature: 212.00 deg. F
Pressure: 14.70 psia
Flow Rate: 6.61e+003 scfh

Component	Conc. (vol%)	Loading (lb/hr)
Water	9.60e+001	3.01e+002
Carbon Dioxide	1.24e+000	9.47e+000
Nitrogen	1.32e-003	6.46e-003
Methane	1.66e+000	4.65e+000
Ethane	1.98e-001	1.04e+000
Propane	1.21e-001	9.30e-001
Isobutane	3.05e-002	3.08e-001
n-Butane	4.00e-002	4.05e-001
Isopentane	6.42e-003	8.07e-002
n-Pentane	9.96e-003	1.25e-001
Cyclopentane	3.11e-003	3.80e-002
n-Hexane	7.91e-003	1.19e-001
Cyclohexane	1.32e-002	1.93e-001
Other Hexanes	1.14e-002	1.71e-001
Heptanes	1.30e-002	2.27e-001
Methylcyclohexane	4.22e-002	7.22e-001
2,2,4-Trimethylpentane	3.00e-004	5.97e-003
Benzene	3.20e-002	4.36e-001
Toluene	1.84e-001	2.96e+000
Ethylbenzene	2.92e-002	5.40e-001
Xylenes	2.26e-001	4.18e+000
C8+ Heavies	9.76e-002	2.90e+000
Total Components	100.00	3.31e+002

GRI-GLYCalc VERSION 4.0 - SUMMARY OF INPUT VALUES

Case Name: Milagro TEG Dehydrators
File Name: P:\Harvest Midstream\New Mexico\Milagro\2025_Update\Dehy\Train4.ddf
Date: November 04, 2025

DESCRIPTION:

Description: Unit 14
Capacity 90 MMSCFD
Train 5 extended gas analysis sampled
7/15/2025

Annual Hours of Operation: 8760.0 hours/yr

WET GAS:

Temperature: 85.00 deg. F
Pressure: 867.00 psig
Wet Gas Water Content: Saturated

Component	Conc. (vol %)
Carbon Dioxide	3.4036
Nitrogen	0.1742
Methane	95.0236
Ethane	1.0760
Propane	0.2299
Isobutane	0.0425
n-Butane	0.0346
Isopentane	0.0095
n-Pentane	0.0061

DRY GAS:

Flow Rate: 90.0 MMSCF/day
Water Content: 7.0 lbs. H2O/MMSCF

LEAN GLYCOL:

Glycol Type: TEG
Water Content: 1.5 wt% H2O
Flow Rate: 10.4 gpm

PUMP:

Glycol Pump Type: Electric/Pneumatic

GRI-GLYCalc VERSION 4.0 - AGGREGATE CALCULATIONS REPORT

Case Name: Milagro TEG Dehydrators
File Name: P:\Harvest Midstream\New Mexico\Milagro\2025_Update\Dehy\Train4.ddf
Date: November 04, 2025

DESCRIPTION:

Description: Unit 14
Capacity 90 MMSCFD
Train 5 extended gas analysis sampled
7/15/2025

Annual Hours of Operation: 8760.0 hours/yr

EMISSIONS REPORTS:

UNCONTROLLED REGENERATOR EMISSIONS

Component	lbs/hr	lbs/day	tons/yr
Methane	15.9703	383.286	69.9497
Ethane	1.1315	27.155	4.9558
Propane	0.5962	14.309	2.6114
Isobutane	0.2075	4.981	0.9090
n-Butane	0.2245	5.388	0.9833
Isopentane	0.0774	1.857	0.3388
n-Pentane	0.0653	1.567	0.2861
Total Emissions	18.2726	438.543	80.0340
Total Hydrocarbon Emissions	18.2726	438.543	80.0340
Total VOC Emissions	1.1709	28.102	5.1286

EQUIPMENT REPORTS:

ABSORBER

NOTE: Because the Calculated Absorber Stages was below the minimum allowed, GRI-GLYCalc has set the number of Absorber Stages to 1.25 and has calculated a revised Dry Gas Dew Point.

Calculated Absorber Stages:	1.25
Calculated Dry Gas Dew Point:	2.37 lbs. H2O/MMSCF
Temperature:	85.0 deg. F
Pressure:	867.0 psig
Dry Gas Flow Rate:	90.0000 MMSCF/day
Glycol Losses with Dry Gas:	0.4911 lb/hr
Wet Gas Water Content:	Saturated
Calculated Wet Gas Water Content:	41.51 lbs. H2O/MMSCF
Calculated Lean Glycol Recirc. Ratio:	4.25 gal/lb H2O

Component	Remaining in Dry Gas	Absorbed in Glycol

Water	5.70%	94.30%
Carbon Dioxide	99.84%	0.16%
Nitrogen	99.99%	0.01%
Methane	99.99%	0.01%
Ethane	99.96%	0.04%
Propane	99.94%	0.06%
Isobutane	99.92%	0.08%
n-Butane	99.89%	0.11%
Isopentane	99.89%	0.11%
n-Pentane	99.85%	0.15%

REGENERATOR

No Stripping Gas used in regenerator.

Component	Remaining in Glycol	Distilled Overhead
Water	37.41%	62.59%
Carbon Dioxide	0.00%	100.00%
Nitrogen	0.00%	100.00%
Methane	0.00%	100.00%
Ethane	0.00%	100.00%
Propane	0.00%	100.00%
Isobutane	0.00%	100.00%
n-Butane	0.00%	100.00%
Isopentane	0.50%	99.50%
n-Pentane	0.50%	99.50%

STREAM REPORTS:

WET GAS STREAM

Temperature: 85.00 deg. F
Pressure: 881.70 psia
Flow Rate: 3.75e+006 scfh

Component	Conc. (vol%)	Loading (lb/hr)
Water	8.75e-002	1.56e+002
Carbon Dioxide	3.40e+000	1.48e+004
Nitrogen	1.74e-001	4.82e+002
Methane	9.49e+001	1.51e+005
Ethane	1.08e+000	3.20e+003
Propane	2.30e-001	1.00e+003
Isobutane	4.25e-002	2.44e+002
n-Butane	3.46e-002	1.99e+002
Isopentane	9.49e-003	6.78e+001
n-Pentane	6.09e-003	4.35e+001
Total Components	100.00	1.71e+005

DRY GAS STREAM

Temperature: 85.00 deg. F

Pressure: 881.70 psia
Flow Rate: 3.75e+006 scfh

Component	Conc. (vol%)	Loading (lb/hr)
Water	4.99e-003	8.88e+000
Carbon Dioxide	3.40e+000	1.48e+004
Nitrogen	1.74e-001	4.82e+002
Methane	9.50e+001	1.51e+005
Ethane	1.08e+000	3.20e+003
Propane	2.30e-001	1.00e+003
Isobutane	4.25e-002	2.44e+002
n-Butane	3.46e-002	1.99e+002
Isopentane	9.49e-003	6.77e+001
n-Pentane	6.09e-003	4.34e+001
Total Components	100.00	1.71e+005

LEAN GLYCOL STREAM

Temperature: 85.00 deg. F
Flow Rate: 1.04e+001 gpm

Component	Conc. (wt%)	Loading (lb/hr)
TEG	9.85e+001	5.77e+003
Water	1.50e+000	8.78e+001
Carbon Dioxide	4.07e-011	2.38e-009
Nitrogen	9.72e-014	5.69e-012
Methane	9.17e-018	5.37e-016
Ethane	9.12e-009	5.34e-007
Propane	4.15e-010	2.43e-008
Isobutane	1.06e-010	6.23e-009
n-Butane	9.51e-011	5.57e-009
Isopentane	6.64e-006	3.89e-004
n-Pentane	5.61e-006	3.28e-004
Total Components	100.00	5.86e+003

RICH GLYCOL STREAM

Temperature: 85.00 deg. F
Pressure: 881.70 psia
Flow Rate: 1.08e+001 gpm
NOTE: Stream has more than one phase.

Component	Conc. (wt%)	Loading (lb/hr)
TEG	9.54e+001	5.77e+003
Water	3.88e+000	2.35e+002
Carbon Dioxide	3.94e-001	2.38e+001
Nitrogen	9.38e-004	5.67e-002
Methane	2.64e-001	1.60e+001
Ethane	1.87e-002	1.13e+000
Propane	9.87e-003	5.96e-001
Isobutane	3.43e-003	2.08e-001
n-Butane	3.71e-003	2.25e-001
Isopentane	1.29e-003	7.77e-002

n-Pentane	1.09e-003	6.56e-002
Total Components	100.00	6.04e+003

REGENERATOR OVERHEADS STREAM

Temperature: 212.00 deg. F
Pressure: 14.70 psia
Flow Rate: 3.70e+003 scfh

Component	Conc. (vol%)	Loading (lb/hr)
Water	8.36e+001	1.47e+002
Carbon Dioxide	5.55e+000	2.38e+001
Nitrogen	2.07e-002	5.67e-002
Methane	1.02e+001	1.60e+001
Ethane	3.86e-001	1.13e+000
Propane	1.39e-001	5.96e-001
Isobutane	3.66e-002	2.08e-001
n-Butane	3.96e-002	2.25e-001
Isopentane	1.10e-002	7.74e-002
n-Pentane	9.28e-003	6.53e-002
Total Components	100.00	1.89e+002

GRI-GLYCalc VERSION 4.0 - SUMMARY OF INPUT VALUES

Case Name: Milagro TEG Dehydrators
File Name: P:\Harvest Midstream\New Mexico\Milagro\2025_Update\Dehy\Train5.ddf
Date: November 04, 2025

DESCRIPTION:

Description: Unit 15
Capacity 120 MMSCFD
Train 5 extended gas analysis sampled
7/15/2025

Annual Hours of Operation: 8760.0 hours/yr

WET GAS:

Temperature: 85.00 deg. F
Pressure: 867.00 psig
Wet Gas Water Content: Saturated

Component	Conc. (vol %)
Carbon Dioxide	3.4036
Nitrogen	0.1742
Methane	95.0236
Ethane	1.0760
Propane	0.2299
Isobutane	0.0425
n-Butane	0.0346
Isopentane	0.0095
n-Pentane	0.0061

DRY GAS:

Flow Rate: 120.0 MMSCF/day
Water Content: 7.0 lbs. H2O/MMSCF

LEAN GLYCOL:

Glycol Type: TEG
Water Content: 1.5 wt% H2O
Flow Rate: 28.4 gpm

PUMP:

Glycol Pump Type: Electric/Pneumatic

FLASH TANK:

Flash Control: Recycle/recompression
Temperature: 100.0 deg. F
Pressure: 60.0 psig

GRI-GLYCalc VERSION 4.0 - AGGREGATE CALCULATIONS REPORT

Case Name: Milagro TEG Dehydrators
File Name: P:\Harvest Midstream\New Mexico\Milagro\2025_Update\Dehy\Train5.ddf
Date: November 04, 2025

DESCRIPTION:

Description: Unit 15
Capacity 120 MMSCFD
Train 5 extended gas analysis sampled
7/15/2025

Annual Hours of Operation: 8760.0 hours/yr

EMISSIONS REPORTS:

UNCONTROLLED REGENERATOR EMISSIONS

Component	lbs/hr	lbs/day	tons/yr
Methane	3.3377	80.106	14.6193
Ethane	0.7707	18.498	3.3758
Propane	0.6910	16.585	3.0267
Isobutane	0.3117	7.482	1.3654
n-Butane	0.3828	9.187	1.6766
Isopentane	0.1419	3.406	0.6215
n-Pentane	0.1297	3.113	0.5682
Total Emissions	5.7656	138.375	25.2535
Total Hydrocarbon Emissions	5.7656	138.375	25.2535
Total VOC Emissions	1.6572	39.772	7.2584

FLASH GAS EMISSIONS

Note: Flash Gas Emissions are zero with the
Recycle/recompression control option.

FLASH TANK OFF GAS

Component	lbs/hr	lbs/day	tons/yr
Methane	41.2909	990.981	180.8541
Ethane	2.4156	57.974	10.5802
Propane	0.9518	22.844	4.1690
Isobutane	0.2627	6.305	1.1507
n-Butane	0.2383	5.720	1.0439
Isopentane	0.0730	1.751	0.3196
n-Pentane	0.0517	1.241	0.2264
Total Emissions	45.2840	1086.816	198.3439
Total Hydrocarbon Emissions	45.2840	1086.816	198.3439
Total VOC Emissions	1.5775	37.861	6.9096

COMBINED REGENERATOR VENT/FLASH GAS EMISSIONS

Component	lbs/hr	lbs/day	tons/yr
Methane	3.3377	80.106	14.6193
Ethane	0.7707	18.498	3.3758
Propane	0.6910	16.585	3.0267
Isobutane	0.3117	7.482	1.3654
n-Butane	0.3828	9.187	1.6766
Isopentane	0.1419	3.406	0.6215
n-Pentane	0.1297	3.113	0.5682
Total Emissions	5.7656	138.375	25.2535
Total Hydrocarbon Emissions	5.7656	138.375	25.2535
Total VOC Emissions	1.6572	39.772	7.2584

COMBINED REGENERATOR VENT/FLASH GAS EMISSION CONTROL REPORT:

Component	Uncontrolled tons/yr	Controlled tons/yr	% Reduction
Methane	195.4734	14.6193	92.52
Ethane	13.9560	3.3758	75.81
Propane	7.1957	3.0267	57.94
Isobutane	2.5161	1.3654	45.73
n-Butane	2.7205	1.6766	38.37
Isopentane	0.9411	0.6215	33.96
n-Pentane	0.7946	0.5682	28.50
Total Emissions	223.5975	25.2535	88.71
Total Hydrocarbon Emissions	223.5975	25.2535	88.71
Total VOC Emissions	14.1681	7.2584	48.77

EQUIPMENT REPORTS:

ABSORBER

NOTE: Because the Calculated Absorber Stages was below the minimum allowed, GRI-GLYCalc has set the number of Absorber Stages to 1.25 and has calculated a revised Dry Gas Dew Point.

Calculated Absorber Stages:	1.25	
Calculated Dry Gas Dew Point:	1.75	lbs. H2O/MMSCF
Temperature:	85.0	deg. F
Pressure:	867.0	psig
Dry Gas Flow Rate:	120.0000	MMSCF/day
Glycol Losses with Dry Gas:	0.6547	lb/hr
Wet Gas Water Content:	Saturated	
Calculated Wet Gas Water Content:	41.51	lbs. H2O/MMSCF
Calculated Lean Glycol Recirc. Ratio:	8.57	gal/lb H2O

Component	Remaining in Dry Gas	Absorbed in Glycol

Component		
Water	4.22%	95.78%
Carbon Dioxide	99.67%	0.33%
Nitrogen	99.98%	0.02%
Methane	99.98%	0.02%
Ethane	99.93%	0.07%
Propane	99.88%	0.12%
Isobutane	99.82%	0.18%
n-Butane	99.77%	0.23%
Isopentane	99.76%	0.24%
n-Pentane	99.69%	0.31%

FLASH TANK

Flash Control: Recycle/recompression
Flash Temperature: 100.0 deg. F
Flash Pressure: 60.0 psig

Component	Left in Glycol	Removed in Flash Gas
Water	99.99%	0.01%
Carbon Dioxide	54.31%	45.69%
Nitrogen	7.29%	92.71%
Methane	7.48%	92.52%
Ethane	24.19%	75.81%
Propane	42.06%	57.94%
Isobutane	54.27%	45.73%
n-Butane	61.63%	38.37%
Isopentane	66.21%	33.79%
n-Pentane	71.65%	28.35%

REGENERATOR

No Stripping Gas used in regenerator.

Component	Remaining in Glycol	Distilled Overhead
Water	54.66%	45.34%
Carbon Dioxide	0.00%	100.00%
Nitrogen	0.00%	100.00%
Methane	0.00%	100.00%
Ethane	0.00%	100.00%
Propane	0.00%	100.00%
Isobutane	0.00%	100.00%
n-Butane	0.00%	100.00%
Isopentane	0.76%	99.24%
n-Pentane	0.70%	99.30%

STREAM REPORTS:

WET GAS STREAM

Temperature: 85.00 deg. F

Pressure: 881.70 psia
Flow Rate: 5.01e+006 scfh

Component	Conc. (vol%)	Loading (lb/hr)
Water	8.75e-002	2.08e+002
Carbon Dioxide	3.40e+000	1.97e+004
Nitrogen	1.74e-001	6.43e+002
Methane	9.49e+001	2.01e+005
Ethane	1.08e+000	4.27e+003
Propane	2.30e-001	1.34e+003
Isobutane	4.25e-002	3.26e+002
n-Butane	3.46e-002	2.65e+002
Isopentane	9.49e-003	9.04e+001
n-Pentane	6.09e-003	5.80e+001
Total Components	100.00	2.28e+005

DRY GAS STREAM

Temperature: 85.00 deg. F
Pressure: 881.70 psia
Flow Rate: 5.00e+006 scfh

Component	Conc. (vol%)	Loading (lb/hr)
Water	3.69e-003	8.76e+000
Carbon Dioxide	3.39e+000	1.97e+004
Nitrogen	1.74e-001	6.43e+002
Methane	9.50e+001	2.01e+005
Ethane	1.08e+000	4.26e+003
Propane	2.30e-001	1.33e+003
Isobutane	4.24e-002	3.25e+002
n-Butane	3.45e-002	2.64e+002
Isopentane	9.48e-003	9.01e+001
n-Pentane	6.08e-003	5.78e+001
Total Components	100.00	2.28e+005

LEAN GLYCOL STREAM

Temperature: 85.00 deg. F
Flow Rate: 2.84e+001 gpm

Component	Conc. (wt%)	Loading (lb/hr)
TEG	9.85e+001	1.57e+004
Water	1.50e+000	2.40e+002
Carbon Dioxide	4.10e-011	6.56e-009
Nitrogen	9.99e-014	1.60e-011
Methane	9.38e-018	1.50e-015
Ethane	9.41e-009	1.50e-006
Propane	4.18e-010	6.69e-008
Isobutane	1.08e-010	1.72e-008
n-Butane	9.63e-011	1.54e-008
Isopentane	6.75e-006	1.08e-003
n-Pentane	5.70e-006	9.12e-004
Total Components	100.00	1.60e+004

RICH GLYCOL STREAM

Temperature: 85.00 deg. F
Pressure: 881.70 psia
Flow Rate: 2.90e+001 gpm
NOTE: Stream has more than one phase.

Component	Conc. (wt%)	Loading (lb/hr)
TEG	9.66e+001	1.57e+004
Water	2.69e+000	4.39e+002
Carbon Dioxide	4.02e-001	6.56e+001
Nitrogen	9.79e-004	1.60e-001
Methane	2.74e-001	4.46e+001
Ethane	1.95e-002	3.19e+000
Propane	1.01e-002	1.64e+000
Isobutane	3.52e-003	5.74e-001
n-Butane	3.81e-003	6.21e-001
Isopentane	1.32e-003	2.16e-001
n-Pentane	1.12e-003	1.82e-001
Total Components	100.00	1.63e+004

FLASH TANK OFF GAS STREAM

Temperature: 100.00 deg. F
Pressure: 74.70 psia
Flow Rate: 1.28e+003 scfh

Component	Conc. (vol%)	Loading (lb/hr)
Water	7.84e-002	4.77e-002
Carbon Dioxide	2.02e+001	3.00e+001
Nitrogen	1.56e-001	1.48e-001
Methane	7.63e+001	4.13e+001
Ethane	2.38e+000	2.42e+000
Propane	6.39e-001	9.52e-001
Isobutane	1.34e-001	2.63e-001
n-Butane	1.21e-001	2.38e-001
Isopentane	3.00e-002	7.30e-002
n-Pentane	2.12e-002	5.17e-002
Total Components	100.00	7.55e+001

FLASH TANK GLYCOL STREAM

Temperature: 100.00 deg. F
Flow Rate: 2.89e+001 gpm

Component	Conc. (wt%)	Loading (lb/hr)
TEG	9.70e+001	1.57e+004
Water	2.70e+000	4.39e+002
Carbon Dioxide	2.20e-001	3.56e+001
Nitrogen	7.17e-005	1.16e-002
Methane	2.06e-002	3.34e+000

Ethane	4.75e-003	7.71e-001
Propane	4.26e-003	6.91e-001
Isobutane	1.92e-003	3.12e-001
n-Butane	2.36e-003	3.83e-001
Isopentane	8.81e-004	1.43e-001
n-Pentane	8.05e-004	1.31e-001
Total Components	100.00	1.62e+004

FLASH GAS EMISSIONS

Control Method: Recycle/recompression
Control Efficiency: 100.00

Note: Flash Gas Emissions are zero with the Recycle/recompression control option.

REGENERATOR OVERHEADS STREAM

Temperature: 212.00 deg. F
Pressure: 14.70 psia
Flow Rate: 4.60e+003 scfh

Component	Conc. (vol%)	Loading (lb/hr)
Water	9.11e+001	1.99e+002
Carbon Dioxide	6.68e+000	3.56e+001
Nitrogen	3.42e-003	1.16e-002
Methane	1.72e+000	3.34e+000
Ethane	2.11e-001	7.71e-001
Propane	1.29e-001	6.91e-001
Isobutane	4.42e-002	3.12e-001
n-Butane	5.43e-002	3.83e-001
Isopentane	1.62e-002	1.42e-001
n-Pentane	1.48e-002	1.30e-001
Total Components	100.00	2.40e+002

Project Name:	Milagro - PTE - Trains 1, 2 & 3 Milagro - PTE - Trains 1, 2 & 3 07/15/2025 Gas Analysis and 07/15/2025 Operating	
Parameters		
Model:	Gas Model	
Amine:	MDEA	
Lean Amine Pressure:	932.000	[psia]
Lean Amine Temperature:	121.000	[F]
Lean Amine Flowrate:	1600.000	[gal/min]
Lean Amine Weight:	48.370	[%]
H2S Loading:	0.000	[mol/mol]
CO2 Loading:	0.040	[mol/mol]
Emission Control Efficiency	100.000	
Operating Hours/Day:	24	[hours/day]
Operating Days/Year:	365	[days/year]
Gas Feed Pressure:	887.000	[psia]
Gas Feed Temperature:	85.000	[F]
Gas Feed Flowrate:	145.000	[MMSCFD]
Number of Trays in Column:	22	
Flash Tank Pressure:	86.000	[psia]
H2S	0.00000	[%]
CO2	11.09750	[%]
MDEA	0.00000	[%]
H2O	0.00000	[%]
N2	0.07690	[%]
O2	0.00000	[%]
C1	87.46280	[%]
C2	0.98890	[%]
C3	0.23030	[%]
i-C4	0.03960	[%]
n-C4	0.04660	[%]
i-C5	0.03370	[%]
n-C5	0.01250	[%]
Hexanes	0.00390	[%]
Heptanes	0.00270	[%]
Octanes	0.00150	[%]
Nonanes	0.00000	[%]
C10+	0.00000	[%]
MeSH	0.00000	[%]
EtSH	0.00000	[%]
Benzene	0.00020	[%]
Toluene	0.00060	[%]
Ethylbenzene	0.00000	[%]
Xylenes	0.00040	[%]
n-C6	0.00160	[%]

224Trimeth 0.00000 [%]

Stream 1 Gas Feed to Absorber

Component	Mol Fraction	[lb/h]	[ton/yr]
H2S	0.000000	0.000	0.000
CO2	0.110980	77756.060	340565.800
MDEA	0.000000	0.000	0.001
H2O	0.000000	0.000	0.000
N2	0.000770	342.965	1502.162
C1	0.874630	223391.500	978438.200
C2	0.009890	4734.167	20735.300
C3	0.002300	1616.816	7081.535
i-C4	0.000400	366.445	1605.000
n-C4	0.000470	431.220	1888.713
i-C5	0.000340	387.106	1695.496
n-C5	0.000130	143.585	628.893
Hexanes	0.000040	53.508	234.361
Heptanes	0.000030	43.074	188.659
Octanes	0.000020	27.280	119.482
Benzene	0.000000	2.487	10.894
Toluene	0.000010	8.802	38.550
Xylenes	0.000000	6.761	29.613
n-C6	0.000020	21.952	96.149
Total:	1.000000	309333.700	1354859.000

Pressure 887.000 [psia]
Temperature 85.000 [F]

Stream 2 Rich Amine From Absorber

Component	Mol Fraction	[lb/h]	[ton/yr]
H2S	0.000000	0.000	0.000
CO2	0.051050	64808.680	283857.200
MDEA	0.117770	404885.600	1773369.000
H2O	0.830350	431608.900	1890415.000
N2	0.000000	0.298	1.306
C1	0.000820	380.056	1664.616
C2	0.000010	7.720	33.813
C3	0.000000	2.162	9.470
i-C4	0.000000	0.048	0.212
n-C4	0.000000	0.057	0.249

i-C5	0.000000	0.073	0.320
n-C5	0.000000	0.027	0.119
Hexanes	0.000000	0.019	0.082
Heptanes	0.000000	0.011	0.050
Octanes	0.000000	0.004	0.020
Benzene	0.000000	0.132	0.579
Toluene	0.000000	0.292	1.281
Xylenes	0.000000	0.180	0.786
n-C6	0.000000	0.036	0.159
Total:	1.000000	901694.300	3949354.000

Pressure	887.000	[psia]
Temperature	156.355	[F]

Stream 3 Flash Gas Vent Flow from Flash Tank

	----- Controlled -----		----- Uncontrolled -----	
Component	[lb/h]	[ton/yr]	[lb/h]	[ton/yr]
H2S	0.000	0.000	0.000	0.000
CO2	316.654	1386.921	316.654	1386.921
MDEA	0.000	0.000	0.034	0.148
H2O	0.000	0.000	24.265	106.279
N2	0.000	0.000	0.286	1.251
C1	0.000	0.000	349.892	1532.503
C2	0.000	0.000	7.130	31.228
C3	0.000	0.000	2.024	8.866
i-C4	0.000	0.000	0.048	0.211
n-C4	0.000	0.000	0.057	0.248
i-C5	0.000	0.000	0.072	0.317
n-C5	0.000	0.000	0.027	0.118
Hexanes	0.000	0.000	0.018	0.080
Heptanes	0.000	0.000	0.011	0.050
Octanes	0.000	0.000	0.004	0.019
Benzene	0.000	0.000	0.035	0.153
Toluene	0.000	0.000	0.112	0.488
Xylenes	0.000	0.000	0.078	0.342
n-C6	0.000	0.000	0.034	0.147
Total:	316.654	1386.921	700.781	3069.368

Pressure	86.000	[psia]
Temperature	156.355	[F]

Stream 4 Rich Amine Feed to Regenerator

Component	Mol Fraction	[lb/h]	[ton/yr]
H2S	0.000000	0.000	0.000
CO2	0.050850	64491.980	282470.100
MDEA	0.117900	404885.600	1773369.000
H2O	0.831190	431584.700	1890309.000
N2	0.000000	0.013	0.055
C1	0.000070	30.179	132.181
C2	0.000000	0.590	2.586
C3	0.000000	0.138	0.604
i-C4	0.000000	0.000	0.001
n-C4	0.000000	0.000	0.001
i-C5	0.000000	0.001	0.003
n-C5	0.000000	0.000	0.001
Hexanes	0.000000	0.000	0.001
Heptanes	0.000000	0.000	0.001
Octanes	0.000000	0.000	0.000
Benzene	0.000000	0.097	0.425
Toluene	0.000000	0.181	0.793
Xylenes	0.000000	0.101	0.444
n-C6	0.000000	0.003	0.012
Total:	1.000000	900993.500	3946285.000

Pressure	86.000	[psia]
Temperature	156.355	[F]

Stream 5 Acid Gas Flow from Regenerator

	----- Controlled -----		----- Uncontrolled -----	
Component	[lb/h]	[ton/yr]	[lb/h]	[ton/yr]
H2S	0.000	0.000	0.000	0.000
CO2	58510.930	256273.500	58510.930	256273.500
MDEA	0.000	0.000	0.000	0.000
H2O	0.000	0.000	0.000	0.000
N2	0.000	0.000	0.013	0.055
C1	0.000	0.000	30.179	132.181
C2	0.000	0.000	0.590	2.586
C3	0.000	0.000	0.138	0.604
i-C4	0.000	0.000	0.000	0.001
n-C4	0.000	0.000	0.000	0.001
i-C5	0.000	0.000	0.001	0.003
n-C5	0.000	0.000	0.000	0.001

Hexanes	0.000	0.000	0.000	0.001
Heptanes	0.000	0.000	0.000	0.001
Octanes	0.000	0.000	0.000	0.000
Benzene	0.000	0.000	0.097	0.425
Toluene	0.000	0.000	0.181	0.793
Xylenes	0.000	0.000	0.101	0.444
n-C6	0.000	0.000	0.003	0.012
Total:	58510.930	256273.500	58542.230	256410.600

Pressure	N/A	[psia]
Temperature	N/A	[F]

Stream 6 Lean Amine from Regenerator

Component	Mol Fraction	[lb/h]	[ton/yr]
H2S	0.000000	0.000	0.000
CO2	0.004940	5981.052	26196.560
MDEA	0.123460	404886.400	1773372.000
H2O	0.871600	432174.600	1892893.000
N2	0.000000	0.000	0.000
C1	0.000000	0.000	0.000
C2	0.000000	0.000	0.000
C3	0.000000	0.000	0.000
i-C4	0.000000	0.000	0.000
n-C4	0.000000	0.000	0.000
i-C5	0.000000	0.000	0.000
n-C5	0.000000	0.000	0.000
Hexanes	0.000000	0.000	0.000
Heptanes	0.000000	0.000	0.000
Octanes	0.000000	0.000	0.000
Benzene	0.000000	0.000	0.000
Toluene	0.000000	0.000	0.000
Xylenes	0.000000	0.000	0.000
n-C6	0.000000	0.000	0.000
Total:	1.000000	843042.100	3692462.000

Pressure	932.000	[psia]
Temperature	121.000	[F]

Stream 7 Sweet Gas Flow from Absorber

Component	Mol Fraction	[lb/h]	[ton/yr]
H2S	0.000000	0.000	0.000
CO2	0.029480	18932.180	82921.550
MDEA	0.000000	0.386	1.692
H2O	0.002150	565.253	2475.764
N2	0.000840	342.665	1500.849
C1	0.952680	223010.600	976769.700
C2	0.010770	4726.428	20701.400
C3	0.002510	1614.648	7072.038
i-C4	0.000430	366.395	1604.782
n-C4	0.000510	431.162	1888.456
i-C5	0.000370	387.031	1695.169
n-C5	0.000140	143.558	628.772
Hexanes	0.000040	53.489	234.278
Heptanes	0.000030	43.062	188.609
Octanes	0.000020	27.275	119.462
Benzene	0.000000	2.355	10.315
Toluene	0.000010	8.509	37.270
Xylenes	0.000000	6.581	28.826
n-C6	0.000020	21.916	95.989
Total:	1.000000	250683.500	1097975.000

Pressure	932.000	[psia]
Temperature	122.480	[F]

Project Name:	Milagro - PTE - Train 4 Milagro - PTE - Train 4 07/15/2025 Gas Analysis and 02/12/2025 Operating Parameters	
Model:	Gas Model	
Amine:	MDEA	
Lean Amine Pressure:	932.000	[psia]
Lean Amine Temperature:	102.000	[F]
Lean Amine Flowrate:	700.000	[gal/min]
Lean Amine Weight:	49.000	[%]
H2S Loading:	0.000	[mol/mol]
CO2 Loading:	0.020	[mol/mol]
Emission Control Efficiency	100.000	
Operating Hours/Day:	24	[hours/day]
Operating Days/Year:	365	[days/year]
Gas Feed Pressure:	892.000	[psia]
Gas Feed Temperature:	58.000	[F]
Gas Feed Flowrate:	90.000	[MMSCFD]
Number of Trays in Column:	22	
Flash Tank Pressure:	84.000	[psia]
H2S	0.00000	[%]
CO2	11.09750	[%]
MDEA	0.00000	[%]
H2O	0.00000	[%]
N2	0.07690	[%]
O2	0.00000	[%]
C1	87.46280	[%]
C2	0.98890	[%]
C3	0.23030	[%]
i-C4	0.03960	[%]
n-C4	0.04660	[%]
i-C5	0.03370	[%]
n-C5	0.01250	[%]
Hexanes	0.00390	[%]
Heptanes	0.00270	[%]
Octanes	0.00150	[%]
Nonanes	0.00000	[%]
C10+	0.00000	[%]
MeSH	0.00000	[%]
EtSH	0.00000	[%]
Benzene	0.00020	[%]
Toluene	0.00060	[%]
Ethylbenzene	0.00000	[%]
Xylenes	0.00040	[%]
n-C6	0.00160	[%]

224Trimeth 0.00000 [%]

Stream 1 Gas Feed to Absorber

Component	Mol Fraction	[lb/h]	[ton/yr]
H2S	0.000000	0.000	0.000
CO2	0.110980	48262.380	211385.600
MDEA	0.000000	0.000	0.000
H2O	0.000000	0.000	0.000
N2	0.000770	212.875	932.377
C1	0.874630	138656.800	607306.500
C2	0.009890	2938.448	12870.190
C3	0.002300	1003.541	4395.435
i-C4	0.000400	227.448	996.207
n-C4	0.000470	267.654	1172.305
i-C5	0.000340	240.273	1052.377
n-C5	0.000130	89.122	390.347
Hexanes	0.000040	33.212	145.465
Heptanes	0.000030	26.735	117.099
Octanes	0.000020	16.932	74.161
Benzene	0.000000	1.544	6.761
Toluene	0.000010	5.463	23.927
Xylenes	0.000000	4.196	18.381
n-C6	0.000020	13.625	59.678
Total:	1.000000	192000.300	840946.800

Pressure 892.000 [psia]
Temperature 58.000 [F]

Stream 2 Rich Amine From Absorber

Component	Mol Fraction	[lb/h]	[ton/yr]
H2S	0.000000	0.000	0.000
CO2	0.056730	31446.800	137734.600
MDEA	0.119650	179596.600	786619.600
H2O	0.822720	186709.600	817774.000
N2	0.000000	0.135	0.590
C1	0.000890	179.211	784.928
C2	0.000010	3.704	16.224
C3	0.000000	1.059	4.638
i-C4	0.000000	0.018	0.078
n-C4	0.000000	0.021	0.093

i-C5	0.000000	0.027	0.119
n-C5	0.000000	0.010	0.044
Hexanes	0.000000	0.010	0.043
Heptanes	0.000000	0.004	0.019
Octanes	0.000000	0.002	0.010
Benzene	0.000000	0.074	0.323
Toluene	0.000000	0.108	0.474
Xylenes	0.000000	0.066	0.291
n-C6	0.000000	0.013	0.058
Total:	1.000000	397937.400	1742936.000

Pressure	892.000	[psia]
Temperature	137.699	[F]

Stream 3 Flash Gas Vent Flow from Flash Tank

	----- Controlled -----		----- Uncontrolled -----	
Component	[lb/h]	[ton/yr]	[lb/h]	[ton/yr]
H2S	0.000	0.000	0.000	0.000
CO2	93.074	407.658	93.074	407.658
MDEA	0.000	0.000	0.007	0.032
H2O	0.000	0.000	6.510	28.513
N2	0.000	0.000	0.129	0.564
C1	0.000	0.000	163.850	717.649
C2	0.000	0.000	3.393	14.862
C3	0.000	0.000	0.983	4.308
i-C4	0.000	0.000	0.018	0.078
n-C4	0.000	0.000	0.021	0.091
i-C5	0.000	0.000	0.027	0.118
n-C5	0.000	0.000	0.010	0.044
Hexanes	0.000	0.000	0.010	0.042
Heptanes	0.000	0.000	0.004	0.019
Octanes	0.000	0.000	0.002	0.010
Benzene	0.000	0.000	0.016	0.071
Toluene	0.000	0.000	0.045	0.197
Xylenes	0.000	0.000	0.031	0.137
n-C6	0.000	0.000	0.013	0.055
Total:	93.074	407.658	268.143	1174.447

Pressure	84.000	[psia]
Temperature	137.699	[F]

Stream 4 Rich Amine Feed to Regenerator

Component	Mol Fraction	[lb/h]	[ton/yr]
H2S	0.000000	0.000	0.000
CO2	0.056620	31353.700	137326.900
MDEA	0.119770	179596.600	786619.600
H2O	0.823530	186703.100	817745.500
N2	0.000000	0.006	0.025
C1	0.000080	15.369	67.315
C2	0.000000	0.311	1.362
C3	0.000000	0.076	0.331
i-C4	0.000000	0.000	0.000
n-C4	0.000000	0.000	0.000
i-C5	0.000000	0.000	0.001
n-C5	0.000000	0.000	0.000
Hexanes	0.000000	0.000	0.001
Heptanes	0.000000	0.000	0.000
Octanes	0.000000	0.000	0.000
Benzene	0.000000	0.058	0.252
Toluene	0.000000	0.063	0.278
Xylenes	0.000000	0.035	0.154
n-C6	0.000000	0.001	0.004
Total:	1.000000	397669.200	1741762.000

Pressure	84.000	[psia]
Temperature	137.699	[F]

Stream 5 Acid Gas Flow from Regenerator

	----- Controlled -----		----- Uncontrolled -----	
Component	[lb/h]	[ton/yr]	[lb/h]	[ton/yr]
H2S	0.000	0.000	0.000	0.000
CO2	30027.160	131516.700	30027.160	131516.700
MDEA	0.000	0.000	0.000	0.000
H2O	0.000	0.000	0.000	0.000
N2	0.000	0.000	0.006	0.025
C1	0.000	0.000	15.369	67.315
C2	0.000	0.000	0.311	1.362
C3	0.000	0.000	0.076	0.331
i-C4	0.000	0.000	0.000	0.000
n-C4	0.000	0.000	0.000	0.000
i-C5	0.000	0.000	0.000	0.001
n-C5	0.000	0.000	0.000	0.000

Hexanes	0.000	0.000	0.000	0.001
Heptanes	0.000	0.000	0.000	0.000
Octanes	0.000	0.000	0.000	0.000
Benzene	0.000	0.000	0.058	0.252
Toluene	0.000	0.000	0.063	0.278
Xylenes	0.000	0.000	0.035	0.154
n-C6	0.000	0.000	0.001	0.004
Total:	30027.160	131516.700	30043.080	131586.400

Pressure	N/A	[psia]
Temperature	N/A	[F]

Stream 6 Lean Amine from Regenerator

Component	Mol Fraction	[lb/h]	[ton/yr]
H2S	0.000000	0.000	0.000
CO2	0.002530	1326.543	5810.158
MDEA	0.126520	179600.200	786635.500
H2O	0.870950	186930.800	818743.000
N2	0.000000	0.000	0.000
C1	0.000000	0.000	0.000
C2	0.000000	0.000	0.000
C3	0.000000	0.000	0.000
i-C4	0.000000	0.000	0.000
n-C4	0.000000	0.000	0.000
i-C5	0.000000	0.000	0.000
n-C5	0.000000	0.000	0.000
Hexanes	0.000000	0.000	0.000
Heptanes	0.000000	0.000	0.000
Octanes	0.000000	0.000	0.000
Benzene	0.000000	0.000	0.000
Toluene	0.000000	0.000	0.000
Xylenes	0.000000	0.000	0.000
n-C6	0.000000	0.000	0.000
Total:	1.000000	367857.500	1611189.000

Pressure	932.000	[psia]
Temperature	102.000	[F]

Stream 7 Sweet Gas Flow from Absorber

Component	Mol Fraction	[lb/h]	[ton/yr]
H2S	0.000000	0.000	0.000
CO2	0.044870	18166.030	79565.880
MDEA	0.000000	0.114	0.500
H2O	0.001310	217.606	953.099
N2	0.000830	212.733	931.753
C1	0.938370	138472.700	606500.000
C2	0.010610	2934.640	12853.500
C3	0.002470	1002.447	4390.642
i-C4	0.000430	227.422	996.093
n-C4	0.000500	267.623	1172.170
i-C5	0.000360	240.237	1052.221
n-C5	0.000130	89.109	390.290
Hexanes	0.000040	33.201	145.418
Heptanes	0.000030	26.730	117.076
Octanes	0.000020	16.929	74.149
Benzene	0.000000	1.470	6.438
Toluene	0.000010	5.355	23.452
Xylenes	0.000000	4.130	18.089
n-C6	0.000020	13.611	59.618
Total:	1.000000	161932.100	709250.300

Pressure	932.000	[psia]
Temperature	104.430	[F]

Project Name:	Milagro - PTE - Train 5 Milagro - PTE - Train 5 07/15/2025 Gas Analysis and 07/15/2025 Operating Parameters	
Model:	Gas Model	
Amine:	MDEA	
Lean Amine Pressure:	952.000	[psia]
Lean Amine Temperature:	108.000	[F]
Lean Amine Flowrate:	1400.000	[gal/min]
Lean Amine Weight:	47.780	[%]
H2S Loading:	0.000	[mol/mol]
CO2 Loading:	0.030	[mol/mol]
Emission Control Efficiency	100.000	
Operating Hours/Day:	24	[hours/day]
Operating Days/Year:	365	[days/year]
Gas Feed Pressure:	883.000	[psia]
Gas Feed Temperature:	84.000	[F]
Gas Feed Flowrate:	120.000	[MMSCFD]
Number of Trays in Column:	22	
Flash Tank Pressure:	92.000	[psia]
H2S	0.00000	[%]
CO2	11.09750	[%]
MDEA	0.00000	[%]
H2O	0.00000	[%]
N2	0.07690	[%]
O2	0.00000	[%]
C1	87.46280	[%]
C2	0.98890	[%]
C3	0.23030	[%]
i-C4	0.03960	[%]
n-C4	0.04660	[%]
i-C5	0.03370	[%]
n-C5	0.01250	[%]
Hexanes	0.00390	[%]
Heptanes	0.00270	[%]
Octanes	0.00150	[%]
Nonanes	0.00000	[%]
C10+	0.00000	[%]
MeSH	0.00000	[%]
EtSH	0.00000	[%]
Benzene	0.00020	[%]
Toluene	0.00060	[%]
Ethylbenzene	0.00000	[%]
Xylenes	0.00040	[%]
n-C6	0.00160	[%]

224Trimeth 0.00000 [%]

Stream 1 Gas Feed to Absorber

Component	Mol Fraction	[lb/h]	[ton/yr]
H2S	0.000000	0.000	0.000
CO2	0.110980	64349.840	281847.500
MDEA	0.000000	0.000	0.001
H2O	0.000000	0.000	0.000
N2	0.000770	283.833	1243.168
C1	0.874630	184875.700	809742.000
C2	0.009890	3917.931	17160.250
C3	0.002300	1338.055	5860.581
i-C4	0.000400	303.265	1328.276
n-C4	0.000470	356.872	1563.072
i-C5	0.000340	320.364	1403.169
n-C5	0.000130	118.829	520.463
Hexanes	0.000040	44.282	193.954
Heptanes	0.000030	35.647	156.132
Octanes	0.000020	22.576	98.882
Benzene	0.000000	2.058	9.016
Toluene	0.000010	7.284	31.904
Xylenes	0.000000	5.595	24.507
n-C6	0.000020	18.167	79.571
Total:	1.000000	256000.300	1121262.000

Pressure 883.000 [psia]
Temperature 84.000 [F]

Stream 2 Rich Amine From Absorber

Component	Mol Fraction	[lb/h]	[ton/yr]
H2S	0.000000	0.000	0.000
CO2	0.043960	48889.750	214133.500
MDEA	0.116170	349848.200	1532309.000
H2O	0.838990	382031.600	1673270.000
N2	0.000000	0.268	1.174
C1	0.000870	353.083	1546.476
C2	0.000010	7.259	31.792
C3	0.000000	2.067	9.054
i-C4	0.000000	0.037	0.163
n-C4	0.000000	0.044	0.193

i-C5	0.000000	0.056	0.247
n-C5	0.000000	0.021	0.091
Hexanes	0.000000	0.019	0.083
Heptanes	0.000000	0.009	0.039
Octanes	0.000000	0.004	0.020
Benzene	0.000000	0.140	0.614
Toluene	0.000000	0.225	0.985
Xylenes	0.000000	0.138	0.605
n-C6	0.000000	0.028	0.122
Total:	1.000000	781133.000	3421304.000

Pressure	883.000	[psia]
Temperature	141.339	[F]

Stream 3 Flash Gas Vent Flow from Flash Tank

	----- Controlled -----		----- Uncontrolled -----	
Component	[lb/h]	[ton/yr]	[lb/h]	[ton/yr]
H2S	0.000	0.000	0.000	0.000
CO2	99.904	437.572	99.904	437.572
MDEA	0.000	0.000	0.013	0.057
H2O	0.000	0.000	11.763	51.522
N2	0.000	0.000	0.254	1.111
C1	0.000	0.000	316.677	1387.021
C2	0.000	0.000	6.529	28.596
C3	0.000	0.000	1.891	8.280
i-C4	0.000	0.000	0.037	0.162
n-C4	0.000	0.000	0.044	0.191
i-C5	0.000	0.000	0.056	0.245
n-C5	0.000	0.000	0.021	0.090
Hexanes	0.000	0.000	0.018	0.080
Heptanes	0.000	0.000	0.009	0.037
Octanes	0.000	0.000	0.004	0.019
Benzene	0.000	0.000	0.027	0.118
Toluene	0.000	0.000	0.080	0.352
Xylenes	0.000	0.000	0.056	0.248
n-C6	0.000	0.000	0.026	0.112
Total:	99.904	437.572	437.408	1915.812

Pressure	92.000	[psia]
Temperature	141.339	[F]

Stream 4 Rich Amine Feed to Regenerator

Component	Mol Fraction	[lb/h]	[ton/yr]
H2S	0.000000	0.000	0.000
CO2	0.043910	48789.820	213695.800
MDEA	0.116270	349848.200	1532309.000
H2O	0.839730	382019.800	1673218.000
N2	0.000000	0.014	0.063
C1	0.000090	36.414	159.491
C2	0.000000	0.730	3.198
C3	0.000000	0.177	0.774
i-C4	0.000000	0.000	0.001
n-C4	0.000000	0.000	0.001
i-C5	0.000000	0.001	0.002
n-C5	0.000000	0.000	0.001
Hexanes	0.000000	0.000	0.002
Heptanes	0.000000	0.000	0.000
Octanes	0.000000	0.000	0.000
Benzene	0.000000	0.113	0.496
Toluene	0.000000	0.145	0.634
Xylenes	0.000000	0.082	0.357
n-C6	0.000000	0.002	0.010
Total:	1.000000	780695.500	3419388.000

Pressure	92.000	[psia]
Temperature	141.339	[F]

Stream 5 Acid Gas Flow from Regenerator

	----- Controlled -----		----- Uncontrolled -----	
Component	[lb/h]	[ton/yr]	[lb/h]	[ton/yr]
H2S	0.000	0.000	0.000	0.000
CO2	44913.800	196719.100	44913.800	196719.100
MDEA	0.000	0.000	0.000	0.000
H2O	0.000	0.000	0.000	0.000
N2	0.000	0.000	0.014	0.063
C1	0.000	0.000	36.414	159.491
C2	0.000	0.000	0.730	3.198
C3	0.000	0.000	0.177	0.774
i-C4	0.000	0.000	0.000	0.001
n-C4	0.000	0.000	0.000	0.001
i-C5	0.000	0.000	0.001	0.002
n-C5	0.000	0.000	0.000	0.001

Hexanes	0.000	0.000	0.000	0.002
Heptanes	0.000	0.000	0.000	0.000
Octanes	0.000	0.000	0.000	0.000
Benzene	0.000	0.000	0.113	0.496
Toluene	0.000	0.000	0.145	0.634
Xylenes	0.000	0.000	0.082	0.357
n-C6	0.000	0.000	0.002	0.010
Total:	44913.800	196719.100	44951.480	196884.200

Pressure	N/A	[psia]
Temperature	N/A	[F]

Stream 6 Lean Amine from Regenerator

Component	Mol Fraction	[lb/h]	[ton/yr]
H2S	0.000000	0.000	0.000
CO2	0.003630	3876.020	16976.680
MDEA	0.121090	349848.700	1532311.000
H2O	0.875280	382358.800	1674703.000
N2	0.000000	0.000	0.000
C1	0.000000	0.000	0.000
C2	0.000000	0.000	0.000
C3	0.000000	0.000	0.000
i-C4	0.000000	0.000	0.000
n-C4	0.000000	0.000	0.000
i-C5	0.000000	0.000	0.000
n-C5	0.000000	0.000	0.000
Hexanes	0.000000	0.000	0.000
Heptanes	0.000000	0.000	0.000
Octanes	0.000000	0.000	0.000
Benzene	0.000000	0.000	0.000
Toluene	0.000000	0.000	0.000
Xylenes	0.000000	0.000	0.000
n-C6	0.000000	0.000	0.000
Total:	1.000000	736083.500	3223991.000

Pressure	952.000	[psia]
Temperature	108.000	[F]

Stream 7 Sweet Gas Flow from Absorber

Component	Mol Fraction	[lb/h]	[ton/yr]
H2S	0.000000	0.000	0.000
CO2	0.036170	19339.340	84704.850
MDEA	0.000000	0.176	0.769
H2O	0.001490	326.779	1431.267
N2	0.000830	283.564	1241.989
C1	0.946750	184521.900	808192.100
C2	0.010710	3910.656	17128.380
C3	0.002490	1335.982	5851.502
i-C4	0.000430	303.226	1328.107
n-C4	0.000510	356.826	1562.874
i-C5	0.000370	320.306	1402.917
n-C5	0.000140	118.808	520.369
Hexanes	0.000040	44.263	193.871
Heptanes	0.000030	35.638	156.092
Octanes	0.000020	22.572	98.862
Benzene	0.000000	1.918	8.402
Toluene	0.000010	7.059	30.918
Xylenes	0.000000	5.457	23.902
n-C6	0.000020	18.139	79.448
Total:	1.000000	210952.600	923956.600

Pressure	952.000	[psia]
Temperature	109.347	[F]

Project Name:	Milagro Mar 2025 X-Haul - Train 2 Milagro Semi-Annual AMINECalc March 2025 X-Haul - Train 2 03/13/2025 Gas Analysis and 03/13/2025 Operating Parameters	
Model:	Gas Model	
Amine:	MDEA	
Lean Amine Pressure:	932.000	[psia]
Lean Amine Temperature:	109.000	[F]
Lean Amine Flowrate:	1285.000	[gal/min]
Lean Amine Weight:	50.000	[%]
H2S Loading:	0.000	[mol/mol]
CO2 Loading:	0.020	[mol/mol]
Emission Control Efficiency	100.000	
Operating Hours/Day:	24	[hours/day]
Operating Days/Year:	365	[days/year]
Gas Feed Pressure:	889.000	[psia]
Gas Feed Temperature:	58.200	[F]
Gas Feed Flowrate:	100.000	[MMSCFD]
Number of Trays in Column:	22	
Flash Tank Pressure:	79.000	[psia]
H2S	0.00000	[%]
CO2	9.25160	[%]
MDEA	0.00000	[%]
H2O	0.00000	[%]
N2	0.05390	[%]
O2	0.00000	[%]
C1	89.70640	[%]
C2	0.78120	[%]
C3	0.16540	[%]
i-C4	0.01690	[%]
n-C4	0.01630	[%]
i-C5	0.00370	[%]
n-C5	0.00190	[%]
Hexanes	0.00060	[%]
Heptanes	0.00060	[%]
Octanes	0.00040	[%]
Nonanes	0.00000	[%]
C10+	0.00000	[%]
MeSH	0.00000	[%]
EtSH	0.00000	[%]
Benzene	0.00010	[%]
Toluene	0.00020	[%]
Ethylbenzene	0.00000	[%]
Xylenes	0.00010	[%]

n-C6	0.00040	[%]
224Trimeth	0.00000	[%]

Stream 1 Gas Feed to Absorber

Component	Mol Fraction	[lb/h]	[ton/yr]
H2S	0.000000	0.000	0.000
CO2	0.092520	44705.190	195805.400
MDEA	0.000000	0.000	0.001
H2O	0.000000	0.000	0.000
N2	0.000540	165.785	726.124
C1	0.897070	158015.100	692094.600
C2	0.007810	2579.202	11296.710
C3	0.001650	800.819	3507.526
i-C4	0.000170	107.853	472.388
n-C4	0.000160	104.024	455.616
i-C5	0.000040	29.311	128.381
n-C5	0.000020	15.052	65.925
Hexanes	0.000010	5.677	24.866
Heptanes	0.000010	6.601	28.913
Octanes	0.000000	5.017	21.974
Benzene	0.000000	0.858	3.757
Toluene	0.000000	2.023	8.862
Xylenes	0.000000	1.166	5.106
n-C6	0.000000	3.785	16.577
Total:	1.000000	206547.500	904662.700

Pressure	889.000	[psia]
Temperature	58.200	[F]

Stream 2 Rich Amine From Absorber

Component	Mol Fraction	[lb/h]	[ton/yr]
H2S	0.000000	0.000	0.000
CO2	0.034050	33386.180	146229.000
MDEA	0.126830	336703.900	1474738.000
H2O	0.838140	336421.600	1473502.000
N2	0.000000	0.174	0.761
C1	0.000960	344.202	1507.579
C2	0.000010	5.552	24.320
C3	0.000000	1.451	6.357
i-C4	0.000000	0.013	0.056

n-C4	0.000000	0.012	0.055
i-C5	0.000000	0.005	0.022
n-C5	0.000000	0.003	0.011
Hexanes	0.000000	0.003	0.013
Heptanes	0.000000	0.002	0.007
Octanes	0.000000	0.001	0.006
Benzene	0.000000	0.075	0.327
Toluene	0.000000	0.061	0.267
Xylenes	0.000000	0.028	0.122
n-C6	0.000000	0.006	0.025
Total:	1.000000	706863.300	3096009.000

Pressure	889.000	[psia]
Temperature	129.461	[F]

Stream 3 Flash Gas Vent Flow from Flash Tank

	----- Controlled -----		----- Uncontrolled -----	
Component	[lb/h]	[ton/yr]	[lb/h]	[ton/yr]
H2S	0.000	0.000	0.000	0.000
CO2	31.739	139.012	31.739	139.012
MDEA	0.000	0.000	0.009	0.041
H2O	0.000	0.000	9.058	39.673
N2	0.000	0.000	0.166	0.725
C1	0.000	0.000	312.347	1368.057
C2	0.000	0.000	5.043	22.088
C3	0.000	0.000	1.338	5.859
i-C4	0.000	0.000	0.013	0.056
n-C4	0.000	0.000	0.012	0.054
i-C5	0.000	0.000	0.005	0.022
n-C5	0.000	0.000	0.003	0.011
Hexanes	0.000	0.000	0.003	0.013
Heptanes	0.000	0.000	0.002	0.007
Octanes	0.000	0.000	0.001	0.006
Benzene	0.000	0.000	0.014	0.063
Toluene	0.000	0.000	0.026	0.111
Xylenes	0.000	0.000	0.013	0.058
n-C6	0.000	0.000	0.005	0.023
Total:	31.739	139.012	359.796	1575.880

Pressure	79.000	[psia]
Temperature	129.461	[F]

Stream 4 Rich Amine Feed to Regenerator

Component	Mol Fraction	[lb/h]	[ton/yr]
H2S	0.000000	0.000	0.000
CO2	0.034050	33354.430	146089.900
MDEA	0.126950	336703.900	1474738.000
H2O	0.838910	336412.500	1473462.000
N2	0.000000	0.008	0.035
C1	0.000090	31.861	139.549
C2	0.000000	0.510	2.232
C3	0.000000	0.114	0.498
i-C4	0.000000	0.000	0.000
n-C4	0.000000	0.000	0.000
i-C5	0.000000	0.000	0.000
n-C5	0.000000	0.000	0.000
Hexanes	0.000000	0.000	0.000
Heptanes	0.000000	0.000	0.000
Octanes	0.000000	0.000	0.000
Benzene	0.000000	0.060	0.265
Toluene	0.000000	0.035	0.155
Xylenes	0.000000	0.015	0.065
n-C6	0.000000	0.000	0.001
Total:	1.000000	706503.500	3094433.000

Pressure	79.000	[psia]
Temperature	129.461	[F]

Stream 5 Acid Gas Flow from Regenerator

	----- Controlled -----		----- Uncontrolled -----	
Component	[lb/h]	[ton/yr]	[lb/h]	[ton/yr]
H2S	0.000	0.000	0.000	0.000
CO2	30867.500	135197.400	30867.500	135197.400
MDEA	0.000	0.000	0.000	0.000
H2O	0.000	0.000	0.000	0.000
N2	0.000	0.000	0.008	0.035
C1	0.000	0.000	31.861	139.549
C2	0.000	0.000	0.510	2.232
C3	0.000	0.000	0.114	0.498
i-C4	0.000	0.000	0.000	0.000
n-C4	0.000	0.000	0.000	0.000
i-C5	0.000	0.000	0.000	0.000

n-C5	0.000	0.000	0.000	0.000
Hexanes	0.000	0.000	0.000	0.000
Heptanes	0.000	0.000	0.000	0.000
Octanes	0.000	0.000	0.000	0.000
Benzene	0.000	0.000	0.060	0.265
Toluene	0.000	0.000	0.035	0.155
Xylenes	0.000	0.000	0.015	0.065
n-C6	0.000	0.000	0.000	0.001
Total:	30867.500	135197.400	30900.110	135340.200

Pressure	N/A	[psia]
Temperature	N/A	[F]

Stream 6 Lean Amine from Regenerator

Component	Mol Fraction	[lb/h]	[ton/yr]
H2S	0.000000	0.000	0.000
CO2	0.002620	2486.927	10892.550
MDEA	0.130990	336704.200	1474739.000
H2O	0.866390	336704.200	1474739.000
N2	0.000000	0.000	0.000
C1	0.000000	0.000	0.000
C2	0.000000	0.000	0.000
C3	0.000000	0.000	0.000
i-C4	0.000000	0.000	0.000
n-C4	0.000000	0.000	0.000
i-C5	0.000000	0.000	0.000
n-C5	0.000000	0.000	0.000
Hexanes	0.000000	0.000	0.000
Heptanes	0.000000	0.000	0.000
Octanes	0.000000	0.000	0.000
Benzene	0.000000	0.000	0.000
Toluene	0.000000	0.000	0.000
Xylenes	0.000000	0.000	0.000
n-C6	0.000000	0.000	0.000
Total:	1.000000	675895.400	2960372.000

Pressure	932.000	[psia]
Temperature	109.000	[F]

Stream 7 Sweet Gas Flow from Absorber

Component	Mol Fraction	[lb/h]	[ton/yr]
H2S	0.000000	0.000	0.000
CO2	0.030540	13807.290	60474.920
MDEA	0.000000	0.169	0.741
H2O	0.001530	282.495	1237.308
N2	0.000580	165.611	725.363
C1	0.956820	157670.600	690585.500
C2	0.008330	2573.644	11272.370
C3	0.001760	799.366	3501.162
i-C4	0.000180	107.840	472.330
n-C4	0.000170	104.011	455.561
i-C5	0.000040	29.306	128.359
n-C5	0.000020	15.049	65.914
Hexanes	0.000010	5.674	24.852
Heptanes	0.000010	6.600	28.907
Octanes	0.000000	5.016	21.969
Benzene	0.000000	0.783	3.429
Toluene	0.000000	1.962	8.596
Xylenes	0.000000	1.138	4.982
n-C6	0.000000	3.779	16.552
Total:	1.000000	175580.300	769028.900

Pressure	932.000	[psia]
Temperature	110.001	[F]

Project Name:	Milagro Mar 2025 X-Haul - Train 3 Milagro Semi-Annual AMINECalc March 2025 X-Haul - Train 3 03/13/2025 Gas Analysis and 03/13/2025 Operating Parameters	
Model:	Gas Model	
Amine:	MDEA	
Lean Amine Pressure:	932.000	[psia]
Lean Amine Temperature:	109.000	[F]
Lean Amine Flowrate:	1263.000	[gal/min]
Lean Amine Weight:	49.500	[%]
H2S Loading:	0.000	[mol/mol]
CO2 Loading:	0.040	[mol/mol]
Emission Control Efficiency	100.000	
Operating Hours/Day:	24	[hours/day]
Operating Days/Year:	365	[days/year]
Gas Feed Pressure:	889.000	[psia]
Gas Feed Temperature:	60.600	[F]
Gas Feed Flowrate:	100.500	[MMSCFD]
Number of Trays in Column:	22	
Flash Tank Pressure:	85.000	[psia]
H2S	0.00000	[%]
CO2	9.25160	[%]
MDEA	0.00000	[%]
H2O	0.00000	[%]
N2	0.05390	[%]
O2	0.00000	[%]
C1	89.70640	[%]
C2	0.78120	[%]
C3	0.16540	[%]
i-C4	0.01690	[%]
n-C4	0.01630	[%]
i-C5	0.00370	[%]
n-C5	0.00190	[%]
Hexanes	0.00060	[%]
Heptanes	0.00060	[%]
Octanes	0.00040	[%]
Nonanes	0.00000	[%]
C10+	0.00000	[%]
MeSH	0.00000	[%]
EtSH	0.00000	[%]
Benzene	0.00010	[%]
Toluene	0.00020	[%]
Ethylbenzene	0.00000	[%]
Xylenes	0.00010	[%]

n-C6	0.00040	[%]
224Trimeth	0.00000	[%]

Stream 1 Gas Feed to Absorber

Component	Mol Fraction	[lb/h]	[ton/yr]
H2S	0.000000	0.000	0.000
CO2	0.092520	44928.720	196784.400
MDEA	0.000000	0.000	0.001
H2O	0.000000	0.000	0.000
N2	0.000540	166.614	729.755
C1	0.897070	158805.200	695555.100
C2	0.007810	2592.098	11353.200
C3	0.001650	804.823	3525.065
i-C4	0.000170	108.392	474.750
n-C4	0.000160	104.544	457.895
i-C5	0.000040	29.458	129.023
n-C5	0.000020	15.127	66.256
Hexanes	0.000010	5.706	24.990
Heptanes	0.000010	6.634	29.058
Octanes	0.000000	5.042	22.083
Benzene	0.000000	0.862	3.775
Toluene	0.000000	2.033	8.907
Xylenes	0.000000	1.172	5.131
n-C6	0.000000	3.804	16.660
Total:	1.000000	207580.200	909186.000

Pressure	889.000	[psia]
Temperature	60.600	[F]

Stream 2 Rich Amine From Absorber

Component	Mol Fraction	[lb/h]	[ton/yr]
H2S	0.000000	0.000	0.000
CO2	0.036750	35745.440	156562.400
MDEA	0.124300	327349.900	1433768.000
H2O	0.837980	333678.400	1461486.000
N2	0.000000	0.171	0.751
C1	0.000960	338.990	1484.750
C2	0.000010	5.460	23.914
C3	0.000000	1.427	6.249
i-C4	0.000000	0.013	0.056

n-C4	0.000000	0.012	0.054
i-C5	0.000000	0.005	0.022
n-C5	0.000000	0.003	0.011
Hexanes	0.000000	0.003	0.013
Heptanes	0.000000	0.002	0.007
Octanes	0.000000	0.001	0.006
Benzene	0.000000	0.073	0.320
Toluene	0.000000	0.061	0.266
Xylenes	0.000000	0.028	0.122
n-C6	0.000000	0.006	0.024
Total:	1.000000	697119.900	3053333.000

Pressure	889.000	[psia]
Temperature	130.083	[F]

Stream 3 Flash Gas Vent Flow from Flash Tank

	----- Controlled -----		----- Uncontrolled -----	
Component	[lb/h]	[ton/yr]	[lb/h]	[ton/yr]
H2S	0.000	0.000	0.000	0.000
CO2	36.811	161.230	36.811	161.230
MDEA	0.000	0.000	0.009	0.037
H2O	0.000	0.000	8.434	36.938
N2	0.000	0.000	0.163	0.713
C1	0.000	0.000	305.368	1337.490
C2	0.000	0.000	4.924	21.565
C3	0.000	0.000	1.307	5.723
i-C4	0.000	0.000	0.013	0.056
n-C4	0.000	0.000	0.012	0.054
i-C5	0.000	0.000	0.005	0.022
n-C5	0.000	0.000	0.003	0.011
Hexanes	0.000	0.000	0.003	0.012
Heptanes	0.000	0.000	0.002	0.007
Octanes	0.000	0.000	0.001	0.006
Benzene	0.000	0.000	0.013	0.058
Toluene	0.000	0.000	0.024	0.106
Xylenes	0.000	0.000	0.013	0.055
n-C6	0.000	0.000	0.005	0.023
Total:	36.811	161.230	357.108	1564.107

Pressure	85.000	[psia]
Temperature	130.083	[F]

Stream 4 Rich Amine Feed to Regenerator

Component	Mol Fraction	[lb/h]	[ton/yr]
H2S	0.000000	0.000	0.000
CO2	0.036750	35708.610	156401.100
MDEA	0.124410	327349.900	1433768.000
H2O	0.838740	333669.900	1461449.000
N2	0.000000	0.009	0.037
C1	0.000090	33.629	147.293
C2	0.000000	0.536	2.350
C3	0.000000	0.120	0.525
i-C4	0.000000	0.000	0.000
n-C4	0.000000	0.000	0.000
i-C5	0.000000	0.000	0.000
n-C5	0.000000	0.000	0.000
Hexanes	0.000000	0.000	0.000
Heptanes	0.000000	0.000	0.000
Octanes	0.000000	0.000	0.000
Benzene	0.000000	0.060	0.262
Toluene	0.000000	0.036	0.160
Xylenes	0.000000	0.015	0.067
n-C6	0.000000	0.000	0.002
Total:	1.000000	696762.800	3051769.000

Pressure	85.000	[psia]
Temperature	130.083	[F]

Stream 5 Acid Gas Flow from Regenerator

	----- Controlled -----		----- Uncontrolled -----	
Component	[lb/h]	[ton/yr]	[lb/h]	[ton/yr]
H2S	0.000	0.000	0.000	0.000
CO2	30872.940	135221.200	30872.940	135221.200
MDEA	0.000	0.000	0.000	0.000
H2O	0.000	0.000	0.000	0.000
N2	0.000	0.000	0.009	0.037
C1	0.000	0.000	33.629	147.293
C2	0.000	0.000	0.536	2.350
C3	0.000	0.000	0.120	0.525
i-C4	0.000	0.000	0.000	0.000
n-C4	0.000	0.000	0.000	0.000
i-C5	0.000	0.000	0.000	0.000

n-C5	0.000	0.000	0.000	0.000
Hexanes	0.000	0.000	0.000	0.000
Heptanes	0.000	0.000	0.000	0.000
Octanes	0.000	0.000	0.000	0.000
Benzene	0.000	0.000	0.060	0.262
Toluene	0.000	0.000	0.036	0.160
Xylenes	0.000	0.000	0.015	0.067
n-C6	0.000	0.000	0.000	0.002
Total:	30872.940	135221.200	30907.340	135371.900

Pressure	N/A	[psia]
Temperature	N/A	[F]

Stream 6 Lean Amine from Regenerator

Component	Mol Fraction	[lb/h]	[ton/yr]
H2S	0.000000	0.000	0.000
CO2	0.005140	4835.673	21179.890
MDEA	0.128410	327350.100	1433769.000
H2O	0.866450	333963.300	1462734.000
N2	0.000000	0.000	0.000
C1	0.000000	0.000	0.000
C2	0.000000	0.000	0.000
C3	0.000000	0.000	0.000
i-C4	0.000000	0.000	0.000
n-C4	0.000000	0.000	0.000
i-C5	0.000000	0.000	0.000
n-C5	0.000000	0.000	0.000
Hexanes	0.000000	0.000	0.000
Heptanes	0.000000	0.000	0.000
Octanes	0.000000	0.000	0.000
Benzene	0.000000	0.000	0.000
Toluene	0.000000	0.000	0.000
Xylenes	0.000000	0.000	0.000
n-C6	0.000000	0.000	0.000
Total:	1.000000	666149.100	2917683.000

Pressure	932.000	[psia]
Temperature	109.000	[F]

Stream 7	Sweet Gas Flow from Absorber		
Component	Mol Fraction	[lb/h]	[ton/yr]
H2S	0.000000	0.000	0.000
CO2	0.030850	14019.750	61405.480
MDEA	0.000000	0.167	0.732
H2O	0.001530	284.816	1247.472
N2	0.000580	166.442	729.004
C1	0.956510	158466.000	694069.400
C2	0.008330	2586.635	11329.270
C3	0.001760	803.395	3518.812
i-C4	0.000180	108.379	474.692
n-C4	0.000170	104.531	457.840
i-C5	0.000040	29.453	129.001
n-C5	0.000020	15.124	66.243
Hexanes	0.000010	5.703	24.977
Heptanes	0.000010	6.633	29.051
Octanes	0.000000	5.041	22.078
Benzene	0.000000	0.789	3.456
Toluene	0.000000	1.973	8.641
Xylenes	0.000000	1.144	5.009
n-C6	0.000000	3.798	16.636
Total:	1.000000	176609.800	773537.800

Pressure	932.000	[psia]
Temperature	110.018	[F]

Project Name:	Milagro Mar 2025 X-Haul - Train 4 Milagro Semi-Annual AMINECalc March 2025 X-Haul - Train 4 03/13/2025 Gas Analysis and 03/13/2025 Operating Parameters	
Model:	Gas Model	
Amine:	MDEA	
Lean Amine Pressure:	937.000	[psia]
Lean Amine Temperature:	102.000	[F]
Lean Amine Flowrate:	616.000	[gal/min]
Lean Amine Weight:	49.000	[%]
H2S Loading:	0.000	[mol/mol]
CO2 Loading:	0.020	[mol/mol]
Emission Control Efficiency	100.000	
Operating Hours/Day:	24	[hours/day]
Operating Days/Year:	365	[days/year]
Gas Feed Pressure:	888.000	[psia]
Gas Feed Temperature:	60.300	[F]
Gas Feed Flowrate:	51.400	[MMSCFD]
Number of Trays in Column:	22	
Flash Tank Pressure:	84.000	[psia]
H2S	0.00000	[%]
CO2	9.25160	[%]
MDEA	0.00000	[%]
H2O	0.00000	[%]
N2	0.05390	[%]
O2	0.00000	[%]
C1	89.70640	[%]
C2	0.78120	[%]
C3	0.16540	[%]
i-C4	0.01690	[%]
n-C4	0.01630	[%]
i-C5	0.00370	[%]
n-C5	0.00190	[%]
Hexanes	0.00060	[%]
Heptanes	0.00060	[%]
Octanes	0.00040	[%]
Nonanes	0.00000	[%]
C10+	0.00000	[%]
MeSH	0.00000	[%]
EtSH	0.00000	[%]
Benzene	0.00010	[%]
Toluene	0.00020	[%]
Ethylbenzene	0.00000	[%]
Xylenes	0.00010	[%]

n-C6	0.00040	[%]
224Trimeth	0.00000	[%]

Stream 1 Gas Feed to Absorber

Component	Mol Fraction	[lb/h]	[ton/yr]
H2S	0.000000	0.000	0.000
CO2	0.092520	22978.470	100644.000
MDEA	0.000000	0.000	0.000
H2O	0.000000	0.000	0.000
N2	0.000540	85.213	373.228
C1	0.897070	81219.790	355736.600
C2	0.007810	1325.710	5806.511
C3	0.001650	411.621	1802.869
i-C4	0.000170	55.436	242.808
n-C4	0.000160	53.468	234.187
i-C5	0.000040	15.066	65.988
n-C5	0.000020	7.737	33.886
Hexanes	0.000010	2.918	12.781
Heptanes	0.000010	3.393	14.861
Octanes	0.000000	2.579	11.294
Benzene	0.000000	0.441	1.931
Toluene	0.000000	1.040	4.555
Xylenes	0.000000	0.599	2.625
n-C6	0.000000	1.945	8.521
Total:	1.000000	106165.400	464996.700

Pressure	888.000	[psia]
Temperature	60.300	[F]

Stream 2 Rich Amine From Absorber

Component	Mol Fraction	[lb/h]	[ton/yr]
H2S	0.000000	0.000	0.000
CO2	0.032680	15553.950	68125.150
MDEA	0.122650	158048.100	692238.800
H2O	0.843660	164378.600	719966.200
N2	0.000000	0.086	0.377
C1	0.001000	172.753	756.647
C2	0.000010	2.825	12.374
C3	0.000000	0.740	3.243
i-C4	0.000000	0.006	0.026

n-C4	0.000000	0.006	0.025
i-C5	0.000000	0.002	0.010
n-C5	0.000000	0.001	0.006
Hexanes	0.000000	0.002	0.007
Heptanes	0.000000	0.001	0.003
Octanes	0.000000	0.001	0.003
Benzene	0.000000	0.040	0.175
Toluene	0.000000	0.028	0.123
Xylenes	0.000000	0.013	0.057
n-C6	0.000000	0.003	0.011
Total:	1.000000	338157.200	1481103.000

Pressure	888.000	[psia]
Temperature	122.737	[F]

Stream 3 Flash Gas Vent Flow from Flash Tank

	----- Controlled -----		----- Uncontrolled -----	
Component	[lb/h]	[ton/yr]	[lb/h]	[ton/yr]
H2S	0.000	0.000	0.000	0.000
CO2	11.415	49.997	11.415	49.997
MDEA	0.000	0.000	0.003	0.013
H2O	0.000	0.000	3.499	15.325
N2	0.000	0.000	0.082	0.358
C1	0.000	0.000	155.433	680.786
C2	0.000	0.000	2.541	11.128
C3	0.000	0.000	0.676	2.963
i-C4	0.000	0.000	0.006	0.026
n-C4	0.000	0.000	0.006	0.025
i-C5	0.000	0.000	0.002	0.010
n-C5	0.000	0.000	0.001	0.006
Hexanes	0.000	0.000	0.002	0.007
Heptanes	0.000	0.000	0.001	0.003
Octanes	0.000	0.000	0.001	0.003
Benzene	0.000	0.000	0.007	0.030
Toluene	0.000	0.000	0.012	0.052
Xylenes	0.000	0.000	0.006	0.026
n-C6	0.000	0.000	0.002	0.011
Total:	11.415	49.997	173.694	760.768

Pressure	84.000	[psia]
Temperature	122.737	[F]

Stream 4 Rich Amine Feed to Regenerator

Component	Mol Fraction	[lb/h]	[ton/yr]
H2S	0.000000	0.000	0.000
CO2	0.032690	15542.530	68075.130
MDEA	0.122760	158048.100	692238.800
H2O	0.844450	164375.100	719950.800
N2	0.000000	0.004	0.019
C1	0.000100	17.322	75.870
C2	0.000000	0.285	1.247
C3	0.000000	0.064	0.280
i-C4	0.000000	0.000	0.000
n-C4	0.000000	0.000	0.000
i-C5	0.000000	0.000	0.000
n-C5	0.000000	0.000	0.000
Hexanes	0.000000	0.000	0.000
Heptanes	0.000000	0.000	0.000
Octanes	0.000000	0.000	0.000
Benzene	0.000000	0.033	0.146
Toluene	0.000000	0.016	0.072
Xylenes	0.000000	0.007	0.030
n-C6	0.000000	0.000	0.001
Total:	1.000000	337983.500	1480342.000

Pressure	84.000	[psia]
Temperature	122.737	[F]

Stream 5 Acid Gas Flow from Regenerator

	----- Controlled -----		----- Uncontrolled -----	
Component	[lb/h]	[ton/yr]	[lb/h]	[ton/yr]
H2S	0.000	0.000	0.000	0.000
CO2	14375.170	62962.190	14375.170	62962.190
MDEA	0.000	0.000	0.000	0.000
H2O	0.000	0.000	0.000	0.000
N2	0.000	0.000	0.004	0.019
C1	0.000	0.000	17.322	75.870
C2	0.000	0.000	0.285	1.247
C3	0.000	0.000	0.064	0.280
i-C4	0.000	0.000	0.000	0.000
n-C4	0.000	0.000	0.000	0.000
i-C5	0.000	0.000	0.000	0.000

n-C5	0.000	0.000	0.000	0.000
Hexanes	0.000	0.000	0.000	0.000
Heptanes	0.000	0.000	0.000	0.000
Octanes	0.000	0.000	0.000	0.000
Benzene	0.000	0.000	0.033	0.146
Toluene	0.000	0.000	0.016	0.072
Xylenes	0.000	0.000	0.007	0.030
n-C6	0.000	0.000	0.000	0.001
Total:	14375.170	62962.190	14392.910	63039.860

Pressure	N/A	[psia]
Temperature	N/A	[F]

Stream 6 Lean Amine from Regenerator

Component	Mol Fraction	[lb/h]	[ton/yr]
H2S	0.000000	0.000	0.000
CO2	0.002530	1167.357	5112.939
MDEA	0.126520	158048.200	692239.200
H2O	0.870950	164499.100	720493.900
N2	0.000000	0.000	0.000
C1	0.000000	0.000	0.000
C2	0.000000	0.000	0.000
C3	0.000000	0.000	0.000
i-C4	0.000000	0.000	0.000
n-C4	0.000000	0.000	0.000
i-C5	0.000000	0.000	0.000
n-C5	0.000000	0.000	0.000
Hexanes	0.000000	0.000	0.000
Heptanes	0.000000	0.000	0.000
Octanes	0.000000	0.000	0.000
Benzene	0.000000	0.000	0.000
Toluene	0.000000	0.000	0.000
Xylenes	0.000000	0.000	0.000
n-C6	0.000000	0.000	0.000
Total:	1.000000	323714.600	1417846.000

Pressure	937.000	[psia]
Temperature	102.000	[F]

Stream 7	Sweet Gas Flow from Absorber		
Component	Mol Fraction	[lb/h]	[ton/yr]
H2S	0.000000	0.000	0.000
CO2	0.036750	8592.173	37633.080
MDEA	0.000000	0.062	0.270
H2O	0.001260	120.446	527.546
N2	0.000570	85.127	372.851
C1	0.950950	81046.960	354979.700
C2	0.008280	1322.883	5794.131
C3	0.001750	410.880	1799.624
i-C4	0.000180	55.430	242.781
n-C4	0.000170	53.462	234.161
i-C5	0.000040	15.064	65.978
n-C5	0.000020	7.735	33.880
Hexanes	0.000010	2.917	12.774
Heptanes	0.000010	3.392	14.858
Octanes	0.000000	2.578	11.292
Benzene	0.000000	0.401	1.756
Toluene	0.000000	1.012	4.431
Xylenes	0.000000	0.586	2.567
n-C6	0.000000	1.943	8.510
Total:	1.000000	91723.050	401740.200

Pressure	937.000	[psia]
Temperature	103.062	[F]

Project Name:	Milagro Mar 2025 X-Haul - Train 5 Milagro Semi-Annual AMINECalc March 2025 X-Haul - Train 5 03/13/2025 Gas Analysis and 03/13/2025 Operating Parameters	
Model:	Gas Model	
Amine:	MDEA	
Lean Amine Pressure:	972.000	[psia]
Lean Amine Temperature:	100.400	[F]
Lean Amine Flowrate:	983.000	[gal/min]
Lean Amine Weight:	47.330	[%]
H2S Loading:	0.000	[mol/mol]
CO2 Loading:	0.020	[mol/mol]
Emission Control Efficiency	100.000	
Operating Hours/Day:	24	[hours/day]
Operating Days/Year:	365	[days/year]
Gas Feed Pressure:	888.000	[psia]
Gas Feed Temperature:	69.800	[F]
Gas Feed Flowrate:	82.000	[MMSCFD]
Number of Trays in Column:	22	
Flash Tank Pressure:	93.000	[psia]
H2S	0.00000	[%]
CO2	9.25160	[%]
MDEA	0.00000	[%]
H2O	0.00000	[%]
N2	0.05390	[%]
O2	0.00000	[%]
C1	89.70640	[%]
C2	0.78120	[%]
C3	0.16540	[%]
i-C4	0.01690	[%]
n-C4	0.01630	[%]
i-C5	0.00370	[%]
n-C5	0.00190	[%]
Hexanes	0.00060	[%]
Heptanes	0.00060	[%]
Octanes	0.00040	[%]
Nonanes	0.00000	[%]
C10+	0.00000	[%]
MeSH	0.00000	[%]
EtSH	0.00000	[%]
Benzene	0.00010	[%]
Toluene	0.00020	[%]
Ethylbenzene	0.00000	[%]
Xylenes	0.00010	[%]

n-C6	0.00040	[%]
224Trimeth	0.00000	[%]

Stream 1 Gas Feed to Absorber

Component	Mol Fraction	[lb/h]	[ton/yr]
H2S	0.000000	0.000	0.000
CO2	0.092520	36658.260	160560.400
MDEA	0.000000	0.000	0.000
H2O	0.000000	0.000	0.000
N2	0.000540	135.943	595.422
C1	0.897070	129572.400	567517.600
C2	0.007810	2114.946	9263.306
C3	0.001650	656.671	2876.172
i-C4	0.000170	88.439	387.358
n-C4	0.000160	85.300	373.606
i-C5	0.000040	24.035	105.272
n-C5	0.000020	12.342	54.059
Hexanes	0.000010	4.655	20.390
Heptanes	0.000010	5.413	23.709
Octanes	0.000000	4.114	18.018
Benzene	0.000000	0.703	3.080
Toluene	0.000000	1.659	7.267
Xylenes	0.000000	0.956	4.187
n-C6	0.000000	3.104	13.593
Total:	1.000000	169369.000	741823.400

Pressure	888.000	[psia]
Temperature	69.800	[F]

Stream 2 Rich Amine From Absorber

Component	Mol Fraction	[lb/h]	[ton/yr]
H2S	0.000000	0.000	0.000
CO2	0.032490	25235.760	110530.700
MDEA	0.115680	243272.700	1065516.000
H2O	0.850830	270539.500	1184943.000
N2	0.000000	0.140	0.613
C1	0.000990	280.627	1229.126
C2	0.000010	4.579	20.057
C3	0.000000	1.200	5.255
i-C4	0.000000	0.010	0.043

n-C4	0.000000	0.010	0.042
i-C5	0.000000	0.004	0.017
n-C5	0.000000	0.002	0.009
Hexanes	0.000000	0.003	0.011
Heptanes	0.000000	0.001	0.006
Octanes	0.000000	0.001	0.004
Benzene	0.000000	0.064	0.282
Toluene	0.000000	0.046	0.203
Xylenes	0.000000	0.021	0.094
n-C6	0.000000	0.004	0.019
Total:	1.000000	539334.600	2362246.000

Pressure	888.000	[psia]
Temperature	123.679	[F]

Stream 3 Flash Gas Vent Flow from Flash Tank

	----- Controlled -----		----- Uncontrolled -----	
Component	[lb/h]	[ton/yr]	[lb/h]	[ton/yr]
H2S	0.000	0.000	0.000	0.000
CO2	19.590	85.804	19.590	85.804
MDEA	0.000	0.000	0.004	0.020
H2O	0.000	0.000	5.252	23.002
N2	0.000	0.000	0.132	0.579
C1	0.000	0.000	249.503	1092.805
C2	0.000	0.000	4.070	17.826
C3	0.000	0.000	1.085	4.753
i-C4	0.000	0.000	0.010	0.043
n-C4	0.000	0.000	0.009	0.042
i-C5	0.000	0.000	0.004	0.017
n-C5	0.000	0.000	0.002	0.009
Hexanes	0.000	0.000	0.002	0.011
Heptanes	0.000	0.000	0.001	0.006
Octanes	0.000	0.000	0.001	0.004
Benzene	0.000	0.000	0.010	0.044
Toluene	0.000	0.000	0.018	0.078
Xylenes	0.000	0.000	0.009	0.042
n-C6	0.000	0.000	0.004	0.018
Total:	19.590	85.804	279.708	1225.100

Pressure	93.000	[psia]
Temperature	123.679	[F]

Stream 4 Rich Amine Feed to Regenerator

Component	Mol Fraction	[lb/h]	[ton/yr]
H2S	0.000000	0.000	0.000
CO2	0.032500	25216.160	110444.900
MDEA	0.115780	243272.700	1065516.000
H2O	0.851610	270534.200	1184920.000
N2	0.000000	0.008	0.034
C1	0.000110	31.127	136.336
C2	0.000000	0.509	2.231
C3	0.000000	0.115	0.503
i-C4	0.000000	0.000	0.000
n-C4	0.000000	0.000	0.000
i-C5	0.000000	0.000	0.000
n-C5	0.000000	0.000	0.000
Hexanes	0.000000	0.000	0.000
Heptanes	0.000000	0.000	0.000
Octanes	0.000000	0.000	0.000
Benzene	0.000000	0.054	0.238
Toluene	0.000000	0.028	0.125
Xylenes	0.000000	0.012	0.052
n-C6	0.000000	0.000	0.001
Total:	1.000000	539054.900	2361020.000

Pressure	93.000	[psia]
Temperature	123.679	[F]

Stream 5 Acid Gas Flow from Regenerator

	----- Controlled -----		----- Uncontrolled -----	
Component	[lb/h]	[ton/yr]	[lb/h]	[ton/yr]
H2S	0.000	0.000	0.000	0.000
CO2	23419.320	102574.900	23419.320	102574.900
MDEA	0.000	0.000	0.000	0.000
H2O	0.000	0.000	0.000	0.000
N2	0.000	0.000	0.008	0.034
C1	0.000	0.000	31.127	136.336
C2	0.000	0.000	0.509	2.231
C3	0.000	0.000	0.115	0.503
i-C4	0.000	0.000	0.000	0.000
n-C4	0.000	0.000	0.000	0.000
i-C5	0.000	0.000	0.000	0.000

n-C5	0.000	0.000	0.000	0.000
Hexanes	0.000	0.000	0.000	0.000
Heptanes	0.000	0.000	0.000	0.000
Octanes	0.000	0.000	0.000	0.000
Benzene	0.000	0.000	0.054	0.238
Toluene	0.000	0.000	0.028	0.125
Xylenes	0.000	0.000	0.012	0.052
n-C6	0.000	0.000	0.000	0.001
Total:	23419.320	102574.900	23451.180	102714.400

Pressure	N/A	[psia]
Temperature	N/A	[F]

Stream 6 Lean Amine from Regenerator

Component	Mol Fraction	[lb/h]	[ton/yr]
H2S	0.000000	0.000	0.000
CO2	0.002390	1796.834	7870.000
MDEA	0.119330	243272.800	1065517.000
H2O	0.878280	270720.000	1185734.000
N2	0.000000	0.000	0.000
C1	0.000000	0.000	0.000
C2	0.000000	0.000	0.000
C3	0.000000	0.000	0.000
i-C4	0.000000	0.000	0.000
n-C4	0.000000	0.000	0.000
i-C5	0.000000	0.000	0.000
n-C5	0.000000	0.000	0.000
Hexanes	0.000000	0.000	0.000
Heptanes	0.000000	0.000	0.000
Octanes	0.000000	0.000	0.000
Benzene	0.000000	0.000	0.000
Toluene	0.000000	0.000	0.000
Xylenes	0.000000	0.000	0.000
n-C6	0.000000	0.000	0.000
Total:	1.000000	515789.700	2259120.000

Pressure	972.000	[psia]
Temperature	100.400	[F]

Stream 7 Sweet Gas Flow from Absorber

Component	Mol Fraction	[lb/h]	[ton/yr]
H2S	0.000000	0.000	0.000
CO2	0.035490	13219.980	57902.530
MDEA	0.000000	0.083	0.365
H2O	0.001180	180.444	790.331
N2	0.000570	135.803	594.808
C1	0.952260	129291.600	566287.700
C2	0.008290	2110.364	9243.236
C3	0.001760	655.471	2870.914
i-C4	0.000180	88.429	387.315
n-C4	0.000170	85.290	373.564
i-C5	0.000040	24.031	105.256
n-C5	0.000020	12.340	54.050
Hexanes	0.000010	4.653	20.379
Heptanes	0.000010	5.412	23.704
Octanes	0.000000	4.113	18.014
Benzene	0.000000	0.639	2.798
Toluene	0.000000	1.613	7.063
Xylenes	0.000000	0.935	4.093
n-C6	0.000000	3.099	13.575
Total:	1.000000	145824.300	638699.700

Pressure	972.000	[psia]
Temperature	101.471	[F]

2030 Afton Place
Farmington, NM 87401
(505) 325-6622

Analysis No: HM20250081
Cust No: 33700-10065

Well/Lease Information

Customer Name:	HARVEST MIDSTREAM	Source:	TUBING
Well Name:	MILAGRO PLANT INLET	Well Flowing:	Y
County/State:		Pressure:	875 PSIG
Location:		Flow Temp:	84.6 DEG. F
Lease/PA/CA:		Ambient Temp:	81 DEG. F
Formation:		Flow Rate:	200 MCF/D
Cust. Stn. No.:		Sample Method:	Purge & Fill
		Sample Date:	07/15/2025
		Sample Time:	11.04 AM
		Sampled By:	Harold Jones
Heat Trace:	N	Sampled by (CO):	HARVEST
Remarks:	Calculated Molecular Weight: 19.4304		

Analysis

Component:	Mole%:	Unormalized %:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	0.0769	0.0756	0.0080	0.00	0.0007
CO2	11.0975	10.9053	1.8980	0.00	0.1686
Methane	87.4628	85.9478	14.8590	883.37	0.4845
Ethane	0.9889	0.9718	0.2650	17.50	0.0103
Propane	0.2303	0.2263	0.0640	5.79	0.0035
Iso-Butane	0.0396	0.0389	0.0130	1.29	0.0008
N-Butane	0.0459	0.0451	0.0150	1.50	0.0009
Neopentane 2,2 dmc3	0.0007	0.0007	0.0000	0.03	0.0000
I-Pentane	0.0337	0.0331	0.0120	1.35	0.0008
N-Pentane	0.0123	0.0121	0.0040	0.49	0.0003
Neohexane	0.0000	N/R	0.0000	0.00	0.0000
2-3-Dimethylbutane	0.0002	N/R	0.0000	0.01	0.0000
Cyclopentane	0.0002	N/R	0.0000	0.01	0.0000
2-Methylpentane	0.0014	N/R	0.0010	0.07	0.0000
3-Methylpentane	0.0005	N/R	0.0000	0.02	0.0000
C6	0.0016	0.0111	0.0010	0.08	0.0000
Methylcyclopentane	0.0013	N/R	0.0000	0.06	0.0000
Benzene	0.0002	N/R	0.0000	0.01	0.0000
Cyclohexane	0.0005	N/R	0.0000	0.02	0.0000
2-Methylhexane	0.0002	N/R	0.0000	0.01	0.0000
3-Methylhexane	0.0004	N/R	0.0000	0.02	0.0000
2-2-4-Trimethylpentane	0.0000	N/R	0.0000	0.00	0.0000
i-heptanes	0.0001	N/R	0.0000	0.01	0.0000
Heptane	0.0007	N/R	0.0000	0.04	0.0000

Methylcyclohexane	0.0013	N/R	0.0010	0.07	0.0000
Toluene	0.0006	N/R	0.0000	0.03	0.0000
2-Methylheptane	0.0003	N/R	0.0000	0.02	0.0000
4-Methylheptane	0.0002	N/R	0.0000	0.01	0.0000
i-Octanes	0.0002	N/R	0.0000	0.01	0.0000
Octane	0.0004	N/R	0.0000	0.02	0.0000
Ethylbenzene	0.0000	N/R	0.0000	0.00	0.0000
m, p Xylene	0.0003	N/R	0.0000	0.02	0.0000
o Xylene (& 2,2,4 tmc7)	0.0001	N/R	0.0000	0.01	0.0000
i-C9	0.0001	N/R	0.0000	0.01	0.0000
C9	0.0001	N/R	0.0000	0.01	0.0000
i-C10	0.0001	N/R	0.0000	0.01	0.0000
C10	0.0000	N/R	0.0000	0.00	0.0000
i-C11	0.0000	N/R	0.0000	0.00	0.0000
C11	0.0000	N/R	0.0000	0.00	0.0000
C12P	0.0001	N/R	0.0000	0.01	0.0000
Helium	0.0000	N/R	0.0000	0.00	0.0000
Total	100.00	98.268	17.141	911.88	0.6708

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY
**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBLITY FACTOR (1/Z):	1.0024	CYLINDER #:	0547
BTU/CU.FT IDEAL:	914.0	CYLINDER PRESSURE:	875 PSIG
BTU/CU.FT (DRY) CORRECTED FOR (1/Z):	916.2	ANALYSIS DATE:	07/16/2025
BTU/CU.FT (WET) CORRECTED FOR (1/Z):	900.3	ANALYIS TIME:	03:57:01 AM
DRY BTU @ 15.025:	934.5	ANALYSIS RUN BY:	ELAINE MORRISON
REAL SPECIFIC GRAVITY:	0.6722		

GPM, BTU, and SPG calculations as shown above are based on current GPA constants.
GPA Standard: GPA 2286-14
GC: SRI Instruments 8610 **Last Cal/Verify: 07/23/2025**
GC Method: C12+BTEX Gas

HARVEST MIDSTREAM

WELL ANALYSIS COMPARISON

Lease: MILAGRO PLANT INLET TUBING 07/23/2025

Stn. No.: 33700-10065

Mtr. No.:

Smpl Date:	07/15/2025	03/13/2025	02/25/2025	02/12/2025	10/25/2024	08/22/2024	04/24/2024
Test Date:	07/16/2025	03/20/2025	02/26/2025	02/13/2025	10/28/2024	08/27/2024	04/30/2024
Run No:	HM20250081	HM20250030	HM20250027	HM20250022	HM20240081	HM20240066	HM20240035
Nitrogen:	0.0769	0.0539	0.1184	0.1233	0.0574	0.0597	0.0631
CO2:	11.0975	9.2516	9.3158	8.8990	11.5400	12.1876	10.4024
Methane:	87.4628	89.7064	89.5124	89.8323	87.1624	86.3552	88.2715
Ethane:	0.9889	0.7812	0.8270	0.8827	0.9202	1.0864	0.9723
Propane:	0.2303	0.1654	0.1705	0.1985	0.2123	0.2227	0.2071
I-Butane:	0.0396	0.0169	0.0236	0.0269	0.0625	0.0348	0.0300
N-Butane:	0.0459	0.0163	0.0179	0.0266	0.0343	0.0287	0.0299
2,2 dmc3:	0.0007	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
I-Pentane:	0.0337	0.0037	0.0046	0.0073	0.0068	0.0096	0.0062
N-Pentane:	0.0123	0.0018	0.0030	0.0034	0.0039	0.0060	0.0074
Neohexane:	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0001
2-3-Cyclopentane:	0.0002	0.0000	0.0001	0.0000	0.0000	0.0002	0.0002
2-Methylpentane:	0.0002	0.0001	0.0001	0.0000	0.0000	0.0002	0.0002
3-Methylpentane:	0.0014	0.0003	0.0007	0.0000	0.0000	0.0013	0.0014
C6:	0.0005	0.0001	0.0002	0.0000	0.0000	0.0005	0.0005
Methylcyclopentane:	0.0016	0.0004	0.0008	0.0000	0.0000	0.0014	0.0015
Benzene:	0.0013	0.0001	0.0004	0.0000	0.0000	0.0002	0.0009
Cyclohexane:	0.0002	0.0001	0.0001	0.0000	0.0000	0.0002	0.0002
2-Methylhexane:	0.0005	0.0001	0.0003	0.0000	0.0000	0.0005	0.0005
3-Methylhexane:	0.0002	0.0001	0.0001	0.0000	0.0000	0.0002	0.0002
2-2-4-i-heptanes:	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Heptane:	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0001
Methylcyclohexane:	0.0001	0.0000	0.0001	0.0000	0.0000	0.0001	0.0002
Toluene:	0.0007	0.0002	0.0004	0.0000	0.0000	0.0007	0.0006
2-Methylheptane:	0.0013	0.0003	0.0009	0.0000	0.0000	0.0013	0.0014
4-Methylheptane:	0.0006	0.0002	0.0006	0.0000	0.0000	0.0005	0.0006
i-Octanes:	0.0003	0.0001	0.0002	0.0000	0.0000	0.0003	0.0003
Octane:	0.0002	0.0000	0.0001	0.0000	0.0000	0.0001	0.0001
Ethylbenzene:	0.0002	0.0000	0.0001	0.0000	0.0000	0.0001	0.0001
m, p Xylene:	0.0004	0.0001	0.0003	0.0000	0.0000	0.0003	0.0003
o Xylene (& 2,2,4	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
i-C9:	0.0003	0.0001	0.0003	0.0000	0.0000	0.0002	0.0002
C9:	0.0001	0.0000	0.0001	0.0000	0.0000	0.0001	0.0000
i-C10:	0.0001	0.0001	0.0001	0.0000	0.0000	0.0001	0.0001
C10:	0.0001	0.0000	0.0001	0.0000	0.0000	0.0001	0.0001
i-C11:	0.0001	0.0001	0.0001	0.0000	0.0000	0.0001	0.0001
C11:	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
C12P:	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Helium:	0.0001	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
BTU:	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
GPM:	916.2	929.7	929.3	934.4	909.8	904.4	921.2
SPG:	17.1430	17.0960	17.1010	17.1090	17.1300	17.1440	17.1300
	0.6722	0.6507	0.6522	0.6488	0.6750	0.6821	0.6640

HARVEST MIDSTREAM

WELL ANALYSIS COMPARISON

Lease: MILAGRO PLANT INLET TUBING 07/23/2025

Stn. No.: 33700-10065

Mtr. No.:

01/10/2024	10/30/2023	03/06/2023	12/09/2022	10/12/2022	08/16/2022	08/11/2022
01/11/2024	11/02/2023	03/07/2023	12/13/2022	10/14/2022	08/17/2022	08/12/2022
HM20240004	HM20230260	HM20230010	HM20220116	HM20220089	HM20220081	HM20220076
0.0630	0.0223	0.0760	0.0597	0.0512	0.0686	0.0759
9.7757	12.0531	11.2424	11.3478	11.7082	13.6018	13.6364
89.1128	86.1310	87.4026	86.5703	86.7491	84.8170	84.8298
0.8219	1.0883	0.9844	1.3681	1.1106	1.1325	1.1289
0.1730	0.4190	0.2159	0.4199	0.2516	0.3082	0.2519
0.0257	0.0393	0.0316	0.0710	0.0425	0.0345	0.0310
0.0194	0.0360	0.0262	0.0913	0.0395	0.0316	0.0363
0.0000	0.1777	0.0000	0.0000	0.0000	0.0000	0.0000
0.0063	0.0332	0.0067	0.0369	0.0141	0.0000	0.0058
0.0022	0.0000	0.0013	0.0253	0.0116	0.0059	0.0041
0.0000	0.0000	0.0000	0.0002	0.0003	0.0000	0.0000
0.0000	0.0000	0.0002	0.0003	0.0004	0.0000	0.0000
0.0000	0.0000	0.0003	0.0003	0.0004	0.0000	0.0000
0.0000	0.0000	0.0016	0.0020	0.0027	0.0000	0.0000
0.0000	0.0000	0.0007	0.0006	0.0009	0.0000	0.0000
0.0000	0.0000	0.0018	0.0014	0.0031	0.0000	0.0000
0.0000	0.0000	0.0013	0.0008	0.0023	0.0000	0.0000
0.0000	0.0000	0.0003	0.0002	0.0005	0.0000	0.0000
0.0000	0.0000	0.0007	0.0004	0.0012	0.0000	0.0000
0.0000	0.0000	0.0002	0.0001	0.0004	0.0000	0.0000
0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000	0.0000	0.0001	0.0002	0.0000	0.0000
0.0000	0.0000	0.0002	0.0001	0.0003	0.0000	0.0000
0.0000	0.0000	0.0008	0.0005	0.0015	0.0000	0.0000
0.0000	0.0000	0.0021	0.0011	0.0030	0.0000	0.0000
0.0000	0.0000	0.0006	0.0004	0.0012	0.0000	0.0000
0.0000	0.0000	0.0003	0.0002	0.0005	0.0000	0.0000
0.0000	0.0000	0.0002	0.0001	0.0002	0.0000	0.0000
0.0000	0.0000	0.0002	0.0001	0.0003	0.0000	0.0000
0.0000	0.0000	0.0004	0.0003	0.0007	0.0000	0.0000
0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000	0.0003	0.0002	0.0005	0.0000	0.0000
0.0000	0.0000	0.0000	0.0000	0.0001	0.0000	0.0000
0.0000	0.0000	0.0001	0.0001	0.0001	0.0000	0.0000
0.0000	0.0000	0.0001	0.0001	0.0002	0.0000	0.0000
0.0000	0.0000	0.0000	0.0001	0.0002	0.0000	0.0000
0.0000	0.0000	0.0000	0.0000	0.0001	0.0000	0.0000
0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000	0.0001	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000	0.0001	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
925.0	914.9	912.8	921.7	911.2	891.1	889.9
17.1020	17.1430	17.1300	17.2180	17.1580	17.1580	17.1510
0.6563	0.6863	0.6723	0.6796	0.6786	0.6965	0.6964

HARVEST MIDSTREAM

WELL ANALYSIS COMPARISON

Lease: MILAGRO PLANT INLET TUBING 07/23/2025

Stn. No.: 33700-10065

Mtr. No.:

01/13/2022	10/12/2021	09/14/2021	04/21/2021	03/17/2021	02/18/2021	02/01/2021
01/18/2022	10/19/2021	09/24/2021	04/21/2021	03/24/2021	02/19/2021	02/03/2021
HM20220004	HM2021088	HM2021079	HM2021031	HM2021015	HM210007	HM210004
0.2929	0.0678	0.2966	0.0945	0.0568	0.0529	0.1069
12.9814	12.7362	12.9619	8.7977	11.1683	9.9297	11.3451
85.3370	85.8379	85.2765	87.6775	87.1920	87.6615	86.9868
1.0689	1.0601	1.1212	2.1958	1.1945	1.6564	1.1874
0.2340	0.2302	0.2487	0.7148	0.2650	0.4389	0.2528
0.0314	0.0249	0.0358	0.1320	0.0377	0.0743	0.0500
0.0283	0.0263	0.0399	0.1689	0.0393	0.0893	0.0426
0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0067	0.0081	0.0045	0.0676	0.0136	0.0284	0.0102
0.0026	0.0035	0.0038	0.0457	0.0096	0.0175	0.0046
0.0001	0.0000	0.0001	0.0021	0.0007	0.0011	0.0001
0.0004	0.0001	0.0003	0.0023	0.0005	0.0011	0.0003
0.0004	0.0001	0.0003	0.0024	0.0005	0.0012	0.0003
0.0024	0.0007	0.0018	0.0158	0.0032	0.0075	0.0020
0.0010	0.0003	0.0008	0.0060	0.0011	0.0027	0.0007
0.0024	0.0007	0.0018	0.0178	0.0034	0.0092	0.0021
0.0017	0.0005	0.0002	0.0122	0.0026	0.0061	0.0015
0.0005	0.0001	0.0004	0.0023	0.0006	0.0011	0.0004
0.0010	0.0003	0.0007	0.0064	0.0014	0.0032	0.0008
0.0003	0.0001	0.0003	0.0021	0.0005	0.0010	0.0003
0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0001	0.0000	0.0001	0.0007	0.0002	0.0003	0.0001
0.0002	0.0001	0.0002	0.0014	0.0003	0.0007	0.0002
0.0010	0.0003	0.0008	0.0060	0.0014	0.0032	0.0009
0.0022	0.0008	0.0016	0.0130	0.0030	0.0059	0.0016
0.0011	0.0002	0.0007	0.0044	0.0010	0.0016	0.0005
0.0004	0.0001	0.0003	0.0020	0.0005	0.0008	0.0002
0.0002	0.0001	0.0002	0.0009	0.0003	0.0004	0.0001
0.0002	0.0001	0.0000	0.0010	0.0003	0.0003	0.0001
0.0005	0.0002	0.0004	0.0021	0.0007	0.0010	0.0003
0.0000	0.0000	0.0000	0.0001	0.0000	0.0001	0.0000
0.0003	0.0001	0.0002	0.0013	0.0004	0.0006	0.0002
0.0000	0.0000	0.0000	0.0001	0.0001	0.0001	0.0000
0.0001	0.0000	0.0000	0.0002	0.0000	0.0003	0.0001
0.0001	0.0001	0.0001	0.0003	0.0001	0.0002	0.0001
0.0000	0.0000	0.0000	0.0000	0.0000	0.0002	0.0002
0.0000	0.0000	0.0001	0.0001	0.0000	0.0001	0.0001
0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0001	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
894.1	898.1	895.0	966.5	917.3	939.8	914.5
17.1310	17.1380	17.1400	17.3830	17.1640	17.2530	17.1600
0.6908	0.6870	0.6911	0.6675	0.6738	0.6682	0.6754

HARVEST MIDSTREAM

WELL ANALYSIS COMPARISON

Lease: MILAGRO PLANT INLET TUBING 07/23/2025

Stn. No.: 33700-10065

Mtr. No.:

06/23/2020	03/20/2020	09/16/2019	06/18/2019	01/25/2019
06/24/2020	03/24/2020	09/17/2019	06/21/2019	01/29/2019
HM200061	HM200013	HM190058	HM190043	HM190001
0.0823	0.0473	0.0454	0.0744	0.0647
0.0269	10.8784	10.6630	9.1333	10.1065
96.1676	87.5063	87.8103	87.7080	88.4708
2.3709	1.1568	1.1230	1.9990	1.0388
0.8045	0.2732	0.2516	0.6532	0.2195
0.1518	0.0415	0.0372	0.1178	0.0374
0.1894	0.0587	0.0387	0.1506	0.0344
0.0000	0.0000	0.0000	0.0016	0.0004
0.0639	0.0111	0.0104	0.0556	0.0083
0.0427	0.0059	0.0059	0.0385	0.0022
0.0003	0.0004	0.0000	0.0012	0.0006
0.0018	0.0004	0.0003	0.0017	0.0003
0.0019	0.0004	0.0003	0.0018	0.0003
0.0120	0.0028	0.0022	0.0113	0.0022
0.0067	0.0009	0.0008	0.0039	0.0004
0.0171	0.0030	0.0023	0.0116	0.0024
0.0112	0.0018	0.0016	0.0075	0.0017
0.0015	0.0005	0.0003	0.0014	0.0005
0.0068	0.0013	0.0010	0.0043	0.0010
0.0026	0.0004	0.0003	0.0015	0.0003
0.0000	0.0000	0.0000	0.0000	0.0000
0.0008	0.0002	0.0001	0.0004	0.0001
0.0017	0.0003	0.0002	0.0009	0.0002
0.0070	0.0014	0.0009	0.0041	0.0011
0.0143	0.0026	0.0019	0.0076	0.0020
0.0033	0.0011	0.0006	0.0024	0.0009
0.0024	0.0005	0.0003	0.0011	0.0003
0.0011	0.0002	0.0002	0.0005	0.0002
0.0009	0.0003	0.0002	0.0006	0.0002
0.0026	0.0007	0.0004	0.0014	0.0006
0.0000	0.0001	0.0000	0.0001	0.0001
0.0010	0.0004	0.0002	0.0006	0.0003
0.0000	0.0001	0.0000	0.0001	0.0001
0.0001	0.0002	0.0001	0.0002	0.0002
0.0004	0.0002	0.0001	0.0002	0.0001
0.0000	0.0001	0.0000	0.0001	0.0002
0.0001	0.0002	0.0001	0.0000	0.0001
0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000	0.0000	0.0000	0.0000
1058.6	920.5	921.3	958.1	925.3
17.4000	17.1660	17.1530	17.3400	17.1380
0.5845	0.6711	0.6681	0.6672	0.6619

875#

2030 Afton Place, Farmington, NM 87401 · (505) 325-6622

GAS ANALYSIS SERVICE

C6+ ☐ C6+w/H2S ☐ C9+ ☐ C12+ BTEX ☐

Helium ☐ Sulfurs ☐ Ext. Liquid ☐

Other _____ Date 7-15-2025

Sampled By:(Co.) Harvest midstream Time 11:04 ☒AM ☐PM

Sampled by:(Person) Harold Jones Well Flowing: ☑ Yes ☐ No

Company: Harvest midstream Heat Trace: ☐ Yes ☑ No

Well Name: milagro plant Inlet Flow Pressure (PSIG): 875

API #: _____ Flow Temp (°F): 84.6

Lease#: _____ Ambient Temp (°F): 81

County: SJ State: NM Formation: _____ Flow Rate (MCF/D): 200

Source ☐ Meter Run ☑ Tubing ☐ Casing ☐ Bradenhead ☐ Other _____

Sample Type ☑ Spot ☐ Composite Sample Method ☑ Purge & Fill ☐ Other _____

Meter Number: _____ Cylinder Number: 0547

Contact: Eric Hall ehall@harvestmidstream.com

Remarks: 505-486-4826

33700-10065 HM20250081

2030 Afton Place
Farmington, NM 87401
(505) 325-6622

Analysis No: HM20250030
Cust No: 33700-10065

Well/Lease Information

Customer Name: HARVEST MIDSTREAM
Well Name: MILAGRO PLANT INLET
County/State:
Location:
Lease/PA/CA:
Formation:
Cust. Stn. No.:

Heat Trace:
Remarks: Calculated Molecular Weight = 18.8119

Source: TUBING
Well Flowing: Y
Pressure: 875.8 PSIG
Flow Temp: 57.5 DEG. F
Ambient Temp: 36 DEG. F
Flow Rate: MCF/D
Sample Method:
Sample Date: 03/13/2025
Sample Time: 8.50 AM
Sampled By: Donald A
Sampled by (CO): HARVEST

Analysis

Component:	Mole%:	Unormalized %:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	0.0539	0.0536	0.0060	0.00	0.0005
CO2	9.2516	9.2007	1.5820	0.00	0.1406
Methane	89.7064	89.2125	15.2390	906.03	0.4969
Ethane	0.7812	0.7769	0.2090	13.82	0.0081
Propane	0.1654	0.1645	0.0460	4.16	0.0025
Iso-Butane	0.0169	0.0168	0.0060	0.55	0.0003
N-Butane	0.0163	0.0162	0.0050	0.53	0.0003
Neopentane 2,2 dmc3	0.0000	0.0000	0.0000	0.00	0.0000
I-Pentane	0.0037	0.0037	0.0010	0.15	0.0001
N-Pentane	0.0018	0.0018	0.0010	0.07	0.0000
Neohexane	0.0000	N/R	0.0000	0.00	0.0000
2-3-Dimethylbutane	0.0000	N/R	0.0000	0.00	0.0000
Cyclopentane	0.0001	N/R	0.0000	0.00	0.0000
2-Methylpentane	0.0003	N/R	0.0000	0.01	0.0000
3-Methylpentane	0.0001	N/R	0.0000	0.00	0.0000
C6	0.0004	0.0027	0.0000	0.02	0.0000
Methylcyclopentane	0.0001	N/R	0.0000	0.00	0.0000
Benzene	0.0001	N/R	0.0000	0.00	0.0000
Cyclohexane	0.0001	N/R	0.0000	0.00	0.0000
2-Methylhexane	0.0001	N/R	0.0000	0.01	0.0000
3-Methylhexane	0.0000	N/R	0.0000	0.00	0.0000
2-2-4-Trimethylpentane	0.0000	N/R	0.0000	0.00	0.0000
i-heptanes	0.0000	N/R	0.0000	0.00	0.0000
Heptane	0.0002	N/R	0.0000	0.01	0.0000

Methylcyclohexane	0.0003	N/R	0.0000	0.02	0.0000
Toluene	0.0002	N/R	0.0000	0.01	0.0000
2-Methylheptane	0.0001	N/R	0.0000	0.01	0.0000
4-Methylheptane	0.0000	N/R	0.0000	0.00	0.0000
i-Octanes	0.0000	N/R	0.0000	0.00	0.0000
Octane	0.0001	N/R	0.0000	0.01	0.0000
Ethylbenzene	0.0000	N/R	0.0000	0.00	0.0000
m, p Xylene	0.0001	N/R	0.0000	0.01	0.0000
o Xylene (& 2,2,4 tmc7)	0.0000	N/R	0.0000	0.00	0.0000
i-C9	0.0001	N/R	0.0000	0.01	0.0000
C9	0.0000	N/R	0.0000	0.00	0.0000
i-C10	0.0001	N/R	0.0000	0.01	0.0000
C10	0.0000	N/R	0.0000	0.00	0.0000
i-C11	0.0000	N/R	0.0000	0.00	0.0000
C11	0.0000	N/R	0.0000	0.00	0.0000
C12P	0.0000	N/R	0.0000	0.00	0.0000
Helium	0.0000	N/R	0.0000	0.00	0.0000
Total	100.00	99.449	17.095	925.45	0.6495

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY
**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBLITY FACTOR (1/Z):	1.0023	CYLINDER #:	FCH0571
BTU/CU.FT IDEAL:	927.6	CYLINDER PRESSURE:	875 PSIG
BTU/CU.FT (DRY) CORRECTED FOR (1/Z):	929.7	ANALYSIS DATE:	03/20/2025
BTU/CU.FT (WET) CORRECTED FOR (1/Z):	913.5	ANALYIS TIME:	09:25:30 AM
DRY BTU @ 15.025:	948.3	ANALYSIS RUN BY:	PATRICIA KING
REAL SPECIFIC GRAVITY:	0.6507		

GPM, BTU, and SPG calculations as shown above are based on current GPA constants.
GPA Standard: GPA 2286-14
GC: SRI Instruments 8610 **Last Cal/Verify: 03/20/2025**
GC Method: C12+BTEX Gas

HARVEST MIDSTREAM

WELL ANALYSIS COMPARISON

Lease: MILAGRO PLANT INLET TUBING 03/20/2025

Stn. No.: 33700-10065

Mtr. No.:

Smpl Date:	03/13/2025	02/25/2025	02/12/2025	10/25/2024	08/22/2024	04/24/2024	01/10/2024
Test Date:	03/20/2025	02/26/2025	02/13/2025	10/28/2024	08/27/2024	04/30/2024	01/11/2024
Run No:	HM20250030	HM20250027	HM20250022	HM20240081	HM20240066	HM20240035	HM20240004
Nitrogen:	0.0539	0.1184	0.1233	0.0574	0.0597	0.0631	0.0630
CO2:	9.2516	9.3158	8.8990	11.5400	12.1876	10.4024	9.7757
Methane:	89.7064	89.5124	89.8323	87.1624	86.3552	88.2715	89.1128
Ethane:	0.7812	0.8270	0.8827	0.9202	1.0864	0.9723	0.8219
Propane:	0.1654	0.1705	0.1985	0.2123	0.2227	0.2071	0.1730
I-Butane:	0.0169	0.0236	0.0269	0.0625	0.0348	0.0300	0.0257
N-Butane:	0.0163	0.0179	0.0266	0.0343	0.0287	0.0299	0.0194
2,2 dmc3:	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
I-Pentane:	0.0037	0.0046	0.0073	0.0068	0.0096	0.0062	0.0063
N-Pentane:	0.0018	0.0030	0.0034	0.0039	0.0060	0.0074	0.0022
Neohexane:	0.0000	0.0000	0.0000	0.0000	0.0001	0.0001	0.0000
2-3-Cyclopentane:	0.0000	0.0001	0.0000	0.0000	0.0002	0.0002	0.0000
2-Methylpentane:	0.0001	0.0001	0.0000	0.0000	0.0002	0.0002	0.0000
3-Methylpentane:	0.0003	0.0007	0.0000	0.0000	0.0013	0.0014	0.0000
C6:	0.0001	0.0002	0.0000	0.0000	0.0005	0.0005	0.0000
Methylcyclopentane:	0.0004	0.0008	0.0000	0.0000	0.0014	0.0015	0.0000
Benzene:	0.0001	0.0004	0.0000	0.0000	0.0002	0.0009	0.0000
Cyclohexane:	0.0001	0.0001	0.0000	0.0000	0.0002	0.0002	0.0000
2-Methylhexane:	0.0001	0.0003	0.0000	0.0000	0.0005	0.0005	0.0000
3-Methylhexane:	0.0001	0.0001	0.0000	0.0000	0.0002	0.0002	0.0000
2-2-4-i-heptanes:	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Heptane:	0.0000	0.0000	0.0000	0.0000	0.0001	0.0001	0.0000
Methylcyclohexane:	0.0000	0.0001	0.0000	0.0000	0.0001	0.0002	0.0000
Toluene:	0.0002	0.0004	0.0000	0.0000	0.0007	0.0006	0.0000
2-Methylheptane:	0.0003	0.0009	0.0000	0.0000	0.0013	0.0014	0.0000
4-Methylheptane:	0.0002	0.0006	0.0000	0.0000	0.0005	0.0006	0.0000
i-Octanes:	0.0001	0.0002	0.0000	0.0000	0.0003	0.0003	0.0000
Octane:	0.0000	0.0001	0.0000	0.0000	0.0001	0.0001	0.0000
Ethylbenzene:	0.0000	0.0001	0.0000	0.0000	0.0001	0.0001	0.0000
m, p Xylene:	0.0001	0.0003	0.0000	0.0000	0.0003	0.0003	0.0000
o Xylene (& 2,2,4 i-C9:	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
C9:	0.0000	0.0001	0.0000	0.0000	0.0002	0.0002	0.0000
i-C10:	0.0000	0.0001	0.0000	0.0000	0.0001	0.0000	0.0000
C10:	0.0001	0.0001	0.0000	0.0000	0.0001	0.0001	0.0000
i-C11:	0.0000	0.0001	0.0000	0.0000	0.0001	0.0001	0.0000
C11:	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
C12P:	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Helium:	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
BTU:	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
GPM:	929.7	929.3	934.4	909.8	904.4	921.2	925.0
SPG:	17.0960	17.1010	17.1090	17.1300	17.1440	17.1300	17.1020
	0.6507	0.6522	0.6488	0.6750	0.6821	0.6640	0.6563

HARVEST MIDSTREAM

WELL ANALYSIS COMPARISON

Lease: MILAGRO PLANT INLET TUBING 03/20/2025

Stn. No.: 33700-10065

Mtr. No.:

10/30/2023	03/06/2023	12/09/2022	10/12/2022	08/16/2022	08/11/2022	01/13/2022
11/02/2023	03/07/2023	12/13/2022	10/14/2022	08/17/2022	08/12/2022	01/18/2022
HM20230260	HM20230010	HM20220116	HM20220089	HM20220081	HM20220076	HM20220004
0.0223	0.0760	0.0597	0.0512	0.0686	0.0759	0.2929
12.0531	11.2424	11.3478	11.7082	13.6018	13.6364	12.9814
86.1310	87.4026	86.5703	86.7491	84.8170	84.8298	85.3370
1.0883	0.9844	1.3681	1.1106	1.1325	1.1289	1.0689
0.4190	0.2159	0.4199	0.2516	0.3082	0.2519	0.2340
0.0393	0.0316	0.0710	0.0425	0.0345	0.0310	0.0314
0.0360	0.0262	0.0913	0.0395	0.0316	0.0363	0.0283
0.1777	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0332	0.0067	0.0369	0.0141	0.0000	0.0058	0.0067
0.0000	0.0013	0.0253	0.0116	0.0059	0.0041	0.0026
0.0000	0.0000	0.0002	0.0003	0.0000	0.0000	0.0001
0.0000	0.0002	0.0003	0.0004	0.0000	0.0000	0.0004
0.0000	0.0003	0.0003	0.0004	0.0000	0.0000	0.0004
0.0000	0.0016	0.0020	0.0027	0.0000	0.0000	0.0024
0.0000	0.0007	0.0006	0.0009	0.0000	0.0000	0.0010
0.0000	0.0018	0.0014	0.0031	0.0000	0.0000	0.0024
0.0000	0.0013	0.0008	0.0023	0.0000	0.0000	0.0017
0.0000	0.0003	0.0002	0.0005	0.0000	0.0000	0.0005
0.0000	0.0007	0.0004	0.0012	0.0000	0.0000	0.0010
0.0000	0.0002	0.0001	0.0004	0.0000	0.0000	0.0003
0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000	0.0001	0.0002	0.0000	0.0000	0.0001
0.0000	0.0002	0.0001	0.0003	0.0000	0.0000	0.0002
0.0000	0.0008	0.0005	0.0015	0.0000	0.0000	0.0010
0.0000	0.0021	0.0011	0.0030	0.0000	0.0000	0.0022
0.0000	0.0006	0.0004	0.0012	0.0000	0.0000	0.0011
0.0000	0.0003	0.0002	0.0005	0.0000	0.0000	0.0004
0.0000	0.0002	0.0001	0.0002	0.0000	0.0000	0.0002
0.0000	0.0002	0.0001	0.0003	0.0000	0.0000	0.0002
0.0000	0.0004	0.0003	0.0007	0.0000	0.0000	0.0005
0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0003	0.0002	0.0005	0.0000	0.0000	0.0003
0.0000	0.0000	0.0000	0.0001	0.0000	0.0000	0.0000
0.0000	0.0001	0.0001	0.0001	0.0000	0.0000	0.0001
0.0000	0.0001	0.0001	0.0002	0.0000	0.0000	0.0001
0.0000	0.0000	0.0001	0.0002	0.0000	0.0000	0.0000
0.0000	0.0000	0.0000	0.0001	0.0000	0.0000	0.0000
0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0001	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0001	0.0000	0.0000	0.0000	0.0000	0.0001
0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
914.9	912.8	921.7	911.2	891.1	889.9	894.1
17.1430	17.1300	17.2180	17.1580	17.1580	17.1510	17.1310
0.6863	0.6723	0.6796	0.6786	0.6965	0.6964	0.6908

HARVEST MIDSTREAM

WELL ANALYSIS COMPARISON

Lease: MILAGRO PLANT INLET TUBING 03/20/2025

Stn. No.: 33700-10065

Mtr. No.:

10/12/2021	09/14/2021	04/21/2021	03/17/2021	02/18/2021	02/01/2021	06/23/2020
10/19/2021	09/24/2021	04/21/2021	03/24/2021	02/19/2021	02/03/2021	06/24/2020
HM2021088	HM2021079	HM2021031	HM2021015	HM210007	HM210004	HM200061
0.0678	0.2966	0.0945	0.0568	0.0529	0.1069	0.0823
12.7362	12.9619	8.7977	11.1683	9.9297	11.3451	0.0269
85.8379	85.2765	87.6775	87.1920	87.6615	86.9868	96.1676
1.0601	1.1212	2.1958	1.1945	1.6564	1.1874	2.3709
0.2302	0.2487	0.7148	0.2650	0.4389	0.2528	0.8045
0.0249	0.0358	0.1320	0.0377	0.0743	0.0500	0.1518
0.0263	0.0399	0.1689	0.0393	0.0893	0.0426	0.1894
0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0081	0.0045	0.0676	0.0136	0.0284	0.0102	0.0639
0.0035	0.0038	0.0457	0.0096	0.0175	0.0046	0.0427
0.0000	0.0001	0.0021	0.0007	0.0011	0.0001	0.0003
0.0001	0.0003	0.0023	0.0005	0.0011	0.0003	0.0018
0.0001	0.0003	0.0024	0.0005	0.0012	0.0003	0.0019
0.0007	0.0018	0.0158	0.0032	0.0075	0.0020	0.0120
0.0003	0.0008	0.0060	0.0011	0.0027	0.0007	0.0067
0.0007	0.0018	0.0178	0.0034	0.0092	0.0021	0.0171
0.0005	0.0002	0.0122	0.0026	0.0061	0.0015	0.0112
0.0001	0.0004	0.0023	0.0006	0.0011	0.0004	0.0015
0.0003	0.0007	0.0064	0.0014	0.0032	0.0008	0.0068
0.0001	0.0003	0.0021	0.0005	0.0010	0.0003	0.0026
0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0001	0.0007	0.0002	0.0003	0.0001	0.0008
0.0001	0.0002	0.0014	0.0003	0.0007	0.0002	0.0017
0.0003	0.0008	0.0060	0.0014	0.0032	0.0009	0.0070
0.0008	0.0016	0.0130	0.0030	0.0059	0.0016	0.0143
0.0002	0.0007	0.0044	0.0010	0.0016	0.0005	0.0033
0.0001	0.0003	0.0020	0.0005	0.0008	0.0002	0.0024
0.0001	0.0002	0.0009	0.0003	0.0004	0.0001	0.0011
0.0001	0.0000	0.0010	0.0003	0.0003	0.0001	0.0009
0.0002	0.0004	0.0021	0.0007	0.0010	0.0003	0.0026
0.0000	0.0000	0.0001	0.0000	0.0001	0.0000	0.0000
0.0001	0.0002	0.0013	0.0004	0.0006	0.0002	0.0010
0.0000	0.0000	0.0001	0.0001	0.0001	0.0000	0.0000
0.0000	0.0000	0.0002	0.0000	0.0003	0.0001	0.0001
0.0001	0.0001	0.0003	0.0001	0.0002	0.0001	0.0004
0.0000	0.0000	0.0000	0.0000	0.0002	0.0002	0.0000
0.0000	0.0001	0.0001	0.0000	0.0001	0.0001	0.0001
0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
898.1	895.0	966.5	917.3	939.8	914.5	1058.6
17.1380	17.1400	17.3830	17.1640	17.2530	17.1600	17.4000
0.6870	0.6911	0.6675	0.6738	0.6682	0.6754	0.5845

HARVEST MIDSTREAM

WELL ANALYSIS COMPARISON

Lease: MILAGRO PLANT INLET TUBING 03/20/2025

Stn. No.: 33700-10065

Mtr. No.:

03/20/2020	09/16/2019	06/18/2019	01/25/2019
03/24/2020	09/17/2019	06/21/2019	01/29/2019
HM200013	HM190058	HM190043	HM190001
0.0473	0.0454	0.0744	0.0647
10.8784	10.6630	9.1333	10.1065
87.5063	87.8103	87.7080	88.4708
1.1568	1.1230	1.9990	1.0388
0.2732	0.2516	0.6532	0.2195
0.0415	0.0372	0.1178	0.0374
0.0587	0.0387	0.1506	0.0344
0.0000	0.0000	0.0016	0.0004
0.0111	0.0104	0.0556	0.0083
0.0059	0.0059	0.0385	0.0022
0.0004	0.0000	0.0012	0.0006
0.0004	0.0003	0.0017	0.0003
0.0004	0.0003	0.0018	0.0003
0.0028	0.0022	0.0113	0.0022
0.0009	0.0008	0.0039	0.0004
0.0030	0.0023	0.0116	0.0024
0.0018	0.0016	0.0075	0.0017
0.0005	0.0003	0.0014	0.0005
0.0013	0.0010	0.0043	0.0010
0.0004	0.0003	0.0015	0.0003
0.0000	0.0000	0.0000	0.0000
0.0002	0.0001	0.0004	0.0001
0.0003	0.0002	0.0009	0.0002
0.0014	0.0009	0.0041	0.0011
0.0026	0.0019	0.0076	0.0020
0.0011	0.0006	0.0024	0.0009
0.0005	0.0003	0.0011	0.0003
0.0002	0.0002	0.0005	0.0002
0.0003	0.0002	0.0006	0.0002
0.0007	0.0004	0.0014	0.0006
0.0001	0.0000	0.0001	0.0001
0.0004	0.0002	0.0006	0.0003
0.0001	0.0000	0.0001	0.0001
0.0002	0.0001	0.0002	0.0002
0.0002	0.0001	0.0002	0.0001
0.0001	0.0000	0.0001	0.0002
0.0002	0.0001	0.0000	0.0001
0.0000	0.0000	0.0000	0.0000
0.0000	0.0000	0.0000	0.0000
0.0000	0.0000	0.0000	0.0000
0.0000	0.0000	0.0000	0.0000
920.5	921.3	958.1	925.3
17.1660	17.1530	17.3400	17.1380
0.6711	0.6681	0.6672	0.6619

2030 Afton Place, Farmington, NM 87401 - (505) 325-6622 875#

GAS ANALYSIS SERVICE

C6+ ☐ C6+w/H2S ☐ C9+ ☐ C12+ BTEX ☐

Helium ☐ Sulfurs ☐ Ext. Liquid ☐

Other _____ Date 3-13-25

HM20250030

Sampled By:(Co.) Milagro Harvest mid stream Time 08:50 ☒AM ☐PM

Sampled by:(Person) Donald E Archuleta Well Flowing: ☒ Yes ☐ No

Company: Harvest mid STREAM Heat Trace: ☐ Yes ☐ No

Well Name: Milagro Plant Inlet Gas Flow Pressure (PSIG): 875.8

API #: Ignacio cross Haul Flow Temp (°F): 57.5

33700-10065

Lease#: Ambient Temp (°F): 36

County: SJ State: NM Formation: Flow Rate (MCF/D):

Source: ☐ Meter Run ☒ Tubing ☐ Casing ☐ Bradenhead ☐ Other (Extended)

Sample Type: ☒ Spot ☐ Composite Sample Method: ☐ Purge & Fill ☐ Other r

Meter Number: Cylinder Number: FCH0571

Contact: Donald E Archuleta 505 609 3424

Remarks: Send To Harvest Enviornmental (Extended)

donald.archuleta@HARVESTmidSTREAM.com

2030 Afton Place
Farmington, NM 87401
(505) 325-6622

Analysis No: HM20250080
Cust No: 33700-10560

Well/Lease Information

Customer Name:	HARVEST MIDSTREAM	Source:	TUBING
Well Name:	Milagro Plant Train 2	Well Flowing:	Y
County/State:	Bloomfield NM	Pressure:	873 PSIG
Location:		Flow Temp:	84.6 DEG. F
Lease/PA/CA:		Ambient Temp:	81 DEG. F
Formation:		Flow Rate:	102 MCF/D
Cust. Stn. No.:		Sample Method:	Purge & Fill
		Sample Date:	07/15/2025
		Sample Time:	10.33 AM
		Sampled By:	Harold Jones
Heat Trace:	N	Sampled by (CO):	Harvest Mid.
Remarks:	Calculated Molecular Weight: 16.7086		

Analysis

Component:	Mole%:	Unormalized %:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	0.1215	0.1203	0.0130	0.00	0.0012
CO2	1.3925	1.3787	0.2380	0.00	0.0212
Methane	97.0833	96.1204	16.4890	980.54	0.5377
Ethane	1.0737	1.0631	0.2880	19.00	0.0111
Propane	0.2333	0.2310	0.0640	5.87	0.0036
Iso-Butane	0.0371	0.0367	0.0120	1.21	0.0007
N-Butane	0.0356	0.0352	0.0110	1.16	0.0007
Neopentane 2,2 dmc3	0.0000	0.0000	0.0000	0.00	0.0000
I-Pentane	0.0068	0.0067	0.0020	0.27	0.0002
N-Pentane	0.0082	0.0081	0.0030	0.33	0.0002
Neohexane	0.0000	N/R	0.0000	0.00	0.0000
2-3-Dimethylbutane	0.0002	N/R	0.0000	0.01	0.0000
Cyclopentane	0.0002	N/R	0.0000	0.01	0.0000
2-Methylpentane	0.0012	N/R	0.0000	0.06	0.0000
3-Methylpentane	0.0005	N/R	0.0000	0.02	0.0000
C6	0.0013	0.0080	0.0010	0.06	0.0000
Methylcyclopentane	0.0005	N/R	0.0000	0.02	0.0000
Benzene	0.0000	N/R	0.0000	0.00	0.0000
Cyclohexane	0.0005	N/R	0.0000	0.02	0.0000
2-Methylhexane	0.0000	N/R	0.0000	0.00	0.0000
3-Methylhexane	0.0001	N/R	0.0000	0.01	0.0000
2-2-4-Trimethylpentane	0.0001	N/R	0.0000	0.01	0.0000
i-heptanes	0.0001	N/R	0.0000	0.01	0.0000
Heptane	0.0006	N/R	0.0000	0.03	0.0000

Methylcyclohexane	0.0012	N/R	0.0000	0.06	0.0000
Toluene	0.0003	N/R	0.0000	0.01	0.0000
2-Methylheptane	0.0002	N/R	0.0000	0.01	0.0000
4-Methylheptane	0.0001	N/R	0.0000	0.01	0.0000
i-Octanes	0.0001	N/R	0.0000	0.01	0.0000
Octane	0.0003	N/R	0.0000	0.02	0.0000
Ethylbenzene	0.0000	N/R	0.0000	0.00	0.0000
m, p Xylene	0.0001	N/R	0.0000	0.01	0.0000
o Xylene (& 2,2,4 tmc7)	0.0000	N/R	0.0000	0.00	0.0000
i-C9	0.0001	N/R	0.0000	0.01	0.0000
C9	0.0001	N/R	0.0000	0.01	0.0000
i-C10	0.0001	N/R	0.0000	0.01	0.0000
C10	0.0000	N/R	0.0000	0.00	0.0000
i-C11	0.0000	N/R	0.0000	0.00	0.0000
C11	0.0000	N/R	0.0000	0.00	0.0000
C12P	0.0001	N/R	0.0000	0.01	0.0000
Helium	0.0000	N/R	0.0000	0.00	0.0000
Total	100.00	99.008	17.121	1008.79	0.5769

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY
**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBLITY FACTOR (1/Z):	1.0021	CYLINDER #:	0515
BTU/CU.FT IDEAL:	1011.1	CYLINDER PRESSURE:	837 PSIG
BTU/CU.FT (DRY) CORRECTED FOR (1/Z):	1013.3	ANALYSIS DATE:	07/16/2025
BTU/CU.FT (WET) CORRECTED FOR (1/Z):	995.7	ANALYIS TIME:	03:10:06 AM
DRY BTU @ 15.025:	1033.6	ANALYSIS RUN BY:	ELAINE MORRISON
REAL SPECIFIC GRAVITY:	0.5779		

GPM, BTU, and SPG calculations as shown above are based on current GPA constants.
GPA Standard: GPA 2286-14
GC: SRI Instruments 8610 **Last Cal/Verify: 07/23/2025**
GC Method: C12+BTEX Gas

HARVEST MIDSTREAM

WELL ANALYSIS COMPARISON

Lease: Milagro Plant Train 2 TUBING 07/23/2025

Stn. No.: 33700-10560

Mtr. No.:

Smpl Date:	07/15/2025	01/10/2024	10/30/2023	03/06/2023	08/11/2022	01/13/2022	09/14/2021
Test Date:	07/16/2025	01/10/2024	11/02/2023	03/07/2023	08/12/2022	01/18/2022	09/24/2021
Run No:	HM20250080	HM20240002	HM20230262	HM20230007	HM20220072	HM20220002	HM2021075
Nitrogen:	0.1215	0.0662	0.0137	0.0802	0.0675	0.1005	0.1347
CO2:	1.3925	0.0000	0.0000	0.0289	0.0056	0.0033	1.6203
Methane:	97.0833	98.7530	98.1900	98.4745	98.2028	98.3047	96.5258
Ethane:	1.0737	0.9292	1.1763	1.0821	1.3291	1.2395	1.3019
Propane:	0.2333	0.1889	0.2609	0.2618	0.2939	0.2620	0.2960
I-Butane:	0.0371	0.0328	0.0379	0.0320	0.0460	0.0394	0.0384
N-Butane:	0.0356	0.0240	0.0341	0.0238	0.0407	0.0348	0.0544
2,2 dmc3:	0.0000	0.0000	0.2518	0.0000	0.0000	0.0000	0.0000
I-Pentane:	0.0068	0.0041	0.0120	0.0103	0.0088	0.0091	0.0085
N-Pentane:	0.0082	0.0018	0.0095	0.0064	0.0058	0.0037	0.0052
Neohexane:	0.0000	0.0000	0.0002	0.0000	0.0000	0.0001	0.0000
2-3-Cyclopentane:	0.0002	0.0000	0.0003	0.0000	0.0000	0.0001	0.0003
2-Methylpentane:	0.0002	0.0000	0.0003	0.0000	0.0000	0.0001	0.0003
3-Methylpentane:	0.0012	0.0000	0.0019	0.0000	0.0000	0.0005	0.0022
C6:	0.0005	0.0000	0.0007	0.0000	0.0000	0.0002	0.0010
Methylcyclopentane:	0.0013	0.0000	0.0020	0.0000	0.0000	0.0004	0.0022
Benzene:	0.0005	0.0000	0.0015	0.0000	0.0000	0.0003	0.0016
Cyclohexane:	0.0000	0.0000	0.0001	0.0000	0.0000	0.0000	0.0003
2-Methylhexane:	0.0005	0.0000	0.0008	0.0000	0.0000	0.0002	0.0009
3-Methylhexane:	0.0000	0.0000	0.0003	0.0000	0.0000	0.0001	0.0001
2-2-4-i-heptanes:	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Heptane:	0.0001	0.0000	0.0001	0.0000	0.0000	0.0000	0.0000
Methylcyclohexane:	0.0001	0.0000	0.0002	0.0000	0.0000	0.0000	0.0003
Toluene:	0.0006	0.0000	0.0009	0.0000	0.0000	0.0002	0.0010
2-Methylheptane:	0.0012	0.0000	0.0019	0.0000	0.0000	0.0004	0.0019
4-Methylheptane:	0.0003	0.0000	0.0000	0.0000	0.0000	0.0001	0.0005
i-Octanes:	0.0002	0.0000	0.0002	0.0000	0.0000	0.0001	0.0005
Octane:	0.0001	0.0000	0.0003	0.0000	0.0000	0.0000	0.0002
Ethylbenzene:	0.0001	0.0000	0.0005	0.0000	0.0000	0.0000	0.0003
m, p Xylene:	0.0003	0.0000	0.0004	0.0000	0.0000	0.0001	0.0005
o Xylene (& 2,2,4	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
i-C9:	0.0001	0.0000	0.0003	0.0000	0.0000	0.0000	0.0002
C9:	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
i-C10:	0.0001	0.0000	0.0001	0.0000	0.0000	0.0000	0.0001
C10:	0.0001	0.0000	0.0000	0.0000	0.0000	0.0000	0.0002
i-C11:	0.0001	0.0000	0.0003	0.0000	0.0000	0.0000	0.0000
C11:	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001
C12P:	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Helium:	0.0000	0.0000	0.0002	0.0000	0.0000	0.0000	0.0001
BTU:	0.0001	0.0000	0.0001	0.0000	0.0000	0.0000	0.0000
GPM:	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
SPG:	1013.3	1025.1	1037.6	1027.3	1030.7	1029.0	1014.2
	17.1240	17.1010	17.1020	17.1260	17.1570	17.1410	17.1590
	0.5779	0.5623	0.5699	0.5644	0.5660	0.5653	0.5823

HARVEST MIDSTREAM

WELL ANALYSIS COMPARISON

Lease: Milagro Plant Train 2 TUBING 07/23/2025

Stn. No.: 33700-10560

Mtr. No.:

02/01/2021	11/13/2020
02/03/2021	11/18/2020
HM210003	HM200096
0.0642	0.0557
0.0330	0.0148
98.1943	98.2933
1.2934	1.2547
0.2899	0.2736
0.0482	0.0407
0.0403	0.0451
0.0000	0.0000
0.0110	0.0080
0.0053	0.0037
0.0001	0.0001
0.0005	0.0002
0.0005	0.0002
0.0031	0.0014
0.0010	0.0002
0.0033	0.0014
0.0021	0.0010
0.0004	0.0002
0.0013	0.0006
0.0004	0.0002
0.0000	0.0000
0.0001	0.0001
0.0003	0.0001
0.0014	0.0006
0.0024	0.0014
0.0007	0.0006
0.0004	0.0003
0.0002	0.0001
0.0002	0.0002
0.0005	0.0003
0.0000	0.0000
0.0004	0.0004
0.0001	0.0000
0.0003	0.0001
0.0002	0.0001
0.0004	0.0001
0.0001	0.0000
0.0000	0.0000
0.0000	0.0000
0.0000	0.0000
0.0000	0.0000
1031.0	1030.2
17.1620	17.1510
0.5667	0.5657

2030 Afton Place, Farmington, NM 87401 · (505) 325-6622

GAS ANALYSIS SERVICE

C6+ ☐ C6+w/H2S ☐ C9+ ☐ C12+ BTEX ☐
Helium ☐ Sulfurs ☐ Ext. Liquid ☐
Other _____

Date 7-15-2025
Time 10:33 ☒AM ☐PM

Sampled By:(Co.) Harvest midstream
Sampled by:(Person) Harold Jones
Company: Harvest midstream
Well Name: T-2 DEHY Inlet
API #:
Lease#:
County: SJ State: NM Formation:

Well Flowing: ☑ Yes ☐ No
Heat Trace: ☐ Yes ☑ No
Flow Pressure (PSIG): 873
Flow Temp (°F): 84.6
Ambient Temp (°F): 81
Flow Rate (MCF/D): 102

Source: ☐ Meter Run ☑ Tubing ☐ Casing ☐ Bradenhead ☐ Other
Sample Type: ☑ Spot ☐ Composite Sample Method: ☑ Purge & Fill ☐ Other
Meter Number:
Cylinder Number: 0515

Contact: Eric Hall ehall@Harvestmidstream.com
Remarks: 505-486-4826

333700-105100 HM2025 80

2030 Afton Place
Farmington, NM 87401
(505) 325-6622

Analysis No: HM20250120
Cust No: 33700-10615

Well/Lease Information

Customer Name:	HARVEST MIDSTREAM	Source:	TUBING
Well Name:	Milagro Plant Train 3	Well Flowing:	Y
County/State:		Pressure:	880 PSIG
Location:		Flow Temp:	92 DEG. F
Lease/PA/CA:		Ambient Temp:	72 DEG. F
Formation:		Flow Rate:	115 MCF/D
Cust. Stn. No.:		Sample Method:	
		Sample Date:	10/08/2025
		Sample Time:	11.15 AM
		Sampled By:	Donald A.
Heat Trace:	N	Sampled by (CO):	Harvest
Remarks:	Calculated Molecular Weight:16.5406		

Analysis

Component:	Mole%:	Unormalized %:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	0.0725	0.0722	0.0080	0.00	0.0007
CO2	0.7666	0.7637	0.1310	0.00	0.0116
Methane	97.6928	97.3182	16.5920	986.70	0.5411
Ethane	1.1285	1.1242	0.3020	19.97	0.0117
Propane	0.2480	0.2470	0.0680	6.24	0.0038
Iso-Butane	0.0348	0.0347	0.0110	1.13	0.0007
N-Butane	0.0309	0.0308	0.0100	1.01	0.0006
Neopentane 2,2 dmc3	0.0000	0.0000	0.0000	0.00	0.0000
I-Pentane	0.0046	0.0046	0.0020	0.18	0.0001
N-Pentane	0.0051	0.0051	0.0020	0.21	0.0001
Neohexane	0.0001	N/R	0.0000	0.00	0.0000
2-3-Dimethylbutane	0.0003	N/R	0.0000	0.01	0.0000
Cyclopentane	0.0003	N/R	0.0000	0.01	0.0000
2-Methylpentane	0.0019	N/R	0.0010	0.09	0.0001
3-Methylpentane	0.0007	N/R	0.0000	0.03	0.0000
C6	0.0021	0.0161	0.0010	0.10	0.0001
Methylcyclopentane	0.0012	N/R	0.0000	0.05	0.0000
Benzene	0.0002	N/R	0.0000	0.01	0.0000
Cyclohexane	0.0007	N/R	0.0000	0.03	0.0000
2-Methylhexane	0.0003	N/R	0.0000	0.02	0.0000
3-Methylhexane	0.0001	N/R	0.0000	0.01	0.0000
2-2-4-Trimethylpentane	0.0001	N/R	0.0000	0.01	0.0000
i-heptanes	0.0002	N/R	0.0000	0.01	0.0000
Heptane	0.0011	N/R	0.0010	0.06	0.0000

Methylcyclohexane	0.0020	N/R	0.0010	0.10	0.0001
Toluene	0.0008	N/R	0.0000	0.04	0.0000
2-Methylheptane	0.0004	N/R	0.0000	0.02	0.0000
4-Methylheptane	0.0002	N/R	0.0000	0.01	0.0000
i-Octanes	0.0003	N/R	0.0000	0.02	0.0000
Octane	0.0007	N/R	0.0000	0.04	0.0000
Ethylbenzene	0.0001	N/R	0.0000	0.01	0.0000
m, p Xylene	0.0005	N/R	0.0000	0.03	0.0000
o Xylene (& 2,2,4 tmc7)	0.0001	N/R	0.0000	0.01	0.0000
i-C9	0.0004	N/R	0.0000	0.03	0.0000
C9	0.0003	N/R	0.0000	0.02	0.0000
i-C10	0.0006	N/R	0.0000	0.04	0.0000
C10	0.0002	N/R	0.0000	0.02	0.0000
i-C11	0.0000	N/R	0.0000	0.00	0.0000
C11	0.0001	N/R	0.0000	0.01	0.0000
C12P	0.0002	N/R	0.0000	0.02	0.0000
Helium	0.0000	N/R	0.0000	0.00	0.0000
Total	100.00	99.617	17.130	1016.29	0.5711

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY
**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBLITY FACTOR (1/Z):	1.0021	CYLINDER #:	FLA 1322
BTU/CU.FT IDEAL:	1018.6	CYLINDER PRESSURE:	511 PSIG
BTU/CU.FT (DRY) CORRECTED FOR (1/Z):	1020.8	ANALYSIS DATE:	10/14/2025
BTU/CU.FT (WET) CORRECTED FOR (1/Z):	1003.0	ANALYIS TIME:	10:48:35 AM
DRY BTU @ 15.025:	1041.2	ANALYSIS RUN BY:	ELAINE MORRISON
REAL SPECIFIC GRAVITY:	0.572		

GPM, BTU, and SPG calculations as shown above are based on current GPA constants.
GPA Standard: GPA 2286-14
GC: SRI Instruments 8610 **Last Cal/Verify: 10/15/2025**
GC Method: C12+BTEX Gas

HARVEST MIDSTREAM

WELL ANALYSIS COMPARISON

Lease: Milagro Plant Train 3 TUBING 10/15/2025

Stn. No.: 33700-10615

Mtr. No.:

Smpl Date:	10/08/2025	01/10/2024	10/30/2023	03/06/2023	08/11/2022	01/13/2022	09/14/2021
Test Date:	10/14/2025	01/10/2024	11/02/2023	03/07/2023	08/12/2022	01/18/2022	09/24/2021
Run No:	HM20250120	HM20240001	HM20230261	HM20230008	HM20220074	HM20220003	HM2021076
Nitrogen:	0.0725	0.0648	0.0078	0.0807	0.0534	0.2523	0.2008
CO2:	0.7666	0.8127	1.0592	0.8687	1.1138	1.1087	1.1126
Methane:	97.6928	97.9474	97.2186	97.5949	97.1131	97.0982	96.9731
Ethane:	1.1285	0.9300	1.1628	1.1421	1.3198	1.1864	1.2939
Propane:	0.2480	0.1929	0.4588	0.2314	0.2949	0.2620	0.2926
I-Butane:	0.0348	0.0238	0.0490	0.0342	0.0434	0.0355	0.0386
N-Butane:	0.0309	0.0225	0.0272	0.0355	0.0384	0.0310	0.0508
2,2 dmc3:	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
I-Pentane:	0.0046	0.0046	0.0067	0.0070	0.0093	0.0065	0.0091
N-Pentane:	0.0051	0.0013	0.0028	0.0054	0.0047	0.0071	0.0052
Neohexane:	0.0001	0.0000	0.0001	0.0000	0.0001	0.0001	0.0004
2-3-Cyclopentane:	0.0003	0.0000	0.0002	0.0000	0.0002	0.0003	0.0005
2-Methylpentane:	0.0003	0.0000	0.0002	0.0000	0.0002	0.0003	0.0006
3-Methylpentane:	0.0019	0.0000	0.0010	0.0000	0.0013	0.0019	0.0036
C6:	0.0007	0.0000	0.0004	0.0000	0.0004	0.0002	0.0015
Methylcyclopentane:	0.0021	0.0000	0.0011	0.0000	0.0014	0.0019	0.0034
Benzene:	0.0012	0.0000	0.0008	0.0000	0.0010	0.0013	0.0023
Cyclohexane:	0.0002	0.0000	0.0000	0.0000	0.0001	0.0002	0.0001
2-Methylhexane:	0.0007	0.0000	0.0004	0.0000	0.0006	0.0009	0.0015
3-Methylhexane:	0.0003	0.0000	0.0002	0.0000	0.0002	0.0001	0.0006
2-2-4-i-heptanes:	0.0000	0.0000	0.0001	0.0000	0.0000	0.0000	0.0000
Heptane:	0.0001	0.0000	0.0001	0.0000	0.0001	0.0001	0.0000
Methylcyclohexane:	0.0002	0.0000	0.0001	0.0000	0.0001	0.0002	0.0004
Toluene:	0.0011	0.0000	0.0005	0.0000	0.0006	0.0008	0.0015
2-Methylheptane:	0.0020	0.0000	0.0011	0.0000	0.0013	0.0017	0.0032
4-Methylheptane:	0.0008	0.0000	0.0000	0.0000	0.0002	0.0004	0.0006
i-Octanes:	0.0004	0.0000	0.0001	0.0000	0.0002	0.0003	0.0007
Octane:	0.0002	0.0000	0.0002	0.0000	0.0001	0.0002	0.0003
Ethylbenzene:	0.0003	0.0000	0.0000	0.0000	0.0002	0.0002	0.0004
m, p Xylene:	0.0007	0.0000	0.0000	0.0000	0.0003	0.0004	0.0008
o Xylene (& 2,2,4 i-C9:	0.0001	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
C9:	0.0005	0.0000	0.0000	0.0000	0.0001	0.0002	0.0001
i-C10:	0.0001	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
C10:	0.0004	0.0000	0.0000	0.0000	0.0000	0.0001	0.0000
i-C11:	0.0003	0.0000	0.0000	0.0000	0.0001	0.0001	0.0002
C11:	0.0006	0.0000	0.0002	0.0000	0.0000	0.0000	0.0000
C12P:	0.0002	0.0000	0.0000	0.0000	0.0000	0.0000	0.0002
Helium:	0.0000	0.0000	0.0001	0.0000	0.0000	0.0000	0.0000
BTU:	0.0001	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001
GPM:	0.0002	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001
SPG:	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	1020.8	1016.8	1021.8	1019.0	1019.8	1016.1	1018.8
	17.1330	17.1010	17.1640	17.1310	17.1600	17.1320	17.1540
	0.5720	0.5701	0.5767	0.5726	0.5768	0.5765	0.5778

2030 Afton Place, Farmington, NM 87401 - (505) 325-6622 5) 1#

GAS ANALYSIS SERVICE

C6+ ☐ C6+w/H2S ☐ C9+ ☐ C12+ BTEX ☐

Helium ☐ Sulfurs ☐ Ext. Liquid ☐

Other _____ Date 10-8-25

Sampled By:(Co.) HARVEST Mid STREAM Time 11:15 ☒AM ☐PM

Sampled by:(Person) Donald E Archuleta Well Flowing: ☒ Yes ☐ No

Company: MILAGRO PLANT HARVEST Mid STREAM Heat Trace: ☐ Yes ☒ No

Well Name: Semi-annual Dehy Inlet Train 3 Flow Pressure (PSIG): 880

API #: _____ Flow Temp (°F): 92°F

Lease#: _____ Ambient Temp (°F): 72°F

County: SAN JUAN State: NM Formation: _____ Flow Rate (MCF/D): 115mmCFD

Source: ☐ Meter Run ☒ Tubing ☐ Casing ☐ Bradenhead ☐ Other _____

Sample Type: ☐ Spot ☐ Composite Sample Method: ☐ Purge & Fill ☐ Other _____

Meter Number: Dehy Train 3 Cylinder Number: FCA 1322

Contact: Donald E Archuleta 505-609-3424

Remarks: Extended

33700-10615 HM20250120

2030 Afton Place
Farmington, NM 87401
(505) 325-6622

Analysis No: HM20250079
Cust No: 33700-10580

Well/Lease Information

Customer Name:	HARVEST MIDSTREAM	Source:	TUBING
Well Name:	Milagro Plant Train 5 Dehy	Well Flowing:	Y
County/State:		Pressure:	867.2 PSIG
Location:		Flow Temp:	85 DEG. F
Lease/PA/CA:		Ambient Temp:	81 DEG. F
Formation:		Flow Rate:	78.1 MCF/D
Cust. Stn. No.:		Sample Method:	Purge & Fill
		Sample Date:	07/15/2025
		Sample Time:	10.47 AM
		Sampled By:	Harold J.
Heat Trace:	N	Sampled by (CO):	Harvest Mid
Remarks:	Calculated Molecular Weight: 17.2724		

Analysis

Component:	Mole%:	Unormalized %:	**GPM:	*BTU:	*SP Gravity:
Nitrogen	0.1742	0.1742	0.0190	0.00	0.0017
CO2	3.4036	3.4044	0.5820	0.00	0.0517
Methane	95.0236	95.0446	16.1410	959.74	0.5263
Ethane	1.0760	1.0762	0.2880	19.04	0.0112
Propane	0.2299	0.2300	0.0630	5.79	0.0035
Iso-Butane	0.0425	0.0425	0.0140	1.38	0.0009
N-Butane	0.0346	0.0346	0.0110	1.13	0.0007
Neopentane 2,2 dmc3	0.0000	0.0000	0.0000	0.00	0.0000
I-Pentane	0.0095	0.0095	0.0030	0.38	0.0002
N-Pentane	0.0061	0.0061	0.0020	0.24	0.0002
Neohexane	0.0000	N/R	0.0000	0.00	0.0000
2-3-Dimethylbutane	0.0000	N/R	0.0000	0.00	0.0000
Cyclopentane	0.0000	N/R	0.0000	0.00	0.0000
2-Methylpentane	0.0000	N/R	0.0000	0.00	0.0000
3-Methylpentane	0.0000	N/R	0.0000	0.00	0.0000
C6	0.0000	0.0000	0.0000	0.00	0.0000
Methylcyclopentane	0.0000	N/R	0.0000	0.00	0.0000
Benzene	0.0000	N/R	0.0000	0.00	0.0000
Cyclohexane	0.0000	N/R	0.0000	0.00	0.0000
2-Methylhexane	0.0000	N/R	0.0000	0.00	0.0000
3-Methylhexane	0.0000	N/R	0.0000	0.00	0.0000
2-2-4-Trimethylpentane	0.0000	N/R	0.0000	0.00	0.0000
i-heptanes	0.0000	N/R	0.0000	0.00	0.0000
Heptane	0.0000	N/R	0.0000	0.00	0.0000

Methylcyclohexane	0.0000	N/R	0.0000	0.00	0.0000
Toluene	0.0000	N/R	0.0000	0.00	0.0000
2-Methylheptane	0.0000	N/R	0.0000	0.00	0.0000
4-Methylheptane	0.0000	N/R	0.0000	0.00	0.0000
i-Octanes	0.0000	N/R	0.0000	0.00	0.0000
Octane	0.0000	N/R	0.0000	0.00	0.0000
Ethylbenzene	0.0000	N/R	0.0000	0.00	0.0000
m, p Xylene	0.0000	N/R	0.0000	0.00	0.0000
o Xylene (& 2,2,4 tmc7)	0.0000	N/R	0.0000	0.00	0.0000
i-C9	0.0000	N/R	0.0000	0.00	0.0000
C9	0.0000	N/R	0.0000	0.00	0.0000
i-C10	0.0000	N/R	0.0000	0.00	0.0000
C10	0.0000	N/R	0.0000	0.00	0.0000
i-C11	0.0000	N/R	0.0000	0.00	0.0000
C11	0.0000	N/R	0.0000	0.00	0.0000
C12P	0.0000	N/R	0.0000	0.00	0.0000
Helium	0.0000	N/R	0.0000	0.00	0.0000
Total	100.00	100.022	17.123	987.70	0.5963

* @ 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY
**@ 14.730 PSIA & 60 DEG. F.

COMPRESSIBLITY FACTOR (1/Z):	1.0022	CYLINDER #:	1469
BTU/CU.FT IDEAL:	990.0	CYLINDER PRESSURE:	867 PSIG
BTU/CU.FT (DRY) CORRECTED FOR (1/Z):	992.1	ANALYSIS DATE:	07/16/2025
BTU/CU.FT (WET) CORRECTED FOR (1/Z):	974.8	ANALYIS TIME:	10:48:12 AM
DRY BTU @ 15.025:	1012.0	ANALYSIS RUN BY:	ELAINE MORRISON
REAL SPECIFIC GRAVITY:	0.5974		

GPM, BTU, and SPG calculations as shown above are based on current GPA constants.
GPA Standard: GPA 2286-14
GC: SRI Instruments 8610 **Last Cal/Verify: 07/23/2025**
GC Method: C12+BTEX Gas

HARVEST MIDSTREAM

WELL ANALYSIS COMPARISON

Lease: Milagro Plant Train 5 Dehy TUBING 07/23/2025

Stn. No.: 33700-10580

Mtr. No.:

Smpl Date:	07/15/2025	01/10/2024	10/30/2023	03/06/2023	08/11/2022	01/13/2022	09/14/2021
Test Date:	07/16/2025	01/11/2024	11/03/2023	03/07/2023	08/12/2022	01/18/2022	09/24/2021
Run No:	HM20250079	HM20240003	HM20230263	HM20230006	HM20220075	HM20220005	HM2021078
Nitrogen:	0.1742	0.0701	0.0647	0.0927	0.0655	0.1842	0.2111
CO2:	3.4036	0.0109	2.4252	2.4278	0.0000	3.8786	3.6417
Methane:	95.0236	98.7452	95.9629	96.0607	98.2274	94.4293	94.5027
Ethane:	1.0760	0.9266	1.1753	1.0692	1.3201	1.1855	1.2519
Propane:	0.2299	0.1863	0.2686	0.2299	0.2870	0.2580	0.2822
I-Butane:	0.0425	0.0268	0.0401	0.0384	0.0465	0.0085	0.0356
N-Butane:	0.0346	0.0238	0.0375	0.0442	0.0345	0.0316	0.0492
2,2 dmc3:	0.0000	0.0000	0.0000	0.0000	0.0000	0.0008	0.0000
I-Pentane:	0.0095	0.0057	0.0111	0.0139	0.0102	0.0064	0.0099
N-Pentane:	0.0061	0.0046	0.0077	0.0100	0.0088	0.0040	0.0054
Neohexane:	0.0000	0.0000	0.0001	0.0000	0.0000	0.0003	0.0002
2-3-Cyclopentane:	0.0000	0.0000	0.0001	0.0002	0.0000	0.0003	0.0002
2-Methylpentane:	0.0000	0.0000	0.0001	0.0002	0.0000	0.0003	0.0002
3-Methylpentane:	0.0000	0.0000	0.0008	0.0015	0.0000	0.0021	0.0015
C6:	0.0000	0.0000	0.0003	0.0007	0.0000	0.0008	0.0006
Methylcyclopentane:	0.0000	0.0000	0.0009	0.0016	0.0000	0.0020	0.0015
Benzene:	0.0000	0.0000	0.0005	0.0012	0.0000	0.0002	0.0010
Cyclohexane:	0.0000	0.0000	0.0001	0.0002	0.0000	0.0003	0.0002
2-Methylhexane:	0.0000	0.0000	0.0003	0.0007	0.0000	0.0009	0.0006
3-Methylhexane:	0.0000	0.0000	0.0001	0.0002	0.0000	0.0003	0.0002
2-2-4-i-heptanes:	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Heptane:	0.0000	0.0000	0.0000	0.0001	0.0000	0.0001	0.0001
Methylcyclohexane:	0.0000	0.0000	0.0001	0.0002	0.0000	0.0002	0.0002
Toluene:	0.0000	0.0000	0.0006	0.0010	0.0000	0.0008	0.0006
2-Methylheptane:	0.0000	0.0000	0.0008	0.0019	0.0000	0.0018	0.0013
4-Methylheptane:	0.0000	0.0000	0.0003	0.0006	0.0000	0.0007	0.0004
i-Octanes:	0.0000	0.0000	0.0001	0.0003	0.0000	0.0004	0.0003
Octane:	0.0000	0.0000	0.0001	0.0001	0.0000	0.0002	0.0001
Ethylbenzene:	0.0000	0.0000	0.0001	0.0002	0.0000	0.0002	0.0001
m, p Xylene:	0.0000	0.0000	0.0003	0.0005	0.0000	0.0004	0.0003
o Xylene (& 2,2,4	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
i-C9:	0.0000	0.0000	0.0003	0.0004	0.0000	0.0003	0.0002
C9:	0.0000	0.0000	0.0001	0.0001	0.0000	0.0000	0.0000
i-C10:	0.0000	0.0000	0.0003	0.0003	0.0000	0.0001	0.0000
C10:	0.0000	0.0000	0.0001	0.0002	0.0000	0.0001	0.0001
i-C11:	0.0000	0.0000	0.0002	0.0005	0.0000	0.0000	0.0000
C11:	0.0000	0.0000	0.0000	0.0001	0.0000	0.0001	0.0001
C12P:	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Helium:	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
BTU:	992.1	1024.9	1004.8	1003.7	1030.6	988.1	992.1
GPM:	17.1230	17.1000	17.1450	17.1310	17.1560	17.1340	17.1500
SPG:	0.5974	0.5624	0.5886	0.5882	0.5659	0.6026	0.6016

HARVEST MIDSTREAM

WELL ANALYSIS COMPARISON

Lease: Milagro Plant Train 5 Dehy TUBING 07/23/2025

Stn. No.: 33700-10580

Mtr. No.:

	02/01/2021
	02/03/2021
	HM210005
	0.0634
	3.4851
	94.7789
	1.2413
	0.2784
	0.0742
	0.0500
	0.0000
	0.0114
	0.0045
	0.0001
	0.0003
	0.0003
	0.0021
	0.0002
	0.0022
	0.0013
	0.0003
	0.0009
	0.0003
	0.0000
	0.0001
	0.0002
	0.0009
	0.0016
	0.0005
	0.0003
	0.0001
	0.0001
	0.0003
	0.0000
	0.0002
	0.0000
	0.0001
	0.0001
	0.0001
	0.0000
	0.0000
	0.0000
	0.0000
	0.0000
	996.0
	17.1640
	0.6001

8677#

2030 Afton Place, Farmington, NM 87401 · (505) 325-6622

GAS ANALYSIS SERVICE

C6+ ☐ C6+w/H2S ☐ C9+ ☐ C12+ BTEX ☐

Helium ☐ SulFyrs ☐ Ext. Liquid ☐

Other _____ Date 7-15-2025 ☑AM ☐PM

Sampled By:(Co.) Harvest midstream Time 10:47

Sampled by:(Person) Harold Jones Well Flowing: ☑ Yes ☐ No

Company: Harvest midstream Heat Trace: ☐ Yes ☑ No

Well Name: T-5 DEHY INLET Flow Pressure (PSIG): 862.2

API #: _____ Flow Temp (°F): 85

Lease#: _____ Ambient Temp (°F): 81

County: SJ State: NM *Formation: _____ Flow Rate (MCF/D): ~~78~~ 78.1

Source ☐ Meter Run ☑ Tubing ☐ Casing ☐ Bradenhead ☐ Other _____

Sample Type ☑ Spot ☐ Composite Sample Method ☑ Purge & Fill ☐ Other _____

Meter Number: _____ Cylinder Number: 1469

Contact: Eric Hall ehall@Harvestmidstream.com

Remarks: 505-486-4826

33700-10580 HM20250079

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

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

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

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

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

Section 7

Subsection 2 – Information Used to Determine Emissions for All Other Units

---

For clarity, this Subsection 2 contains information used to determine emissions for all other units at this facility that were not affected by this application (i.e. all units except for Units 2A, 9b, 10b, 11b, 14, 15, 16a, 16b, 17, 18, 19, F1, SSM1, and SSM2). For information pertinent to the units added or modified with this application, please refer to Subsection 1.

Table 3.4-1. GASEOUS EMISSION FACTORS FOR LARGE STATIONARY DIESEL AND ALL STATIONARY DUAL-FUEL ENGINES[a]

Pollutant	Diesel Fuel (SCC 2-02-004-01)			Dual Fuel[b] (SCC 2-02-004-02)		
	Emission Factor (lb/hp-hr) (power output)	Emission Factor (lb/MMBtu) (fuel input)	EMISSION FACTOR RATING	Emission Factor (lb/hp-hr) (power output)	Emission Factor (lb/MMBtu) (fuel input)	EMISSION FACTOR RATING
NO_x						
Uncontrolled	0.024	3.2	B	0.018	2.7	D
Controlled	0.013[c]	1.9[c]	B	ND	ND	NA
CO	5.5 E-03	0.85	C	7.5 E-03	1.16	D
SO_x[d]	8.09 E-03S_1	1.01S_1	B	4.06 E-04S_1 + 9.57 E-03S_2	0.05S_1 + 0.895S_2	B
CO_2[e]	1.16	165	B	0.772	110	B
PM	0.0007[c]	0.1[c]	B	ND	ND	NA
TOC (as CH_4)	7.05 E-04	0.09	C	5.29 E-03	0.8	D
Methane	f	f	E	3.97 E-03	0.6	E
Nonmethane	f	f	E	1.32 E-03	0.2[g]	E

[a] Based on uncontrolled levels for each fuel, from References 2,6-7. When necessary, the average heating value of diesel was assumed to be 19,300 Btu/lb with a density of 7.1 lb/gallon. The power output and fuel input values were averaged independently from each other, because of the use of actual brake-specific fuel consumption (BSFC) values for each data point and of the use of data possibly sufficient to calculate only 1 of the 2 emission factors (e. g., enough information to calculate lb/MMBtu, but not lb/hp-hr). Factors are based on averages across all manufacturers and duty cycles. The actual emissions from a particular engine or manufacturer could vary considerably from these levels. To convert from lb/hp-hr to kg/kw-hr, multiply by 0.608. To convert from lb/MMBtu to ng/J, multiply by 430. SCC = Source Classification Code.

[b] Dual fuel assumes 95% natural gas and 5% diesel fuel.

[c] References 8-26. Controlled NO_x is by ignition timing retard.

[d] Assumes that all sulfur in the fuel is converted to SO_2. S_1 = % sulfur in fuel oil; S_2 = % sulfur in natural gas. For example, if sulfer content is 1.5%, then S = 1.5.

[e] Assumes 100% conversion of carbon in fuel to CO_2 with 87 weight % carbon in diesel, 70 weight % carbon in natural gas, dual-fuel mixture of 5% diesel with 95% natural gas, average BSFC of 7,000 Btu/hp-hr, diesel heating value of 19,300 Btu/lb, and natural gas heating value of 1050 Btu/scf.

[f] Based on data from 1 engine, TOC is by weight 9% methane and 91% nonmethane.

[g] Assumes that nonmethane organic compounds are 25% of TOC emissions from dual-fuel engines. Molecular weight of nonmethane gas stream is assumed to be that of methane.

Table 3.4-3. SPECIATED ORGANIC COMPOUND EMISSION FACTORS FOR LARGE UNCONTROLLED STATIONARY DIESEL ENGINES[a]

EMISSION FACTOR RATING: E

Pollutant	Emission Factor (lb/MMBtu) (fuel input)
Benzene[b]	7.76 E-04
Toluene[b]	2.81 E-04
Xylenes[b]	1.93 E-04
Propylene	2.79 E-03
Formaldehyde[b]	7.89 E-05
Acetaldehyde[b]	2.52 E-05
Acrolein[b]	7.88 E-06

[a]Based on 1 uncontrolled diesel engine from Reference 7. Source Classification Code 2-02-004-01. Not enough information to calculate the output-specific emission factors of lb/hp-hr. To convert from lb/MMBtu to ng/J, multiply by 430.
[b]Hazardous air pollutant listed in the *Clean Air Act*.

LOCKE AMI
A BOWEN COMPANY

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15705 S Hwy 169 / Olathe, KS 66062
913 782 8500 ph / 913 782 8502 fax

Proposal		Page:	1 of	8
To:	**Harvest Midstream**	Date:	06/07/24	
	Nate Work / Brian Farley	Quote#:	240530R1	
	cc:	CU#:	Harvest Midstream Milagro Boiler 1 Burner	
		Engineer:	Brian Mohart	

Project: Boiler 1 Burner Replacement
Quote #: 240530R1

Item #1 BLR 1 Burner Replacement

Locke AMI will provide all engineering, demo of existing equipment, provide new equipment, installation of new equipment, and commissioning for the following:

- BLR 1 Zeeco Low NOx GB 30 ppm burner
  - Existing gas trains will be reused.
  - Burner selection based on 14% FGR to achieve 30 ppm NOx.
  - One retractable direct spark high energy Class 3 special igniter
  - Physical air flow model – the flow model would determine if modifications to burner/windbox baffles would be required.
  - Two Zeeco Proflame UV scanners with ball swivel mounts. 5 scfm at 5" w.c. above furnace pressure is required for purging/cooling of the scanner.
  - Burner front wall refractory – the existing burner front wall would be demolished and replaced to match the new burner.
  - Gas piping will be reconfigured to connect to the new burner inlet.
  - Ductwork modifications – a new fresh air damper, transition ducts, new rain hood, supports and foundations are included. Damper by Fox Damper with Kinetrol pneumatic actuator. Actuator to fail in position on loss of air or electric signal.
  - Replacement flue gas recirculation ductwork with fabric expansion joint, modulating damper and supports. Damper by Fox Damper with Jflow Controls pneumatic actuator. Actuator to fail in position on loss of air or electric signal.
  - Steam coil air heater (SCAH) package with coil, control valves, temperature transmitters, steam traps, etc. Steam coil by HICO to utilize carbon steel tubing. The coil will be designed to ASME Section VIII-1 and be sized to use 60 psig steam at 340-370 °F with a Maxumim Allowable Working Pressure of 75 psig. The control valve will be Fisher and the temperature transmitter will be Rosemount.
  - Steam piping from a tie-in point near the boiler to the new SCAH and condensate piping out of the SCAH over to a tie-in point near the boiler.
  - BMS / CCS control logic – existing hardware, cabinets, VFD's, etc. will be re-used. Locke AMI will provide new software for the BMS & CCS. The updated system will match the new equipment provided and meet NFPA 85 requirements. A new data file for communication to and remote control thru the DCS is included.

Emissions Guarantee:

Locke AMI can guarantee the following emissions for boiler #1:

MINIMUM GAS PERFORMANCE GUARANTEES FOR BOILER #1	
FUEL DESIGNATION	NATURAL GAS
BOILER, #	#1
NOx, ppmv (lb/mmBtu)	30 (.036)
CO, ppmv (lb/mmBtu)	100 (.073)
GUARANTEED VOC, LB/MMBtu	0.004
GUARANTEED PM, LB/MMBtu	0.005

1. Locke AMI does not guarantee SOx emissions since these are stoichiometrically related to sulfur compounds in the fuels and the equilibrium conditions in the furnace.
2. Locke AMI takes exception to providing NOx emission guarantees for any fuel gas compositions containing ammonia (NH_3) and hydrogen cyanide (HCN).
3. Emissions guarantees stated above encompass measured values rounded to the significant digit provided.
4. The emissions guarantees are for operation at the specific conditions stated.
5. Locke AMI requires Boiler 1 top drum seals to be air-tight.
6. All emissions guarantees are based on 3 mm deposition maximum on all waterwall surfaces. Any further thickness on waterwalls will increase furnace temperatures, thus NOx will increase.
7. Locke AMI has not provided an opacity guarantee.
8. Emissions stated above are applicable for boiler loading from 25% to 100% of MCR, unless noted otherwise above, at steady state conditions.
9. All ppm values stated above (where applicable) are corrected to 3.0% O_2 dry basis.
10. The burner MCR excess air levels stated herein are expected operating levels and may require slight adjustment during commissioning to optimize combustion and achieve performance criteria stated herein (i.e. NOx and/or CO emissions).
11. All emissions provided above are additive to any inlet conditions.
12. The above NOx emission levels are based on the ability of the existing boiler equipment to control excess O_2 levels when firing gas at:
    a. The excess air/O_2 levels stated in the technical section of this proposal from 50% to 100% load.
    b. Excess O_2 levels between those stated in the Technical Section of this proposal and not more than 5% O_2 from 25% to 50% load.

New Design Information

A. Burner Gas Performance Data

BURNER GAS PERFORMANCE DATA FOR BOILER #1	
TYPE OF BURNER	30 PPM GB
FUEL DESIGNATION	NATURAL GAS
TOTAL HEAT INPUT, MMBTU/HR (HHV)	137.98
REGISTER DRAFT LOSS, " W.C.	9.2
FLAME LENGTH, FT	14.9
FLAME WIDTH, FT	4.2
BURNER TURNDOWN	10:1
EXCESS AIR	14%
COMBUSTION AIR TEMPERATURE, °F	100
COMBUSTION AIR FLOW, PPH	114,430
TOTAL FUEL FLOW PER BOILER, PPH	5,974
TOTAL FUEL FLOW PER BOILER, SCFH	131,740
FUEL PRESSURE AVAILABLE AT BURNER, PSIG	15.0
% FGR	14%
FGR FLOW, PPH	16,857

B. Site Data

SITE DATA	
SITE LOCATION	BLOOMFIELD, NM
SITE ELEVATION, FASL	5,700
INSTALLATION OF BOILERS #1	INDOOR
INSTALLATION OF BOILERS #5	OUTDOOR
AMBIENT AIR TEMPERATURE, °F	100
ELECTRICAL SUPPLY POWER (ENCLOSURE)	120VAC, 1PHASE, 60Hz
ELECTRICAL I/O POWER (FIELD DEVICES)	24VDC
ELECTRICAL POWER (MOTORS)	460VAC, 3PHASE, 60Hz
BURNER FRONT AREA CLASSIFICATION	NON-HAZARDOUS
GENERAL AREA CLASSIFICATION	NON-HAZARDOUS
JUNCTION BOX ENCLOSURE RATING	NEMA 4X
INSTRUMENT AIR PRESSURE, PSIG	80

C. Fuel Analysis - Gaseous Fuel Constituents

FUEL ANALYSIS		% BY VOLUME
	CONSTITUENT	NATURAL GAS
CH4	METHANE	95.00%
C2H6	ETHANE	2.00%
C3H8	PROPANE	2.50%
N2	NITROGEN	0.50%
	SG vs. Air @ STP	0.59
	HHV - Btu/SCF	1,057

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Date: 10/11/2024

To: Harvest Midstream
1754 Arroyo DR
Bloomfield, NM
Attn: Brian Farley

From: Brian Mohart
Locke AMI LLC

RE: Recirculated Flue Gas Technology Comparison

The existing burner is a staged fuel, staged air burner that uses Fuel gas Induced flue gas Recirculation (FIR). Fuel gas flow is used to induce recirculated flue gas, ducted from the boiler stack, into the burner fuel zone. The presence of the flue gas with the fuel results in delayed combustion which produces a lower adiabatic flame temperature and reduced NOx emissions from thermal NOx. FIR may be coupled with recirculated flue gas that is induced into the FD fan suction. However, this was not done for the existing installation on the Milagro boilers. FIR is a difficult technology to apply correctly and has limited applications as it can be temperamental. FIR is also an older technology that is not typically used for forced draft burners anymore.

Induced Flue Gas Recirculation (FGR) is a technology that mixes recirculated flue gas from the boiler stack with the inlet combustion air. The Forced Draft (FD) fan suction is used to induce the flue gas into the combustion air stream. The reduced oxygen content in this mixture delays combustion thereby reducing adiabatic flame temperature and thus reducing thermal NOx emissions. FGR is widely used in forced draft burners and is a proven technology which has been consistently used to reduce NOx emissions.

While both FIR and FGR technologies use recirculated flue gas from the boiler stack to reduce NOx emissions, FIR uses the fuel flow to induce recirculated flue gas in with the fuel while FGR uses the FD fan suction to induce flue gas into the combustion air stream. FGR is considerably more effective in consistently reducing NOx emissions in the application for Harvest Midstream boilers 1 & 3 burners.

Please advise if you had additional questions regarding the above.

Sincerely,

Brian Mohart
Mechanical Engineer
Office 913-815-1103
Cell 913-488-5918
bmohart@lockeami.com

Williams Milagro Gas Plant
Emissions Data

Fuel Fired		#1 Flash Gas
DESCRIPTION	UNITS	
System Performance		
Steam Flow	Lb/hr	186,500
Steam Pressure	PSIG	400
System Efficiency (HHV)	%	84.16
Total Heat Input (HHV)	MMBtu/Hr	245
Stack Gas Temperature	ºF	276
Stack Gas Flow	Lbs/hr	218,518
Stack Gas Flow	ACFM	70,552
Stack Diameter	in	62
Stack Exit Velocity	Ft/sec	56.1
Furnace Volume	Ft^3	2897.7
Furnace Heat Release Rate	Btu/Hr-Ft3	84,541
Emissions (Based on Low NOx Burner and FGR)		
NOx	Ton/Year	35
	Lbs/MMBtu	0.0326
	PPM (Ref 3% O2)	27
CO	Ton/Year	90
	Lbs/MMBtu	0.0838
	PPM (Ref 3% O2)	113
VOC	Ton/Year	4.5
	Lbs/MMBtu	0.0042
	PPM (Ref 3% O2)	10

Notes:

1. Feedwater temperature to boiler is 230°F.
2. Ambient temperature is 80°F.

Rentech Boiler Systems, Inc.
Abilene Office: 5025 E. Business 20 • Abilene, TX 79601 • Phone: 325-672-3400 • Fax: 325-672-9996
Lincoln Office: 145 North 46th Street • Lincoln, NE 68503 • Phone: 402-474-4242 • Fax: 402-474-4243

Williams Four Corners, LLC : Milagro Gas Treating Plant Rentech Boiler (Unit 20)					
	Run #1	**Run #2**	**Run #3**	***Average***	
Start Time	12:51	14:07	15:25		
Stop Time	13:51	15:07	16:25		
Stack Gas Parameters					
Volumetric Flow (dscfm)	52,152	51,876	52,000	52,009	***Emission Limits***
O_2 (%vd)	4.1	4.3	4.2	4.2	
CO_2 (%vd)	10.1	10.4	10.4	10.3	
H_2O (%vw)	17.7	16.9	17.0	17.2	
Emission Data					
NO_X (lb/hr)	8.0	8.2	8.5	8.2	***19.6***
NO_X (lb/MMBtu)	0.028	0.029	0.030	0.029	***0.08***
NO_X (tpy)	35.0	35.8	37.2	36.0	***85.9***
CO (lb/hr)	0.5	0.5	0.5	0.5	***20.5***
CO (tpy)	2.0	2.2	2.1	2.1	***90.0***

Table 2.1: Test Results Summary – Rentech Boiler (Unit 20)

Part 3. Test Procedures

A. Stack Schematic

A schematic of the sampling locations can be found in ***Appendix 4 – Schematics***.

B. Sampling Train Schematics

Schematics of the sampling trains can be found in ***Appendix 4 – Schematics***.

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

Identification

User Identification:	Milagro T7 (Gasoline)
City:	Bloomfield
State:	New Mexico
Company:	Williams Four Corners LLC
Type of Tank:	Horizontal Tank
Description:	500 Gallon Gasoline Storage Tank

Tank Dimensions

Shell Length (ft):	6.00
Diameter (ft):	4.00
Volume (gallons):	500.00
Turnovers:	24.00
Net Throughput(gal/yr):	12,000.00
Is Tank Heated (y/n):	N
Is Tank Underground (y/n):	N

Paint Characteristics

Shell Color/Shade:	Gray/Light
Shell Condition	Good

Breather Vent Settings

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

Meterological Data used in Emissions Calculations: Albuquerque, New Mexico (Avg Atmospheric Pressure = 12.15 psia)

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

Milagro T7 (Gasoline) - Horizontal Tank
Bloomfield, New Mexico

Mixture/Component	Month	Daily Liquid Surf. Temperature (deg F) Avg.	Min.	Max.	Liquid Bulk Temp (deg F)	Vapor Pressure (psia) Avg.	Min.	Max.	Vapor Mol. Weight.	Liquid Mass Fract.	Vapor Mass Fract.	Mol. Weight	Basis for Vapor Pressure Calculations
Gasoline (RVP 13)	All	64.94	53.24	76.64	58.39	7.6119	6.1130	9.3880	62.0000			92.00	Option 4: RVP=13, ASTM Slope=3

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

Milagro T7 (Gasoline) - Horizontal Tank
Bloomfield, New Mexico

Annual Emission Calcaulations

Standing Losses (lb):	648.5898
Vapor Space Volume (cu ft):	48.0243
Vapor Density (lb/cu ft):	0.0838
Vapor Space Expansion Factor:	0.7975
Vented Vapor Saturation Factor:	0.5534
Tank Vapor Space Volume:	
Vapor Space Volume (cu ft):	48.0243
Tank Diameter (ft):	4.0000
Effective Diameter (ft):	5.5293
Vapor Space Outage (ft):	2.0000
Tank Shell Length (ft):	6.0000
Vapor Density	
Vapor Density (lb/cu ft):	0.0838
Vapor Molecular Weight (lb/lb-mole):	62.0000
Vapor Pressure at Daily Average Liquid Surface Temperature (psia):	7.6119
Daily Avg. Liquid Surface Temp. (deg. R):	524.6094
Daily Average Ambient Temp. (deg. F):	56.1542
Ideal Gas Constant R (psia cuft / (lb-mol-deg R)):	10.731
Liquid Bulk Temperature (deg. R):	518.0642
Tank Paint Solar Absorptance (Shell):	0.5400
Daily Total Solar Insulation Factor (Btu/sqft day):	1,765.3167
Vapor Space Expansion Factor	
Vapor Space Expansion Factor:	0.7975
Daily Vapor Temperature Range (deg. R):	46.7976
Daily Vapor Pressure Range (psia):	3.2750
Breather Vent Press. Setting Range(psia):	0.0600
Vapor Pressure at Daily Average Liquid Surface Temperature (psia):	7.6119
Vapor Pressure at Daily Minimum Liquid Surface Temperature (psia):	6.1130
Vapor Pressure at Daily Maximum Liquid Surface Temperature (psia):	9.3880
Daily Avg. Liquid Surface Temp. (deg R):	524.6094
Daily Min. Liquid Surface Temp. (deg R):	512.9100
Daily Max. Liquid Surface Temp. (deg R):	536.3088
Daily Ambient Temp. Range (deg. R):	27.9250
Vented Vapor Saturation Factor	
Vented Vapor Saturation Factor:	0.5534
Vapor Pressure at Daily Average Liquid: Surface Temperature (psia):	7.6119
Vapor Space Outage (ft):	2.0000
Working Losses (lb):	134.8393
Vapor Molecular Weight (lb/lb-mole):	62.0000
Vapor Pressure at Daily Average Liquid Surface Temperature (psia):	7.6119
Annual Net Throughput (gal/yr.):	12,000.0000

Annual Turnovers:	24.0000
Turnover Factor:	1.0000
Tank Diameter (ft):	4.0000
Working Loss Product Factor:	1.0000

Total Losses (lb):	783.4290

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

Emissions Report for: Annual

Milagro T7 (Gasoline) - Horizontal Tank
Bloomfield, New Mexico

	Losses(lbs)		
Components	Working Loss	Breathing Loss	Total Emissions
Gasoline (RVP 13)	134.84	648.59	783.43

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

Identification

User Identification:	Milagro T25 (Condensate)
City:	Bloomfield
State:	New Mexico
Company:	Williams Four Corners LLC
Type of Tank:	Vertical Fixed Roof Tank
Description:	4,200 Gallon Condensate Storage Tank

Tank Dimensions

Shell Height (ft):	15.00
Diameter (ft):	7.00
Liquid Height (ft) :	14.00
Avg. Liquid Height (ft):	7.00
Volume (gallons):	4,030.00
Turnovers:	380.40
Net Throughput(gal/yr):	1,533,000.00
Is Tank Heated (y/n):	N

Paint Characteristics

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

Roof Characteristics

Type:	Dome
Height (ft)	0.00
Radius (ft) (Dome Roof)	7.00

Breather Vent Settings

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

Meterological Data used in Emissions Calculations: Albuquerque, New Mexico (Avg Atmospheric Pressure = 12.15 psia)

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

Milagro T25 (Condensate) - Vertical Fixed Roof Tank
Bloomfield, New Mexico

Mixture/Component	Month	Daily Liquid Surf. Temperature (deg F) Avg.	Min.	Max.	Liquid Bulk Temp (deg F)	Vapor Pressure (psia) Avg.	Min.	Max.	Vapor Mol. Weight.	Liquid Mass Fract.	Vapor Mass Fract.	Mol. Weight	Basis for Vapor Pressure Calculations
Condensate	All	64.94	53.24	76.64	58.39	0.8976	0.6679	1.1903	51.3065			21.26	
Benzene						1.3372	0.9653	1.8208	78.1100	0.0012	0.0008	78.11	Option 2: A=6.905, B=1211.033, C=220.79
Ethylbenzene						0.1286	0.0854	0.1894	106.1700	0.0002	0.0000	106.17	Option 2: A=6.975, B=1424.255, C=213.21
Hexane (-n)						2.1727	1.6003	2.9030	86.1700	0.0844	0.0846	86.17	Option 2: A=6.876, B=1171.17, C=224.41
Isobutane						41.6075	33.9758	50.4378	58.1230	0.0153	0.2931	58.12	Option 1: VP60 = 38.14 VP70 = 45.16
Isopentane						11.2522	8.5746	14.3915	72.1500	0.0972	0.5049	72.15	Option 1: VP60 = 10.005 VP70 = 12.53
Toluene						0.3844	0.2666	0.5435	92.1300	0.0013	0.0002	92.13	Option 2: A=6.954, B=1344.8, C=219.48
Water						0.3148	0.2107	0.4610	18.0150	0.7999	0.1163	18.02	Option 1: VP60 = .263 VP70 = .3679
Xylenes (mixed isomers)						0.1073	0.0710	0.1586	106.1700	0.0005	0.0000	106.17	Option 2: A=7.009, B=1462.266, C=215.11

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

Milagro T25 (Condensate) - Vertical Fixed Roof Tank
Bloomfield, New Mexico

Annual Emission Calcaulations

Standing Losses (lb):	90.4695
Vapor Space Volume (cu ft):	326.3538
Vapor Density (lb/cu ft):	0.0082
Vapor Space Expansion Factor:	0.1303
Vented Vapor Saturation Factor:	0.7125
Tank Vapor Space Volume:	
Vapor Space Volume (cu ft):	326.3538
Tank Diameter (ft):	7.0000
Vapor Space Outage (ft):	8.4801
Tank Shell Height (ft):	15.0000
Average Liquid Height (ft):	7.0000
Roof Outage (ft):	0.4801
Roof Outage (Dome Roof)	
Roof Outage (ft):	0.4801
Dome Radius (ft):	7.0000
Shell Radius (ft):	3.5000
Vapor Density	
Vapor Density (lb/cu ft):	0.0082
Vapor Molecular Weight (lb/lb-mole):	51.3065
Vapor Pressure at Daily Average Liquid Surface Temperature (psia):	0.8976
Daily Avg. Liquid Surface Temp. (deg. R):	524.6094
Daily Average Ambient Temp. (deg. F):	56.1542
Ideal Gas Constant R (psia cuft / (lb-mol-deg R)):	10.731
Liquid Bulk Temperature (deg. R):	518.0642
Tank Paint Solar Absorptance (Shell):	0.5400
Tank Paint Solar Absorptance (Roof):	0.5400
Daily Total Solar Insulation Factor (Btu/sqft day):	1,765.3167
Vapor Space Expansion Factor	
Vapor Space Expansion Factor:	0.1303
Daily Vapor Temperature Range (deg. R):	46.7976
Daily Vapor Pressure Range (psia):	0.5224
Breather Vent Press. Setting Range(psia):	0.0600
Vapor Pressure at Daily Average Liquid Surface Temperature (psia):	0.8976
Vapor Pressure at Daily Minimum Liquid Surface Temperature (psia):	0.6679
Vapor Pressure at Daily Maximum Liquid Surface Temperature (psia):	1.1903
Daily Avg. Liquid Surface Temp. (deg R):	524.6094
Daily Min. Liquid Surface Temp. (deg R):	512.9100
Daily Max. Liquid Surface Temp. (deg R):	536.3088
Daily Ambient Temp. Range (deg. R):	27.9250
Vented Vapor Saturation Factor	
Vented Vapor Saturation Factor:	0.7125
Vapor Pressure at Daily Average Liquid: Surface Temperature (psia):	0.8976
Vapor Space Outage (ft):	8.4801

Working Losses (lb):	412.7246
Vapor Molecular Weight (lb/lb-mole):	51.3065
Vapor Pressure at Daily Average Liquid Surface Temperature (psia):	0.8976
Annual Net Throughput (gal/yr.):	1,533,000.0000
Annual Turnovers:	380.4000
Turnover Factor:	0.2455
Maximum Liquid Volume (gal):	4,030.0000
Maximum Liquid Height (ft):	14.0000
Tank Diameter (ft):	7.0000
Working Loss Product Factor:	1.0000
Total Losses (lb):	503.1941

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

Emissions Report for: Annual

Milagro T25 (Condensate) - Vertical Fixed Roof Tank
Bloomfield, New Mexico

	Losses(lbs)		
Components	Working Loss	Breathing Loss	Total Emissions
Condensate	412.72	90.47	503.19
Water	47.99	10.52	58.51
Isobutane	120.98	26.52	147.50
Isopentane	208.40	45.68	254.08
Hexane (-n)	34.92	7.66	42.58
Benzene	0.32	0.07	0.39
Ethylbenzene	0.00	0.00	0.01
Toluene	0.10	0.02	0.12
Xylenes (mixed isomers)	0.01	0.00	0.01

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

Identification

User Identification:	Milagro T29 & T30 (Condensate)
City:	Bloomfield
State:	New Mexico
Company:	Williams Four Corners LLC
Type of Tank:	Vertical Fixed Roof Tank
Description:	200 Gallon Condensate Storage Tank

Tank Dimensions

Shell Height (ft):	5.00
Diameter (ft):	2.60
Liquid Height (ft) :	4.50
Avg. Liquid Height (ft):	2.25
Volume (gallons):	180.00
Turnovers:	2.00
Net Throughput(gal/yr):	360.00
Is Tank Heated (y/n):	N

Paint Characteristics

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

Roof Characteristics

Type:	Cone
Height (ft)	0.00
Slope (ft/ft) (Cone Roof)	0.06

Breather Vent Settings

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

Meterological Data used in Emissions Calculations: Albuquerque, New Mexico (Avg Atmospheric Pressure = 12.15 psia)

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

Milagro T29 & T30 (Condensate) - Vertical Fixed Roof Tank
Bloomfield, New Mexico

Mixture/Component	Month	Daily Liquid Surf. Temperature (deg F) Avg.	Min.	Max.	Liquid Bulk Temp (deg F)	Vapor Pressure (psia) Avg.	Min.	Max.	Vapor Mol. Weight.	Liquid Mass Fract.	Vapor Mass Fract.	Mol. Weight	Basis for Vapor Pressure Calculations
Condensate	All	64.94	53.24	76.64	58.39	7.4178	5.7833	9.3492	67.1136			57.60	
Benzene						1.3372	0.9653	1.8208	78.1100	0.0056	0.0009	78.11	Option 2: A=6.905, B=1211.033, C=220.79
Ethylbenzene						0.1286	0.0854	0.1894	106.1700	0.0009	0.0000	106.17	Option 2: A=6.975, B=1424.255, C=213.21
Hexane (-n)						2.1727	1.6003	2.9030	86.1700	0.3795	0.0954	86.17	Option 2: A=6.876, B=1171.17, C=224.41
Isobutane						41.6075	33.9758	50.4378	58.1230	0.0686	0.3305	58.12	Option 1: VP60 = 38.14 VP70 = 45.16
Isopentane						11.2522	8.5746	14.3915	72.1500	0.4373	0.5693	72.15	Option 1: VP60 = 10.005 VP70 = 12.53
Toluene						0.3844	0.2666	0.5435	92.1300	0.0059	0.0003	92.13	Option 2: A=6.954, B=1344.8, C=219.48
Water						0.3148	0.2107	0.4610	18.0150	0.1000	0.0036	18.02	Option 1: VP60 = .263 VP70 = .3679
Xylenes (mixed isomers)						0.1073	0.0710	0.1586	106.1700	0.0022	0.0000	106.17	Option 2: A=7.009, B=1462.266, C=215.11

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

Milagro T29 & T30 (Condensate) - Vertical Fixed Roof Tank
Bloomfield, New Mexico

Annual Emission Calcaulations

Standing Losses (lb):	188.8159
Vapor Space Volume (cu ft):	14.7443
Vapor Density (lb/cu ft):	0.0884
Vapor Space Expansion Factor:	0.8299
Vented Vapor Saturation Factor:	0.4781
Tank Vapor Space Volume:	
Vapor Space Volume (cu ft):	14.7443
Tank Diameter (ft):	2.6000
Vapor Space Outage (ft):	2.7771
Tank Shell Height (ft):	5.0000
Average Liquid Height (ft):	2.2500
Roof Outage (ft):	0.0271
Roof Outage (Cone Roof)	
Roof Outage (ft):	0.0271
Roof Height (ft):	0.0000
Roof Slope (ft/ft):	0.0625
Shell Radius (ft):	1.3000
Vapor Density	
Vapor Density (lb/cu ft):	0.0884
Vapor Molecular Weight (lb/lb-mole):	67.1136
Vapor Pressure at Daily Average Liquid Surface Temperature (psia):	7.4178
Daily Avg. Liquid Surface Temp. (deg. R):	524.6094
Daily Average Ambient Temp. (deg. F):	56.1542
Ideal Gas Constant R (psia cuft / (lb-mol-deg R)):	10.731
Liquid Bulk Temperature (deg. R):	518.0642
Tank Paint Solar Absorptance (Shell):	0.5400
Tank Paint Solar Absorptance (Roof):	0.5400
Daily Total Solar Insulation Factor (Btu/sqft day):	1,765.3167
Vapor Space Expansion Factor	
Vapor Space Expansion Factor:	0.8299
Daily Vapor Temperature Range (deg. R):	46.7976
Daily Vapor Pressure Range (psia):	3.5659
Breather Vent Press. Setting Range(psia):	0.0600
Vapor Pressure at Daily Average Liquid Surface Temperature (psia):	7.4178
Vapor Pressure at Daily Minimum Liquid Surface Temperature (psia):	5.7833
Vapor Pressure at Daily Maximum Liquid Surface Temperature (psia):	9.3492
Daily Avg. Liquid Surface Temp. (deg R):	524.6094
Daily Min. Liquid Surface Temp. (deg R):	512.9100
Daily Max. Liquid Surface Temp. (deg R):	536.3088
Daily Ambient Temp. Range (deg. R):	27.9250
Vented Vapor Saturation Factor	
Vented Vapor Saturation Factor:	0.4781
Vapor Pressure at Daily Average Liquid: Surface Temperature (psia):	7.4178

Vapor Space Outage (ft):	2.7771
Working Losses (lb):	4.2672
Vapor Molecular Weight (lb/lb-mole):	67.1136
Vapor Pressure at Daily Average Liquid Surface Temperature (psia):	7.4178
Annual Net Throughput (gal/yr.):	360.0000
Annual Turnovers:	2.0000
Turnover Factor:	1.0000
Maximum Liquid Volume (gal):	180.0000
Maximum Liquid Height (ft):	4.5000
Tank Diameter (ft):	2.6000
Working Loss Product Factor:	1.0000
Total Losses (lb):	193.0831

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

Emissions Report for: Annual

Milagro T29 & T30 (Condensate) - Vertical Fixed Roof Tank
Bloomfield, New Mexico

	Losses(lbs)		
Components	Working Loss	Breathing Loss	Total Emissions
Condensate	4.27	188.82	193.08
Water	0.02	0.69	0.70
Isobutane	1.41	62.40	63.81
Isopentane	2.43	107.49	109.92
Hexane (-n)	0.41	18.01	18.42
Benzene	0.00	0.16	0.17
Ethylbenzene	0.00	0.00	0.00
Toluene	0.00	0.05	0.05
Xylenes (mixed isomers)	0.00	0.01	0.01

CATERPILLAR®

Industrial Engine 597-858 bkW/ 800-1150 bhp

C27 ACERT™

1800-2100 rpm

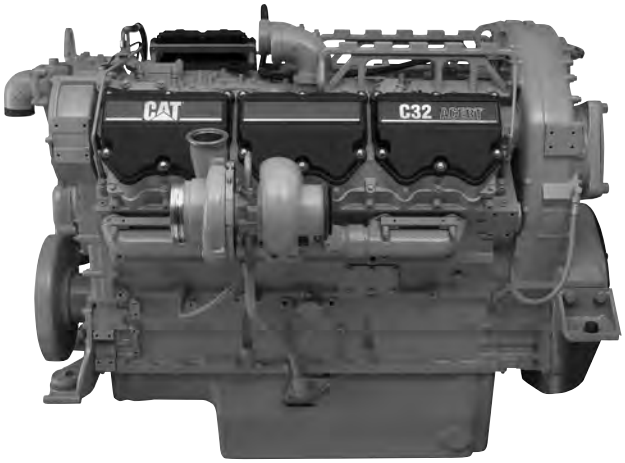


Image shown may not reflect actual engine

CATERPILLAR® ENGINE SPECIFICATIONS

V-12, 4-Stroke-Cycle Diesel

Bore . . . . . 137.7 mm (5.42 in.)
Stroke. . . . . 152.4 mm (6.0 in.)
Displacement . . . . . 27.0 L (1648 in^3)
Aspiration. . . . . Turbocharged Aftercooled
Compression Ratio 18:1
Rotation (from flywheel end) . . . Counterclockwise
Engine Weight, Net Dry (approximate)
with standard equipment . . . . . 2367 kg (5218 lbs.)

FEATURES

Emissions

Meets Tier 2 emissions requirements. Tier 2 refers to EPA (U.S.) standards.

Worldwide Supplier Capability

Caterpillar
– Casts engine blocks, heads, and cylinder liners
– Machines critical components
– Assembles complete engine

Ownership of these manufacturing processes enables Caterpillar to produce high quality, dependable product.

Factory-designed systems built at Caterpillar ISO 9001:2000 certified facilities.

Testing

Prototype testing on every model
– proves computer design
– verifies system torsional stability
– tests functionality on every model

Every Caterpillar® engine is dynamometer tested under full load to ensure proper engine performance.

Full Range of Attachments

Wide range of bolt-on system expansion attachments, factory designed and tested.

Unmatched Product Support Offered Through Worldwide Caterpillar Dealer Network

More than 1,800 dealer outlets

Caterpillar factory-trained dealer technicians service every aspect of your industrial engine

99.7% of parts orders filled within 24 hours worldwide

Caterpillar parts and labor warranty

Preventive maintenance agreements available for repair before failure options

Scheduled Oil Sampling program matches your oil sample against Caterpillar set standards to determine:
– internal engine component condition
– presence of unwanted fluids
– presence of combustion by-products

Web Site

For additional information on all your power requirements, visit www.cat-industrial.com.

STANDARD ENGINE EQUIPMENT

Air Inlet System
- Air-to-air aftercooled (ATAAC)
- Twin turbo

Control System
- Electronic governing, PTO speed control
- Programmable ratings
- Cold mode start strategy
- Automatic altitude compensation
- Power compensation for fuel temperature
- Programmable low and high idle and total engine limit
- Electronic diagnostics and fault logging
- Engine monitoring system
- J1939 Broadcast (diagnostic and engine status)
- ADEM™ A4

Cooling System
- Thermostats and housing, vertical outlet
- Jacket water pump, centrifugal
- Water pump, inlet

Exhaust System
- Exhaust manifold, dry
- Optional exhaust outlet

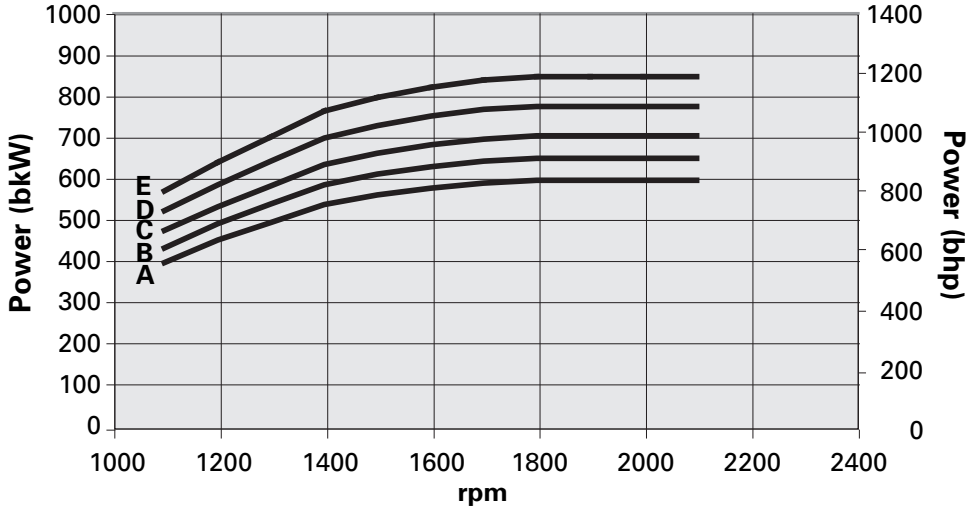
Flywheels and Flywheel Housing
- SAE No. 0 or SAE No. 1 flywheel housing

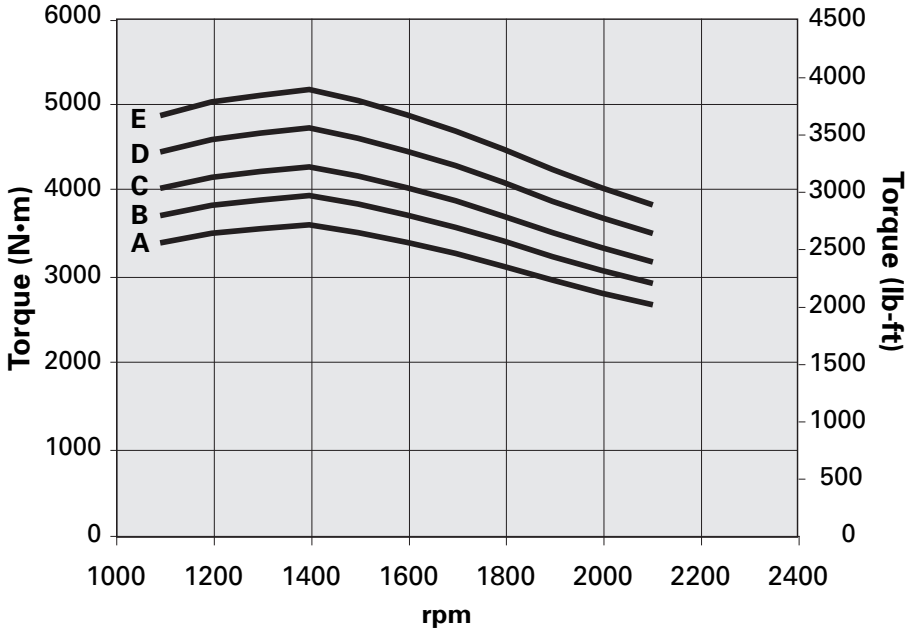
Fuel System
- MEUI injection
- Fuel filter, secondary (2 micron high performance)
- Fuel transfer pump
- Fuel priming pump
- ACERT™ Technology

Lube System
- Crankcase breather
- Oil cooler
- Oil filler
- Oil filter
- Oil pan front sump
- Oil dipstick
- Oil pump (gear driven)

General
- Paint, Caterpillar yellow
- Vibration damper
- Lifting eyes

PERFORMANCE CURVES





Length	2083 mm (82 in.)
Width	1473 mm (58 in.)
Height	1499 mm (59 in.)

CATERPILLAR®

Industrial Engine

C27 ACERT™

597-858 bkW/ 800-1150 bhp

INDUSTRIAL RATINGS AND CONDITIONS

IND-A (Continuous)
Continuous heavy duty service where the engine is operated at maximum power and speed up to 100% of the time without interruption or load cycling.

IND-B
For service where power and/or speed are cyclic (time at full load not to exceed 80%).

IND-C (Intermittent)
Intermittent service where maximum power and/or speed are cyclic (time at full load not to exceed 50%).

IND-D
For service where maximum power is required for periodic overloads.

IND-E
For service where maximum power is required for a short time for initial starting or sudden overload. For emergency service where standard power is unavailable.

Ratings are based on SAE J1995, inlet air standard conditions of 99 kPa (29.31 in. Hg) dry barometer and 25°C (77°F) temperature. Performance measured using a standard fuel with fuel gravity of 35° API having a lower heating value of 42,780 kJ/kg (18,390 btu/lb) when used at 29° C (84.2° F) with a density of 838.9 g/L.

The corrected performance values shown for Caterpillar engines will approximate the values obtained when the observed performance data is corrected to SAE J1995, ISO 3046-2, 8665, 2288, 9249, and 1585, EEC 80/1269 and DIN 70020 standard reference conditions.

Materials and specifications are subject to change without notice. The International System of Units (SI) is used in this publication.
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ELECTRIC POWER - Technical Spec Sheet
STANDARD

C27 ACERT
750 ekW/ 937 kVA/ 60 Hz/ 1800 rpm/ 480 V/ 0.8 Power Factor

Rating Type: STANDBY

Emissions: U.S. EPA Certified for Stationary Emergency Use Only (Tier 2 Nonroad Equivalent Emission Standards)



Image shown may not reflect actual configuration

C27 ACERT
750 ekW/ 937 kVA
60 Hz/ 1800 rpm/ 480 V

	Metric	English
Package Performance		
Genset Power Rating with Fan @ 0.8 Power Factor	750 ekW	
Genset Power Rating	937 kVA	
Aftercooler (Separate Circuit)	N/A	N/A
Fuel Consumption		
100% Load with Fan	202.9 L/hr	53.6 gal/hr
75% Load with Fan	162.4 L/hr	42.9 gal/hr
50% Load with Fan	116.2 L/hr	30.7 gal/hr
25% Load with Fan	70.6 L/hr	18.7 gal/hr
Cooling System[1]		
Engine Coolant Capacity	55.0 L	14.5 gal
Inlet Air		
Combustion Air Inlet Flow Rate	58.7 m³/min	2073.6 cfm
Max. Allowable Combustion Air Inlet Temp	49 ° C	121 ° F
Exhaust System		
Exhaust Stack Gas Temperature	509.3 ° C	948.7 ° F
Exhaust Gas Flow Rate	158.9 m³/min	5610.2 cfm
Exhaust System Backpressure (Maximum Allowable)	10.0 kPa	40.0 in. water

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Rating Type: STANDBY

Emissions: U.S. EPA Certified for Stationary Emergency Use Only (Tier 2 Nonroad Equivalent Emission Standards)

Heat Rejection		
Heat Rejection to Jacket Water	324 kW	18420 Btu/min
Heat Rejection to Exhaust (Total)	742 kW	42192 Btu/min
Heat Rejection to Aftercooler	138 kW	7849 Btu/min
Heat Rejection to Atmosphere from Engine	100 kW	5664 Btu/min
Heat Rejection to Atmosphere from Generator	53 kW	3014 Btu/min

Alternator[2]	
Motor Starting Capability @ 30% Voltage Dip	2117 skVA
Current	1127 amps
Frame Size	1296
Excitation	PM
Temperature Rise	125 ° C

Emissions (Nominal)[3]		
NOx	2637.1 mg/Nm³	5.3 g/hp-hr
CO	123.9 mg/Nm³	0.2 g/hp-hr
HC	11.2 mg/Nm³	0.0 g/hp-hr
PM	8.8 mg/Nm³	0.0 g/hp-hr

DEFINITIONS AND CONDITIONS

1. For ambient and altitude capabilities consult your Cat dealer. Air flow restriction (system) is added to existing restriction from factory.

2. UL 2200 Listed packages may have oversized generators with a different temperature rise and motor starting characteristics. Generator temperature rise is based on a 40° C ambient per NEMA MG1-32.

3. Emissions data measurement procedures are consistent with those described in EPA CFR 40 Part 89, Subpart D & E and ISO8178-1 for measuring HC, CO, PM, NOx. Data shown is based on steady state operating conditions of 77° F, 28.42 in HG and number 2 diesel fuel with 35° API and LHV of 18,390 btu/lb. The nominal emissions data shown is subject to instrumentation, measurement, facility and engine to engine variations. Emissions data is based on 100% load and thus cannot be used to compare to EPA regulations which use values based on a weighted cycle.

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Rating Type: STANDBY

Emissions: U.S. EPA Certified for Stationary Emergency Use Only (Tier 2 Nonroad Equivalent Emission Standards)

Applicable Codes and Standards:
AS1359, CSA C22.2 No100-04, UL142,UL489, UL869, UL2200,
NFPA37, NFPA70, NFPA99, NFPA110, IBC, IEC60034-1, ISO3046, ISO8528,
NEMA MG1-22,NEMA MG1-33, 2006/95/EC, 2006/42/EC, 2004/108/EC.

Note: Codes may not be available in all model configurations. Please consult your local Cat Dealer representative for availability.

STANDBY: Output available with varying load for the duration of the interruption of the normal source power. Average power output is 70% of the standby power rating. Typical operation is 200 hours per year, with maximum expected usage of 500 hours per year.

Ratings are based on SAE J1349 standard conditions. These ratings also apply at ISO3046 standard conditions

Fuel Rates are based on fuel oil of 35º API [16º C (60º F)] gravity having an LHV of 42 780 kJ/kg (18,390 Btu/lb) when used at 29º C (85º F) and weighing 838.9 g/liter (7.001 lbs/U.S. gal.). Additional ratings may be available for specific customer requirements, contact your Cat representative for details. For information regarding Low Sulfur fuel and Biodiesel capability, please consult your Cat dealer.

www.Cat-ElectricPower.com

Performance No.: DM9071-02

Feature Code: C27DR69

Generator Arrangement: 3850654

Date: 03/06/2016

Source Country: U.S.

The International System of Units (SI) is used in this publication. CAT, CATERPILLAR, their respective logos, ADEM, EUI, S•O•S, "Caterpillar Yellow" and the "Power Edge" trade dress, as well as corporate and product identity used herein, are trademarks of Caterpillar and may not be used without permission.

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PERFORMANCE DATA[DM9071]

March 14, 2016

Performance Number: DM9071 **Change Level: 02**

SALES MODEL:	C27	**COMBUSTION:**	DI
ENGINE POWER (BHP):	1,141	**ENGINE SPEED (RPM):**	1,800
GEN POWER WITH FAN (EKW):	750.0	**HERTZ:**	60
COMPRESSION RATIO:	16.5	**FAN POWER (HP):**	37.5
RATING LEVEL:	STANDBY	**ADDITIONAL PARASITICS (HP):**	52.7
PUMP QUANTITY:	1	**ASPIRATION:**	TA
FUEL TYPE:	DIESEL	**AFTERCOOLER TYPE:**	ATAAC
MANIFOLD TYPE:	DRY	**AFTERCOOLER CIRCUIT TYPE:**	JW+OC, ATAAC
GOVERNOR TYPE:	ADEM4	**INLET MANIFOLD AIR TEMP (F):**	120
ELECTRONICS TYPE:	ADEM4	**JACKET WATER TEMP (F):**	210.2
IGNITION TYPE:	CI	**TURBO CONFIGURATION:**	PARALLEL
INJECTOR TYPE:	EUI	**TURBO QUANTITY:**	2
REF EXH STACK DIAMETER (IN):	10	**TURBOCHARGER MODEL:**	GTA5008BS-56T-1.60
MAX OPERATING ALTITUDE (FT):	10,000	**CERTIFICATION YEAR:**	2006
		PISTON SPD @ RATED ENG SPD (FT/MIN):	1,800.0

INDUSTRY	SUBINDUSTRY	APPLICATION
ELECTRIC POWER	STANDARD	PACKAGED GENSET
OIL AND GAS	LAND PRODUCTION	PACKAGED GENSET

General Performance Data

GENSET POWER WITH FAN	PERCENT LOAD	ENGINE POWER	BRAKE MEAN EFF PRES (BMEP)	BRAKE SPEC FUEL CONSUMPTN (BSFC)	VOL FUEL CONSUMPTN (VFC)	INLET MFLD PRES	INLET MFLD TEMP	EXH MFLD TEMP	EXH MFLD PRES	ENGINE OUTLET TEMP
EKW	%	BHP	PSI	LB/BHP-HR	GAL/HR	IN-HG	DEG F	DEG F	IN-HG	DEG F
750.0	100	1,141	305	0.329	53.6	52.6	120.7	1,210.7	36.7	948.7
675.0	90	1,036	276	0.333	49.3	48.2	117.3	1,184.5	33.3	935.9
600.0	80	931	248	0.339	45.0	43.6	114.3	1,157.5	30.1	920.5
562.5	75	878	234	0.342	42.9	41.2	112.8	1,143.4	28.5	911.5
525.0	70	826	220	0.344	40.6	38.3	110.7	1,127.0	26.5	902.0
450.0	60	722	193	0.346	35.7	31.9	105.8	1,084.0	22.3	877.6
375.0	50	618	165	0.348	30.7	25.3	100.8	1,028.5	18.0	845.1
300.0	40	516	138	0.350	25.8	19.1	97.6	957.6	14.1	798.9
225.0	30	413	110	0.356	21.0	13.6	95.6	866.3	10.9	731.9
187.5	25	361	96	0.361	18.7	11.0	94.8	813.1	9.5	691.2
150.0	20	309	82	0.368	16.3	8.6	94.0	754.4	8.2	645.3
75.0	10	201	54	0.403	11.6	4.9	92.4	617.0	6.1	532.3

GENSET POWER WITH FAN	PERCENT LOAD	ENGINE POWER	COMPRESSOR OUTLET PRES	COMPRESSOR OUTLET TEMP	WET INLET AIR VOL FLOW RATE	ENGINE OUTLET WET EXH GAS VOL FLOW RATE	WET INLET AIR MASS FLOW RATE	WET EXH GAS MASS FLOW RATE	WET EXH VOL FLOW RATE (32 DEG F AND 29.98 IN HG)	DRY EXH VOL FLOW RATE (32 DEG F AND 29.98 IN HG)
EKW	%	BHP	IN-HG	DEG F	CFM	CFM	LB/HR	LB/HR	FT3/MIN	FT3/MIN
750.0	100	1,141	55	340.2	2,073.6	5,610.2	8,929.7	9,304.9	1,958.6	1,773.7
675.0	90	1,036	51	321.4	1,972.9	5,269.2	8,478.1	8,823.2	1,856.4	1,685.5
600.0	80	931	46	304.2	1,874.4	4,932.9	8,053.0	8,368.4	1,757.3	1,600.2
562.5	75	878	43	295.1	1,825.8	4,766.3	7,827.5	8,127.9	1,709.1	1,558.8
525.0	70	826	40	282.3	1,763.3	4,540.6	7,544.0	7,828.2	1,639.5	1,497.3
450.0	60	722	34	253.9	1,610.3	4,039.0	6,871.8	7,121.9	1,485.0	1,359.5
375.0	50	618	27	225.6	1,444.6	3,541.1	6,147.8	6,362.8	1,334.4	1,225.1
300.0	40	516	21	197.9	1,288.0	3,054.4	5,467.1	5,647.9	1,193.2	1,099.5
225.0	30	413	15	170.0	1,143.5	2,567.6	4,844.7	4,992.1	1,059.4	981.2
187.5	25	361	12	155.9	1,073.8	2,322.4	4,546.8	4,677.5	992.1	921.8
150.0	20	309	10	141.7	1,005.3	2,074.6	4,256.4	4,370.3	923.1	860.8
75.0	10	201	6	120.2	905.7	1,659.5	3,831.9	3,913.1	822.6	775.2

PERFORMANCE DATA[DM9071]

March 14, 2016

Heat Rejection Data

GENSET POWER WITH FAN	PERCENT LOAD	ENGINE POWER	REJECTION TO JACKET WATER	REJECTION TO ATMOSPHERE	REJECTION TO EXH	EXHUAST RECOVERY TO 350F	FROM OIL COOLER	FROM AFTERCOOLER	WORK ENERGY	LOW HEAT VALUE ENERGY	HIGH HEAT VALUE ENERGY
EKW	%	BHP	BTU/MIN	BTU/MIN	BTU/MIN	BTU/MIN	BTU/MIN	BTU/MIN	BTU/MIN	BTU/MIN	BTU/MIN
750.0	100	1,141	18,420	5,664	42,192	23,831	6,126	7,849	48,396	115,016	122,520
675.0	90	1,036	17,400	5,193	39,249	22,066	5,635	6,930	43,919	105,788	112,691
600.0	80	931	16,092	4,896	36,354	20,327	5,147	6,123	39,470	96,630	102,935
562.5	75	878	15,154	5,120	34,836	19,404	4,904	5,715	37,253	92,070	98,078
525.0	70	826	14,494	5,043	33,095	18,346	4,642	5,184	35,034	87,162	92,850
450.0	60	722	13,468	4,399	29,123	15,903	4,084	4,077	30,613	76,677	81,680
375.0	50	618	11,700	4,303	24,895	13,283	3,509	3,072	26,205	65,876	70,174
300.0	40	516	10,463	3,778	20,710	10,638	2,951	2,194	21,876	55,406	59,021
225.0	30	413	9,817	2,772	16,546	7,940	2,405	1,443	17,528	45,159	48,105
187.5	25	361	9,420	2,280	14,506	6,617	2,133	1,114	15,330	40,038	42,651
150.0	20	309	8,879	1,864	12,505	5,323	1,858	813	13,103	34,888	37,164
75.0	10	201	6,965	1,736	8,856	2,900	1,326	427	8,541	24,901	26,525

Emissions Data

RATED SPEED POTENTIAL SITE VARIATION: 1800 RPM

GENSET POWER WITH FAN		EKW	750.0	562.5	375.0	187.5	75.0
PERCENT LOAD		%	100	75	50	25	10
ENGINE POWER		BHP	1,141	878	618	361	201
TOTAL NOX (AS NO2)		G/HR	7,181	4,159	2,639	1,824	1,310
TOTAL CO		G/HR	520	683	655	540	554
TOTAL HC		G/HR	55	82	96	88	101
PART MATTER		G/HR	47.2	59.4	150.5	116.9	78.8
TOTAL NOX (AS NO2)	(CORR 5% O2)	MG/NM3	3,190.9	2,326.7	2,078.5	2,424.5	2,904.0
TOTAL CO	(CORR 5% O2)	MG/NM3	231.7	383.5	519.6	772.5	1,347.1
TOTAL HC	(CORR 5% O2)	MG/NM3	21.1	40.7	65.9	111.3	214.7
PART MATTER	(CORR 5% O2)	MG/NM3	17.2	27.7	103.8	128.4	160.0
TOTAL NOX (AS NO2)	(CORR 5% O2)	PPM	1,554	1,133	1,012	1,181	1,414
TOTAL CO	(CORR 5% O2)	PPM	185	307	416	618	1,078
TOTAL HC	(CORR 5% O2)	PPM	39	76	123	208	401
TOTAL NOX (AS NO2)		G/HP-HR	6.35	4.76	4.29	5.06	6.52
TOTAL CO		G/HP-HR	0.46	0.78	1.07	1.50	2.76
TOTAL HC		G/HP-HR	0.05	0.09	0.16	0.24	0.50
PART MATTER		G/HP-HR	0.04	0.07	0.24	0.32	0.39
TOTAL NOX (AS NO2)		LB/HR	15.83	9.17	5.82	4.02	2.89
TOTAL CO		LB/HR	1.15	1.51	1.45	1.19	1.22
TOTAL HC		LB/HR	0.12	0.18	0.21	0.19	0.22
PART MATTER		LB/HR	0.10	0.13	0.33	0.26	0.17

RATED SPEED NOMINAL DATA: 1800 RPM

GENSET POWER WITH FAN		EKW	750.0	562.5	375.0	187.5	75.0
PERCENT LOAD		%	100	75	50	25	10
ENGINE POWER		BHP	1,141	878	618	361	201
TOTAL NOX (AS NO2)		G/HR	5,935	3,437	2,181	1,507	1,082
TOTAL CO		G/HR	278	365	351	289	296
TOTAL HC		G/HR	29	43	51	47	53
TOTAL CO2		KG/HR	525	419	298	180	112
PART MATTER		G/HR	24.2	30.5	77.2	59.9	40.4
TOTAL NOX (AS NO2)	(CORR 5% O2)	MG/NM3	2,637.1	1,922.9	1,717.8	2,003.7	2,400.0
TOTAL CO	(CORR 5% O2)	MG/NM3	123.9	205.1	277.9	413.1	720.4
TOTAL HC	(CORR 5% O2)	MG/NM3	11.2	21.5	34.9	58.9	113.6
PART MATTER	(CORR 5% O2)	MG/NM3	8.8	14.2	53.2	65.9	82.0
TOTAL NOX (AS NO2)	(CORR 5% O2)	PPM	1,285	937	837	976	1,169
TOTAL CO	(CORR 5% O2)	PPM	99	164	222	330	576
TOTAL HC	(CORR 5% O2)	PPM	21	40	65	110	212
TOTAL NOX (AS NO2)		G/HP-HR	5.25	3.94	3.54	4.18	5.39
TOTAL CO		G/HP-HR	0.25	0.42	0.57	0.80	1.48
TOTAL HC		G/HP-HR	0.03	0.05	0.08	0.13	0.27

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March 14, 2016

PART MATTER	G/HP-HR	0.02	0.03	0.13	0.17	0.20
TOTAL NOX (AS NO2)	LB/HR	13.08	7.58	4.81	3.32	2.39
TOTAL CO	LB/HR	0.61	0.81	0.77	0.64	0.65
TOTAL HC	LB/HR	0.06	0.10	0.11	0.10	0.12
TOTAL CO2	LB/HR	1,157	924	658	397	246
PART MATTER	LB/HR	0.05	0.07	0.17	0.13	0.09
OXYGEN IN EXH	%	8.9	10.1	11.2	13.2	15.4
DRY SMOKE OPACITY	%	0.4	1.4	2.9	4.4	3.8
BOSCH SMOKE NUMBER		0.18	0.48	1.07	1.51	1.40

PERFORMANCE DATA[DM9071]

March 14, 2016

Regulatory Information

EPA TIER 2		2006 - 2010		
GASEOUS EMISSIONS DATA MEASUREMENTS PROVIDED TO THE EPA ARE CONSISTENT WITH THOSE DESCRIBED IN EPA 40 CFR PART 89 SUBPART D AND ISO 8178 FOR MEASURING HC, CO, PM, AND NOX. THE "MAX LIMITS" SHOWN BELOW ARE WEIGHTED CYCLE AVERAGES AND ARE IN COMPLIANCE WITH THE NON-ROAD REGULATIONS.				
Locality	**Agency**	**Regulation**	**Tier/Stage**	**Max Limits - G/BKW - HR**
U.S. (INCL CALIF)	EPA	NON-ROAD	TIER 2	CO: 3.5 NOx + HC: 6.4 PM: 0.20

EPA EMERGENCY STATIONARY		2011 - ----		
GASEOUS EMISSIONS DATA MEASUREMENTS PROVIDED TO THE EPA ARE CONSISTENT WITH THOSE DESCRIBED IN EPA 40 CFR PART 60 SUBPART IIII AND ISO 8178 FOR MEASURING HC, CO, PM, AND NOX. THE "MAX LIMITS" SHOWN BELOW ARE WEIGHTED CYCLE AVERAGES AND ARE IN COMPLIANCE WITH THE EMERGENCY STATIONARY REGULATIONS.				
Locality	**Agency**	**Regulation**	**Tier/Stage**	**Max Limits - G/BKW - HR**
U.S. (INCL CALIF)	EPA	STATIONARY	EMERGENCY STATIONARY	CO: 3.5 NOx + HC: 6.4 PM: 0.20

Altitude Derate Data

ALTITUDE CORRECTED POWER CAPABILITY (BHP)

AMBIENT OPERATING TEMP (F)	30	40	50	60	70	80	90	100	110	120	130	140	NORMAL
ALTITUDE (FT)													
0	1,141	1,141	1,141	1,141	1,141	1,141	1,141	1,141	1,141	1,141	1,141	1,141	1,141
1,000	1,141	1,141	1,141	1,141	1,141	1,141	1,141	1,141	1,141	1,141	1,141	1,141	1,141
2,000	1,141	1,141	1,141	1,141	1,141	1,141	1,141	1,141	1,141	1,141	1,141	1,141	1,141
3,000	1,141	1,141	1,141	1,141	1,141	1,141	1,141	1,141	1,141	1,141	1,141	1,141	1,141
4,000	1,141	1,141	1,141	1,141	1,141	1,141	1,141	1,141	1,141	1,141	1,141	1,141	1,141
5,000	1,141	1,141	1,141	1,141	1,141	1,141	1,141	1,141	1,141	1,141	1,141	1,141	1,141
6,000	1,141	1,141	1,141	1,141	1,141	1,141	1,141	1,141	1,141	1,141	1,141	1,141	1,141
7,000	1,141	1,141	1,141	1,141	1,141	1,141	1,141	1,141	1,141	1,141	1,141	1,141	1,141
8,000	1,141	1,141	1,141	1,141	1,141	1,141	1,141	1,141	1,141	1,141	1,127	1,108	1,141
9,000	1,141	1,141	1,141	1,141	1,141	1,141	1,141	1,140	1,120	1,101	1,082	1,064	1,141
10,000	1,141	1,141	1,141	1,141	1,141	1,135	1,114	1,094	1,075	1,056	1,038	1,021	1,141
11,000	1,141	1,141	1,141	1,131	1,109	1,089	1,069	1,050	1,031	1,014	996	980	1,141
12,000	1,141	1,128	1,106	1,084	1,064	1,044	1,025	1,007	989	972	956	940	1,137
13,000	1,103	1,081	1,060	1,039	1,020	1,001	983	965	948	932	916	901	1,098
14,000	1,057	1,036	1,016	996	977	959	942	925	909	893	878	863	1,060
15,000	1,012	992	973	954	936	919	902	886	870	855	841	827	1,023

Cross Reference

Engine Arrangement			
Arrangement Number	**Effective Serial Number**	**Engineering Model**	**Engineering Model Version**
2671232	MJE00001	GS327	-
3495619	MJE00001	GS603	LS
3541450	PEN00001	GS582	-

Test Specification Data						
Test Spec	**Setting**	**Effective Serial Number**	**Engine Arrangement**	**Governor Type**	**Default Low Idle Speed**	**Default High Idle Speed**
0K7492	PP5659	MJE00001	2671232			
3704840	GG0522	MJE00001	3495619			
0K4032	GG0384	PEN00001	3541450			
3704840	GG0522		3884919			

Performance Parameter Reference

Parameters Reference:DM9600-08
PERFORMANCE DEFINITIONS

PERFORMANCE DEFINITIONS DM9600

APPLICATION:
Engine performance tolerance values below are representative of a

PERFORMANCE DATA[DM9071]

typical production engine tested in a calibrated dynamometer test cell at SAE J1995 standard reference conditions. Caterpillar maintains ISO9001:2000 certified quality management systems for engine test Facilities to assure accurate calibration of test equipment. Engine test data is corrected in accordance with SAE J1995. Additional reference material SAE J1228, J1349, ISO 8665, 3046-1:2002E, 3046-3:1989, 1585, 2534, 2288, and 9249 may apply in part or are similar to SAE J1995. Special engine rating request (SERR) test data shall be noted.

PERFORMANCE PARAMETER TOLERANCE FACTORS:

Power	+/- 3%
Torque	+/- 3%
Exhaust stack temperature	+/- 8%
Inlet airflow	+/- 5%
Intake manifold pressure-gage	+/- 10%
Exhaust flow	+/- 6%
Specific fuel consumption	+/- 3%
Fuel rate	+/- 5%
Specific DEF consumption	+/- 3%
DEF rate	+/- 5%
Heat rejection	+/- 5%
Heat rejection exhaust only	+/- 10%
Heat rejection CEM only	+/- 10%

Heat Rejection values based on using treated water.

Torque is included for truck and industrial applications, do not use for Gen Set or steady state applications.

On C7 - C18 engines, at speeds of 1100 RPM and under these values are provided for reference only, and may not meet the tolerance listed.

These values do not apply to C280/3600. For these models, see the tolerances listed below.

C280/3600 HEAT REJECTION TOLERANCE FACTORS:

Heat rejection	+/- 10%
Heat rejection to Atmosphere	+/- 50%
Heat rejection to Lube Oil	+/- 20%
Heat rejection to Aftercooler	+/- 5%

TEST CELL TRANSDUCER TOLERANCE FACTORS:

Torque	+/- 0.5%
Speed	+/- 0.2%
Fuel flow	+/- 1.0%
Temperature	+/- 2.0 C degrees
Intake manifold pressure	+/- 0.1 kPa

OBSERVED ENGINE PERFORMANCE IS CORRECTED TO SAE J1995 REFERENCE AIR AND FUEL CONDITIONS.

REFERENCE ATMOSPHERIC INLET AIR
FOR 3500 ENGINES AND SMALLER
SAE J1228 AUG2002 for marine engines, and J1995 JAN2014 for other engines, reference atmospheric pressure is 100 KPA (29.61 in hg), and standard temperature is 25deg C (77 deg F) at 30% relative humidity at the stated aftercooler water temp, or inlet manifold temp.

FOR 3600 ENGINES
Engine rating obtained and presented in accordance with ISO 3046/1 and SAE J1995 JANJAN2014 reference atmospheric pressure is 100 KPA (29.61 in hg), and standard temperature is 25deg C (77 deg F) at 30% relative humidity and 150M altitude at the stated aftercooler water temperature.

MEASUREMENT LOCATION FOR INLET AIR TEMPERATURE
Location for air temperature measurement air cleaner inlet at stabilized operating conditions.

PERFORMANCE DATA[DM9071]

REFERENCE EXHAUST STACK DIAMETER
The Reference Exhaust Stack Diameter published with this dataset is only used for the calculation of Smoke Opacity values displayed in this dataset. This value does not necessarily represent the actual stack diameter of the engine due to the variety of exhaust stack adapter options available. Consult the price list, engine order or general dimension drawings for the actual stack diameter size ordered or options available.

REFERENCE FUEL
DIESEL
Reference fuel is #2 distillate diesel with a 35API gravity;
A lower heating value is 42,780 KJ/KG (18,390 BTU/LB) when used at 29 (84.2), where the density is 838.9 G/Liter (7.001 Lbs/Gal).

GAS
Reference natural gas fuel has a lower heating value of 33.74 KJ/L (905 BTU/CU Ft). Low BTU ratings are based on 18.64 KJ/L (500 BTU/CU FT) lower heating value gas. Propane ratings are based on 87.56 KJ/L (2350 BTU/CU Ft) lower heating value gas.

ENGINE POWER (NET) IS THE CORRECTED FLYWHEEL POWER (GROSS) LESS EXTERNAL AUXILIARY LOAD
Engine corrected gross output includes the power required to drive standard equipment; lube oil, scavenge lube oil, fuel transfer, common rail fuel, separate circuit aftercooler and jacket water pumps. Engine net power available for the external (flywheel) load is calculated by subtracting the sum of auxiliary load from the corrected gross flywheel out put power. Typical auxiliary loads are radiator cooling fans, hydraulic pumps, air compressors and battery charging alternators. For Tier 4 ratings additional Parasitic losses would also include Intake, and Exhaust Restrictions.

ALTITUDE CAPABILITY
Altitude capability is the maximum altitude above sea level at standard temperature and standard pressure at which the engine could develop full rated output power on the current performance data set.

Standard temperature values versus altitude could be seen on TM2001.

When viewing the altitude capability chart the ambient temperature is the inlet air temp at the compressor inlet.

Engines with ADEM MEUI and HEUI fuel systems operating at conditions above the defined altitude capability derate for atmospheric pressure and temperature conditions outside the values defined, see TM2001.

Mechanical governor controlled unit injector engines require a setting change for operation at conditions above the altitude defined on the engine performance sheet. See your Caterpillar technical representative for non standard ratings.

REGULATIONS AND PRODUCT COMPLIANCE
TMI Emissions information is presented at 'nominal' and 'Potential Site Variation' values for standard ratings. No tolerances are applied to the emissions data. These values are subject to change at any time. The controlling federal and local emission requirements need to be verified by your Caterpillar technical representative.

Customer's may have special emission site requirements that need to be verified by the Caterpillar Product Group engineer.

EMISSIONS DEFINITIONS:
Emissions : DM1176

PERFORMANCE DATA[DM9071]

HEAT REJECTION DEFINITIONS:
Diesel Circuit Type and HHV Balance : DM9500

HIGH DISPLACEMENT (HD) DEFINITIONS:
3500: EM1500

RATING DEFINITIONS:
Agriculture : TM6008

Fire Pump : TM6009

Generator Set : TM6035

Generator (Gas) : TM6041

Industrial Diesel : TM6010

Industrial (Gas) : TM6040

Irrigation : TM5749

Locomotive : TM6037

Marine Auxiliary : TM6036

Marine Prop (Except 3600) : TM5747

Marine Prop (3600 only) : TM5748

MSHA : TM6042

Oil Field (Petroleum) : TM6011

Off-Highway Truck : TM6039

On-Highway Truck : TM6038

SOUND DEFINITIONS:
Sound Power : DM8702

Sound Pressure : TM7080

Date Released : 7/7/15

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
2014 MODEL YEAR
CERTIFICATE OF CONFORMITY
WITH THE CLEAN AIR ACT OF 1990

OFFICE OF TRANSPORTATION AND AIR QUALITY
ANN ARBOR, MICHIGAN 48105

Certificate Issued To: **Caterpillar Inc.**
(U.S. Manufacturer or Importer)

Certificate Number: ECPXL27.0NZS-005

Effective Date: 06/20/2013

Expiration Date: 12/31/2014

Byron J. Bunker, Division Director
Compliance Division

Issue Date: 06/20/2013

Revision Date: N/A

Model Year: 2014
Manufacturer Type: Original Engine Manufacturer
Engine Family: ECPXL27.0NZS

Mobile/Stationary Indicator: Stationary
Emissions Power Category: 560<kW<=2237
Fuel Type: Diesel
After Treatment Devices: No After Treatment Devices Installed
Non-after Treatment Devices: Electronic Control, Engine Design Modification

Pursuant to Section 111 and Section 213 of the Clean Air Act (42 U.S.C. sections 7411 and 7547) and 40 CFR Part 60, and subject to the terms and conditions prescribed in those provisions, this certificate of conformity is hereby issued with respect to the test engines which have been found to conform to applicable requirements and which represent the following engines, by engine family, more fully described in the documentation required by 40 CFR Part 60 and produced in the stated model year.

This certificate of conformity covers only those new compression-ignition engines which conform in all material respects to the design specifications that applied to those engines described in the documentation required by 40 CFR Part 60 and which are produced during the model year stated on this certificate of the said manufacturer, as defined in 40 CFR Part 60.

It is a term of this certificate that the manufacturer shall consent to all inspections described in 40 CFR 1068 and authorized in a warrant or court order. Failure to comply with the requirements of such a warrant or court order may lead to revocation or suspension of this certificate for reasons specified in 40 CFR Part 60. It is also a term of this certificate that this certificate may be revoked or suspended or rendered void *ab initio* for other reasons specified in 40 CFR Part 60.

This certificate does not cover engines sold, offered for sale, or introduced, or delivered for introduction, into commerce in the U.S. prior to the effective date of the certificate.

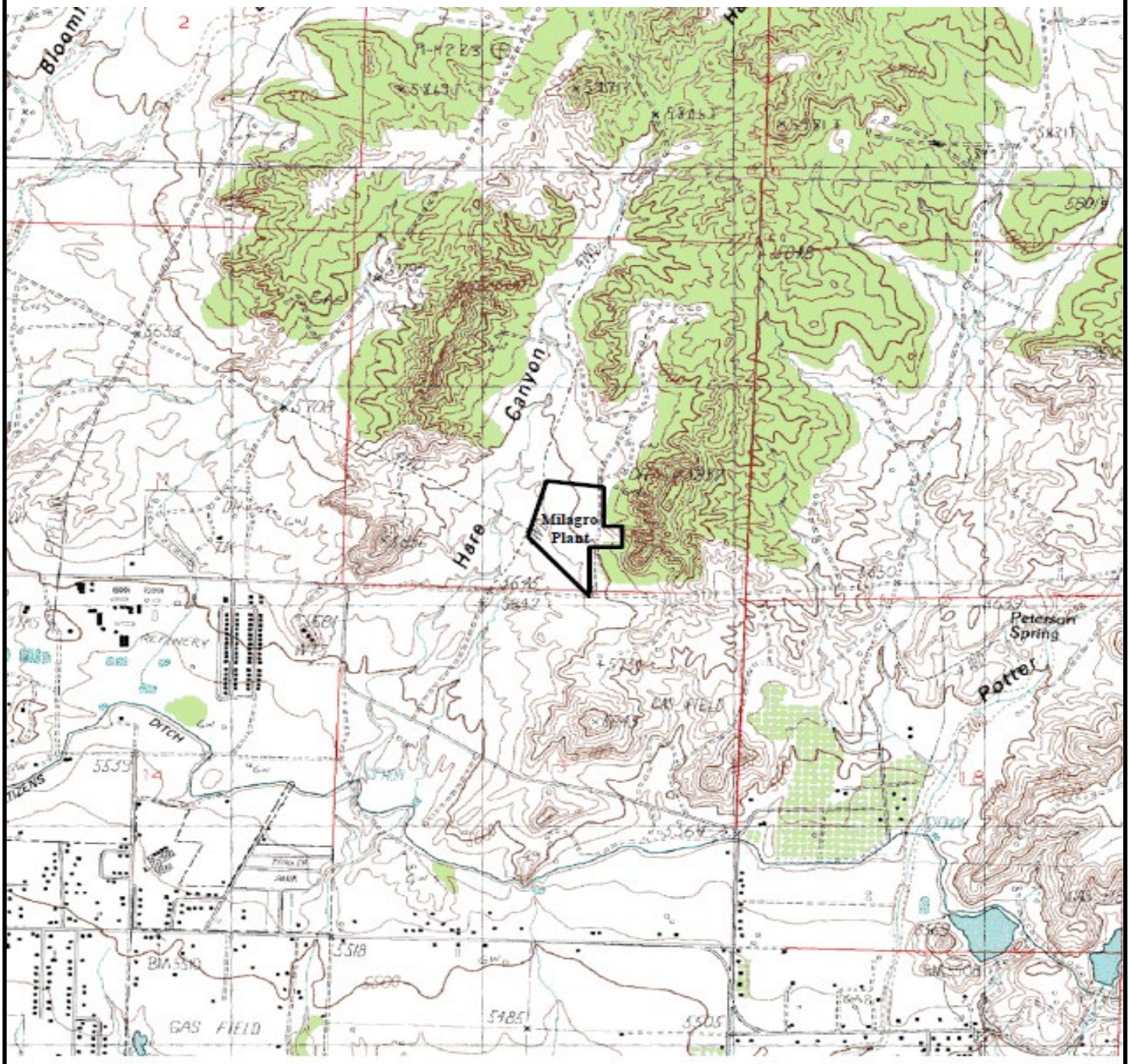
Section 8

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 provided on the following page.



Source: USGS Aztec and Bloomfield, NM Quadrangles

ALTAMIRA

4950 N O'CONNER RD.
SUITE 104
IRVING, TX 75062

www.altamira-us.com

FIGURE TITLE	AREA MAP
DOCUMENT TITLE	SIGNIFICANT REVISION
CLIENT	HARVEST MIDSTREAM, LLC
LOCATION	MILAGRO SAN JUAN COUNTY, NEW MEXICO

DATE	9/8/2025
SCALE	AS SHOWN
DESIGNED BY	AD
APPROVED BY	LWL
DRAWN BY	AD
PROJECT NUMBER	HARANM2401
FIGURE NUMBER	SECTION 8

Section 9

Proof of Public Notice

(for NSR applications submitting under 20.2.72 or 20.2.74 NMAC)

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

☑ **I have read the AQB "Guidelines for Public Notification for Air Quality Permit Applications"**
This document provides detailed instructions about public notice requirements for various permitting actions. It also provides public notice examples and certification forms. Material mistakes in the public notice will require a re-notice before issuance of the permit.

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

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

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

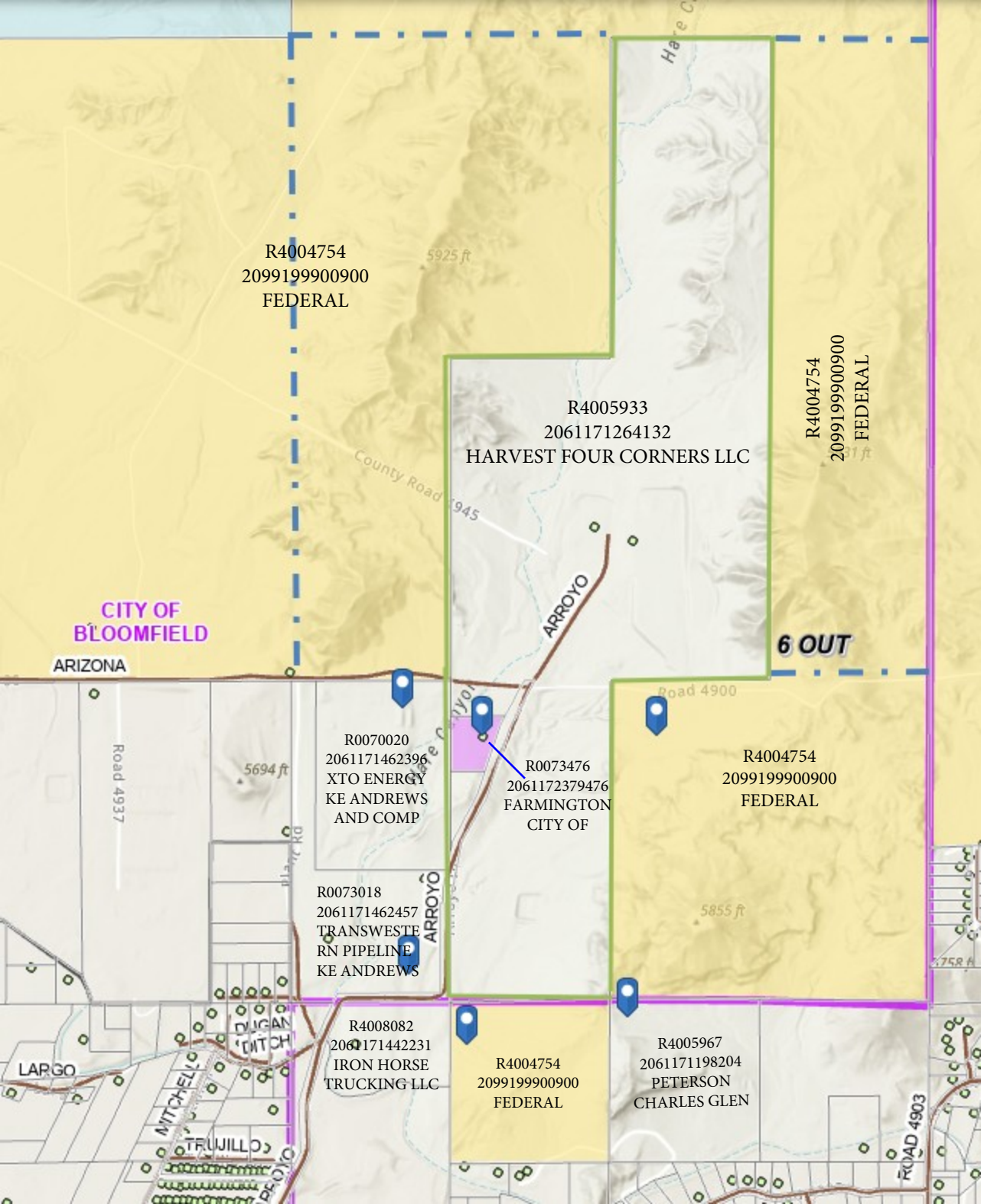
Per the Guidelines for Public Notification document mentioned above, include:

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

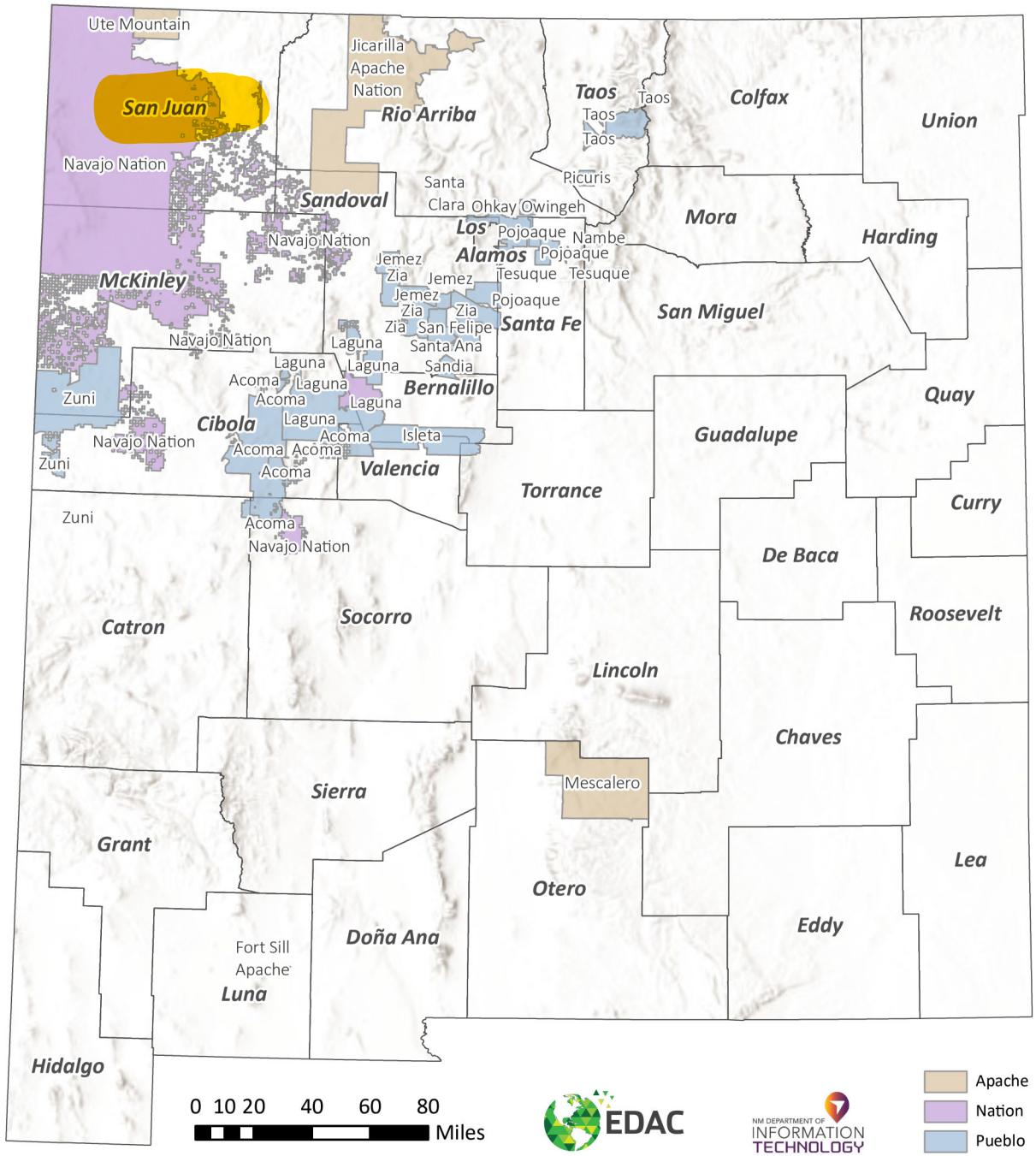
New Mexico Municipalities (04-2023)

Municipality	Mayor (as of 4-2023)	County	2010 Population	2020 Population	% Change (2010 to 2020)	Incorporation Date
Alamogordo	Susan Payne	Otero	30,403	31,361	3%	1912
Albuquerque	Timothy Keller	Bernalillo	545,852	564,648	3%	1885
Angel Fire	Jo Mixon	Colfax	1,216	1,211	0%	1986
Anthony	Diana Murillo-Trujillo	Dona Ana	9,360	8,701	-7%	2010
Artesia	Jon Henry	Eddy	11,301	12,844	14%	1905
Aztec	Michael Padilla	San Juan	6,763	6,196	-8%	1905
Bayard	Chon Fierro	Grant	2,328	2,124	-9%	1938
Belen	Robert Noblin	Valencia	7,269	7,386	2%	1918
Bernalillo	Jack Torres	Sandoval	8,320	9,084	9%	1948
Bloomfield	Cynthia Atencio	San Juan	8,112	7,407	-9%	1958
Bosque Farms	Russel Walkup	Valencia	3,904	4,053	4%	1974
Capitan	Ron Lowrance	Lincoln	1,489	1,396	-6%	1937
Carlsbad	Dale Janway	Eddy	26,138	32,248	23%	1918
Carrizozo	Ray Dean	Lincoln	996	968	-3%	1917
Causey	Kris King	Roosevelt	104	69	-34%	1959
Chama	Ernest Vigil	Rio Arriba	1,022	914	-11%	1961
Cimarron	Matthew Gonzales	Colfax	1,021	802	-21%	1910
Clayton	Ernest Sanches	Union	2,980	2,731	-8%	1912
Cloudcroft	Bill Denney	Otero	674	768	14%	1948
Clovis	Michael Morris	Curry	37,775	38,244	1%	1909
Columbus	Esequiel Salas	Luna	1,664	1,451	-13%	1913
Corona	Samuel Seely	Lincoln	172	130	-24%	1947
Corrales	James Fahey, Jr., MD	Sandoval	8,329	8,517	2%	1971
Cuba	Denny Herrera	Sandoval	731	630	-14%	1964
Deming	Benny Jasso	Luna	14,855	14,787	0%	1902
Des moines	Jonathan Valdez	Union	143	109	-24%	1915
Dexter	Mitch Daubert	Chaves	1,266	1,079	-15%	1903
Dora	Michey Burkett	Roosevelt	133	117	-12%	1959
Eagle Nest	Jeff Carr	Colfax	290	328	13%	1976
Edgewood	Audrey Jaramillo	Santa Fe	3,735	6,183	66%	1999
Elephant Butte	Philip Mortensen	Sierra	1,431	1,432	0%	1998
Elida	Durwood Dixon	Roosevelt	197	160	-19%	1907
Encino	Boyd Herrington	Torrance	82	51	-38%	1938
Espanola	John Ramon	Rio Arriba	10,224	10,514	3%	1925
Estancia	Nathan Dial	Torrance	1,655	1,487	-10%	1909
Eunice	Billy Hobbs	Lea	2,922	3,065	5%	1936
Farmington	Nate Duckett	San Juan	45,877	46,596	2%	1901
Floyd	Colin Chandler	Roosevelt	133	85	-36%	1959
Folsom	Stephanie King	Union	56	43	-23%	1908
Fort Sumner	Louie Gallegos	De Baca	1,031	877	-15%	1916
Gallup	Louie Bonaguidi	McKinley	21,678	21,765	0%	1891
Grady	Wesley Shafer	Curry	107	88	-18%	1936
Grants	Erik Garcia	Cibola	9,182	9,141	0%	1933
Grenville	Judy Jacobs	Union	38	22	-42%	1920
Hagerman	Tony Garcia	Chaves	1,257	982	-22%	1905
Hatch	James Whitlock	Dona Ana	1,648	1,550	-6%	1927
Hobbs	Sam Cobb	Lea	34,122	40,618	19%	1937
Hope	Bill Fletcher	Eddy	105	114	9%	1910
House	Sherman Martin	Quay	68	55	-19%	1959
Hurley	Ed Stevens	Grant	1,297	1,262	-3%	1956
Jal	Stephen Aldridge	Lea	2,047	2,196	7%	1950
Jemez Springs	Roger Sweet	Sandoval	250	197	-21%	1955
Kirtland	Mark Duncan	San Juan	7,875	580	-93%	2015
Lake Arthur	Ysidro Salazar	Chaves	436	382	-12%	1906
Las Cruces	Ken Miyagishima	Dona Ana	97,618	111,738	14%	1907
Las Vegas	Louie Trujillo	San Miguel	13,753	13,163	-4%	1888
Logan	David Babb	Quay	1,042	974	-7%	1959

Municipality	Mayor (as of 4-2023)	County	2010 Population	2020 Population	% Change (2010 to 2020)	Incorporation Date
Lordsburg	Glenda Greene	Hidalgo	2,797	2,318	-17%	1916
Los Alamos	Randall Tyti	Los Alamos	17,744	12,978	-27%	1969
Los Lunas	Charles Griego	Valencia	14,835	17,370	17%	1928
Los Ranchos	Don Lopez	Bernalillo	6,024	5,881	-2%	1958
Loving	Pete Estrada	Eddy	1,413	1,386	-2%	1945
Lovington	David Ttrujillo	Lea	11,009	11,678	6%	1917
Magdalena	Richard Rumpf	Socorro	938	821	-12%	1918
Maxwell	Shantelle Gallegos	Colfax	254	230	-9%	1912
Melrose	Barry Green	Curry	651	612	-6%	1916
Mesilla	Nora Barraza	Dona Ana	2,196	1,804	-18%	1959
Milan	Felix Gonzales	Cibola	3,245	2,531	-22%	1957
Moriarty	Ted Moriarty	Torrance	1,910	1,908	0%	1953
Mosquero	Victor Vihil	Harding	93	100	8%	1922
Mountainair	Peter Nieto	Torrance	928	869	-6%	1903
Pecos	Telesfor Benavidez	San Miguel	1,398	1,377	-2%	1953
Peralta	Bryan Olguin	Valencia	3,660	3,380	-8%	2007
Portales	Ronald Jackson	Roosevelt	12,280	12,109	-1%	1909
Questa	John Ortega	Taos	1,770	1,724	-3%	1964
Raton	Neil Segotta	Colfax	6,885	6,031	-12%	1891
Red River	Linda Calhoun	Taos	477	537	13%	1971
Reserve	Hilda Kellar	Catron	289	290	0%	1974
Rio Communities	Joshua Ramsell	Valencia	5,000	4,965	-1%	2013
Rio Rancho	Greggory Hull	Sandoval	87,521	104,257	19%	1981
Roswell	Timothy Jennings	Chaves	48,366	48,541	0%	1903
Roy	Matthew Baca	Harding	234	194	-17%	1916
Ruidoso	Lynn Crawford	Lincoln	8,029	7,693	-4%	1945
Ruidoso Downs	Dean holman	Lincoln	2,815	2,632	-7%	1947
San Jon	Billie jo Barnes	Quay	216	195	-10%	1946
San Ysidro	Steve Lucero	Sandoval	193	166	-14%	1967
Santa Clara	Richard Bauch	Grant	1,686	1,624	-4%	1947
Santa Fe	Alan Webber	Santa Fe	67,947	87,684	29%	1891
Santa Rosa	Nelson Kotiar	Guadalupe	2,848	2,846	0%	1914
Silver City	Ken Ladner	Grant	10,315	9,689	-6%	1878
Socorro	Ravi Bhasker	Socorro	9,051	8,549	-6%	1894
Springer	Boe Lopez	Colfax	1,047	939	-10%	1910
Sunland Park	Javier Perea	Dona Ana	14,106	16,807	19%	1983
T or C	Amanda Forrister	Sierra	6,475	6,064	-6%	1916
Taos	Pascualito Maestas	Taos	5,716	6,577	15%	1934
Taos Ski Valley	Christof Brownell	Taos	69	79	14%	1996
Tatum	Amy Gutierrez	Lea	798	711	-11%	1948
Texico	Jerry Bradley	Curry	1,130	938	-17%	1908
Tijeras	Jake Bruton	Bernalillo	541	465	-14%	1973
Tucumcari	Ruth Ann Litchfield	Quay	5,363	5,252	-2%	1908
Tularosa	Margaret Trujillo	Otero	2,842	2,610	-8%	1916
Vaugn	Roman Garcia	Guadalupe	446	282	-37%	1919
Virden	Jacob Bigler	Hidalgo	152	125	-18%	1932
Wagon Mound	Andres Martinez	Mora	314	264	-16%	1918
Willard	David Dean	Torrance	253	201	-21%	1910
Williamsburg	Deb Stubblefield	Sierra	449	461	3%	1949

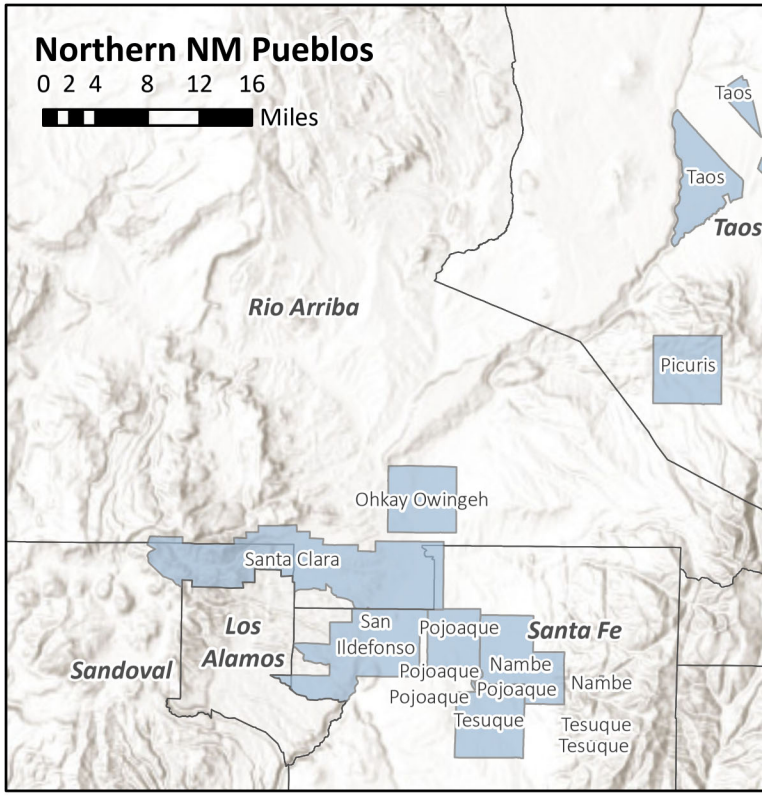

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HARVEST FOUR CORNERS LLC
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FEDERAL
CITY OF
BLOOMFIELD
ARIZONA
6 OUT
ARROYO
Road 4900
Road 4937
5694 ft
5855 ft
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XTO ENERGY
KE ANDREWS
AND COMP
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FARMINGTON
CITY OF
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FEDERAL
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TRANSWESTE
RN PIPELINE
KE ANDREWS
ARROYO
LARGO
MITCHELL
TRUJILLO
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IRON HORSE
TRUCKING LLC
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2061171198204
PETERSON
CHARLES GLEN
ROAD 4903

Tribal Areas Within New Mexico, 2021

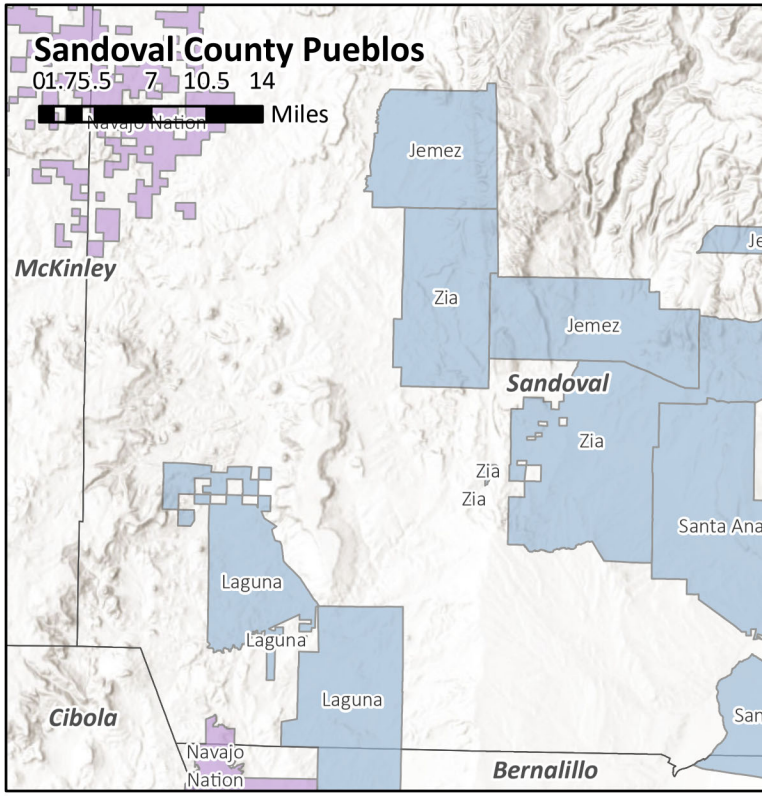


Map produced by: Earth Data Analysis Center; **Data Sources:** US Census, RGIS; **Base map:** "World Topographic Map" and "World Hillshade", by Esri, NASA, NGA, USGS, New Mexico State University, Texas Parks & Wildlife, HERE, Garmin, SafeGraph, METI/NASA, Bureau of Land Management, EPA, NPS, USDA

Northern NM Pueblos



Sandoval County Pueblos



Tax Account

Summary

Account Id	C8800146
Parcel Number	
Owners	HARVEST FOUR CORNERS LLC
Address	1111 TRAVIS ST HOUSTON, TX 77002
Situs Address	
Legal	EQUIPMENT FOR PIPELINE

Inquiry

As Of 10/14/2025

Payment Type ○ First ◉ Full

Taxes Due $75,179.32

Total Due $75,179.32

Value

Area Id		**Mill Levy**
6INNR - District 6IN Non-Residential		34.1160000
	Actual	**Assessed**
CENTRAL NON-RESIDENTIAL LAND - 8200	13,203	4,401
CENTRAL NON-RESIDENTIAL IMPROVEMENT - 8220	6,596,937	2,198,979
Total Value	6,610,140	2,203,380
Taxes		$75,179.32

The amounts of taxes due on this page are based on **last year's** property value assessments. For current year values visit the San Juan County Assessor's site.

BALLANTINE
COMMUNICATIONS

AFFIDAVIT OF PUBLICATION

STATE OF NEW MEXICO

County of San Juan

Odette Zemin, the undersigned, authorized Representative of the Tri-City Record, on oath states that this newspaper is duly qualified to publish legal notices or advertisements within the meaning of Section 3, Chapter 167, Session Law of 1937, that payment therefore has been made of assessed as court cost; and that the notice, copy of which is hereto attached, was published in said paper in the regular daily edition, for 1 time(s) on the following date(s):

2/16/2026

Sworn and subscribed before me, a notary public in and for the county of La Plata and the State of Colorado, 2-17-26

Gail Lynn Vitarius
Notary Public

PRICE: $ 904.61

Statement to come at the end of the month.

ACCOUNT NUMBER: 112313

GAIL LYNN VITARIUS
Notary Public
State of Colorado
Notary ID # 20254005989
My Commission Expires 02-12-2029

COPY OF ADVERTISEMENT

NOTICE OF AIR QUALITY PERMIT APPLICATION

Harvest Four Corners, LLC announces its application submittal to the New Mexico Environment Department for an air quality permit for the modification of its compressor station. The date of application submittal to the Air Quality Bureau is February 17, 2026.

The exact location for the facility, known as Milagro Gas Testing Plant, is at latitude 36.725536 and longitude -107.941502. The approximate location of this facility is 3 miles northeast of Bloomfield, in San Juan County.

The proposed revision consists of replacing one (1) Hoisman/Zurn 990 MMBtu/hr boiler (Unit 21 with one (1) Babcock & Wilcox 135.2 MMBtu/hr boiler (Unit 21A) equipped equipped with a Flue Gas Recirculation (FGR), a low NOx burner (LNB), and with a Selective Catalytic Reduction (SCR) control device. Harvest is also updating emissions from the TEG dehydrator still vents (Units 9b, 10b, 11b, 14, 15), the amine regenerator vents (Units 16a, 16b, 17, 18, 19), startup, shutdown, and maintenance (Units SSM1, SSM2), and the fugitives (Unit F1) based on current gas analyses from the facility. In addition, malfunction emissions (Unit M1) are being removed from the permit. No other permit changes are proposed.

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

POLLUTANT	POUNDS PER HOUR	TONS PER YEAR
PARTICULATE MATTER (PM)	6.0	22.0
PM10	6.0	22.0
PM 2.5	6.0	22.0
SULFUR DIOXIDE (SO2)	1.0	3.0
NITROGEN OXIDES (NOx)	44.0	142.0
CARBON MONOXIDE (CO)	56.0	240.0
VOLATILE ORGANIC COMPOUNDS (VOC)	8.0	35.0
TOTAL SUM OF ALL HAZARDOUS AIR POLLUTANTS (HAPs)	4.0	17.0
TOXIC AIR POLLUTANT (TAP)	1.0	3.0
GREEN HOUSE GAS EMISSIONS AS TOTAL CO2e	N/A	1,461,451

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

The owner/operator of the Facility is Harvest Four Corners, LLC, 1755 Arroyo Drive, Bloomfield, NM 87413.

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

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

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

Atención

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

Notice of Non-Discrimination

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

BALLANTINE
COMMUNICATIONS

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Notary ID # 20254005989
My Commission Expires 02-12-2029

COPY OF ADVERTISEMENT

33491

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Pollutant: Pounds per hour Tons per year
Particulate Matter (PM) 6.0 22.0
PM_{10} 6.0 22.0
$PM_{2.5}$ 6.0 22.0
Sulfur Dioxide (SO_2) 1.0 3.0
Nitrogen Oxides (NO_x) 44.0 142.0
Carbon Monoxide (CO) 56.0 240.0
Volatile Organic Compounds (VOC) 8.0 75.0
Total sum of all Hazardous Air Pollutants (HAPs) 4.0 17.0
Toxic Air Pollutant (TAP) 1.0 3.0
Green House Gas Emission as Total CO_2e n/a 1,461,451

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

General information about air quality and the permitting process and links to the

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

Atención

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

Notice of Non-Discrimination

NMED does not discriminate on the basis of race, color, national origin, disability, age or sex in the administration of its programs or activities, as required by applicable laws and regulations. NMED is responsible for coordination of compliance efforts and receipt of inquiries concerning non-discrimination requirements implemented by 40 C.F.R. Part 7, including Title VI of the Civil Rights Act of 1964, as amended; Section 504 of the Rehabilitation Act of 1973; the Age Discrimination Act of 1975, Title IX of the Education Amendments of 1972, and Section 13 of the Federal Water Pollution Control Act

Amendments of 1972. If you have any questions about this notice or any of NMED's non-discrimination programs, policies or procedures, or if you believe that you have been discriminated against with respect to a NMED program or activity, you may contact: Non-Discrimination Coordinator, NMED, 1190 St. Francis Dr., Suite N4050, P.O. Box 5469, Santa Fe, NM 87502, (505) 827-2855, nd.coordinator@env.nm.gov. You may also visit our website at *https://www.env.nm.gov/non-employee-discrimination-complaint-page/* to learn how and where to file a complaint of discrimination.

Published in Tri-City Record
February 16, 2026

NOTICE OF AIR QUALITY PERMIT APPLICATION

Harvest Four Corners, LLC announces its application submittal to the New Mexico Environment Department for an air quality permit for the modification of its compressor station. The date of application submittal to the Air Quality Bureau is February 17, 2026.

The exact location for the facility, known as Milagro Gas Trating Plant, is at latitude 36.735536 and longitude -107.941502. The approximate location of this facility is 3 miles northeast of Bloomfield in San Juan County.

The proposed revision consists of replacing one (1) Holman/Zurn 190 MMBtu/hr boiler (Unit 2) with one (1) Babcock & Wilcox 135.2 MMBtu/hr boiler (Unit 2A) equipped equipped with a Flue Gas Recirculation (FGR), a low NOx burner (LNB), and with a Selective Catalytic Reduction (SCR) control device. Harvest is also updating emissions from the TEG dehydrator still vents (Units 9b, 10b, 11b, 14, 15), the amine regenerator vents (Units 16a, 16b, 17, 18, 19), startup, shutdown, and maintenance (Units SSM1, SSM2), and the fugitives (Unit F1) based on current gas analyses from the facility. In addition, malfunction emissions (Unit M1) are being removed from the permit. No other permit changes are proposed.

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

Pollutant:	Pounds per hour	Tons per year
Particulate Matter (PM)	6.0	22.0
PM_{10}	6.0	22.0
$PM_{2.5}$	6.0	22.0
Sulfur Dioxide (SO_2)	1.0	3.0
Nitrogen Oxides (NO_x)	44.0	142.0
Carbon Monoxide (CO)	56.0	240.0
Volatile Organic Compounds (VOC)	8.0	75.0
Total sum of all Hazardous Air Pollutants (HAPs)	4.0	17.0
Toxic Air Pollutant (TAP)	1.0	3.0
Green House Gas Emission as Total CO_2e	n/a	1,461,451

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

The owner/operator of the Facility is: Harvest Four Corners, LLC, 1755 Arroyo Drive, Bloomfield, NM 87413.

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

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

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Atención

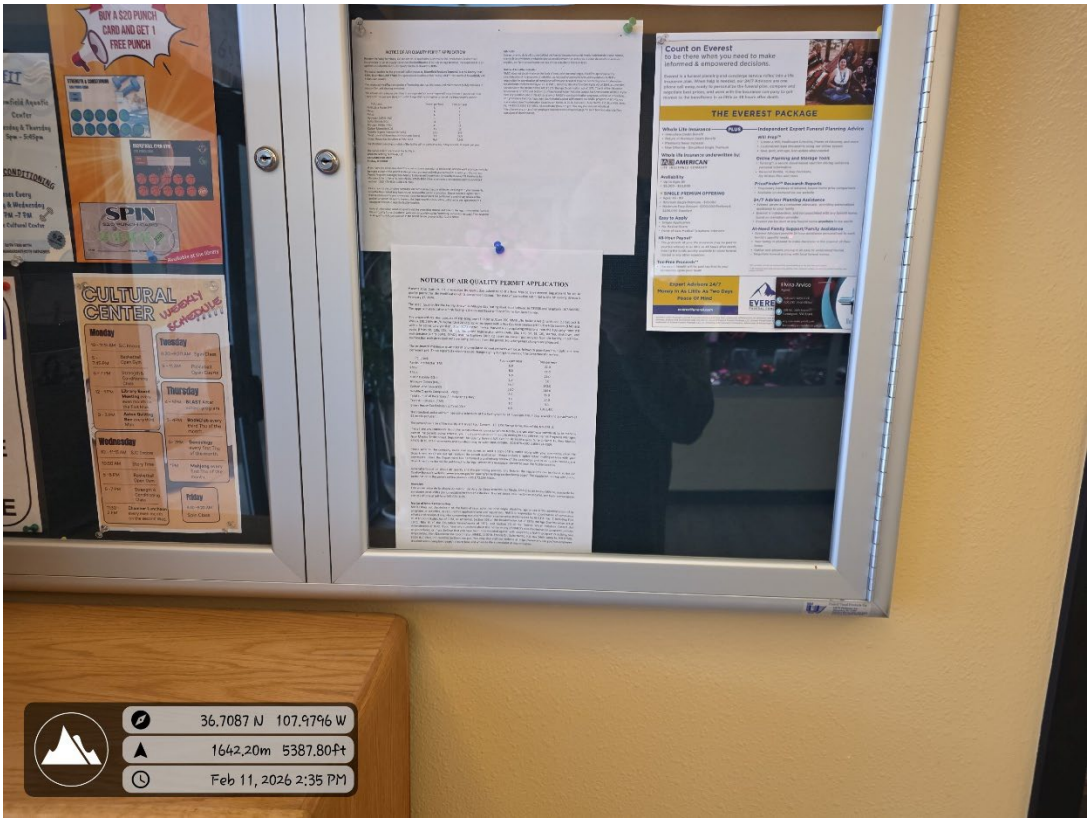
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Notice of Non-Discrimination

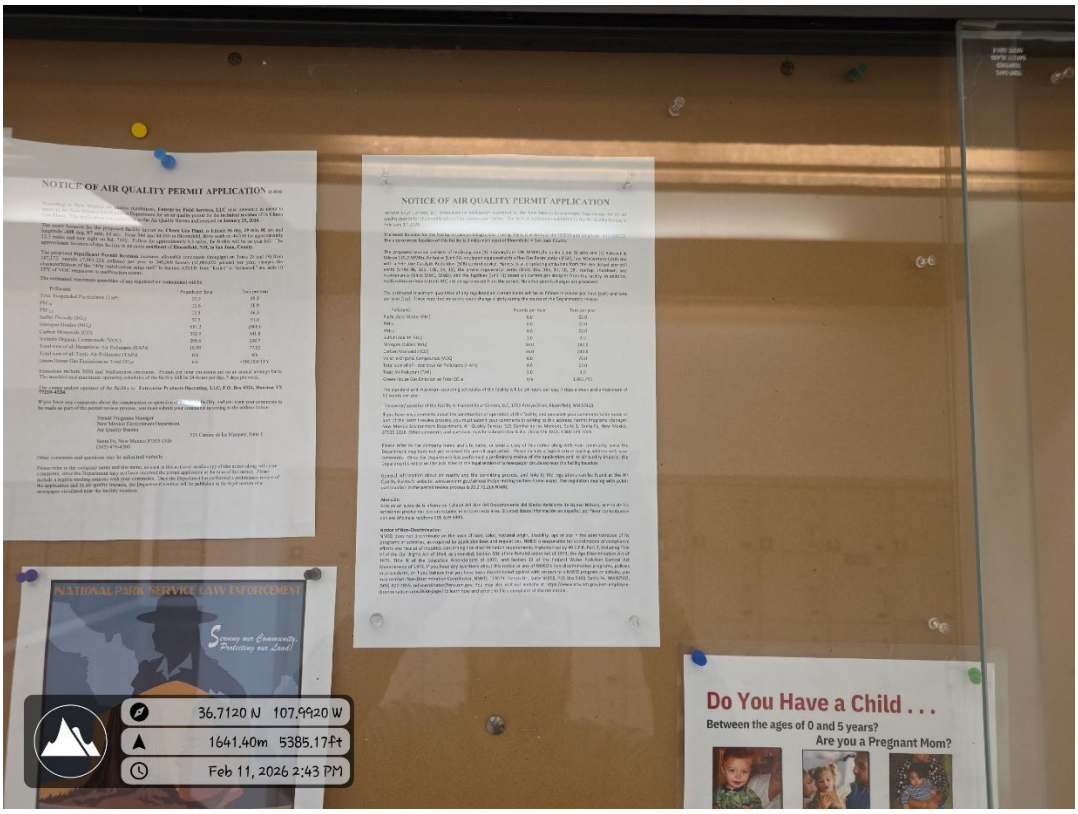
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FCA
OFFICE
MILAGRO
TREATING
& COGEN
PLANTS
36.7355 N 107.9432 W
1734.31m 5689.99ft
Feb 11, 2026 2:17 PM

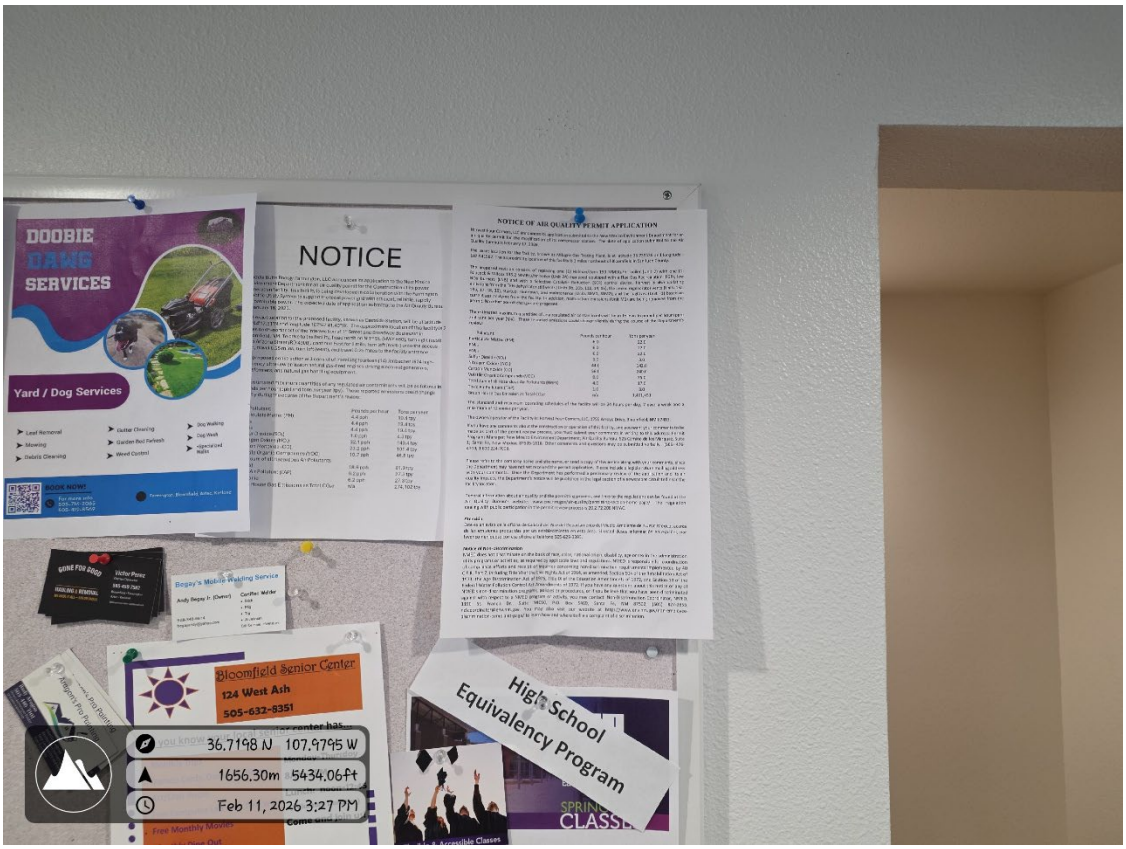

TREATING
& COGEN
PLANTS
ALL VISITORS MUST
CHECK -IN WITH SECURITY
36.7355 N 107.9432 W
1734.31m 5689.99ft
Feb 11, 2026 2:17 PM


BUY A $20 PUNCH CARD AND GET 1 FREE PUNCH
SPIN
CULTURAL CENTER WEEKLY SCHEDULE
Monday
Tuesday
Thursday
Wednesday
Friday
NOTICE OF AIR QUALITY PERMIT APPLICATION
Count on Everest
to be there when you need to make informed & empowered decisions.
THE EVEREST PACKAGE
36.7087 N 107.9796 W
1642.20m 5387.80ft
Feb 11, 2026 2:35 PM


333
36.7086 N 107.9797 W
1642.30m 5388.12ft
Feb 11, 2026 2:35 PM


NOTICE OF AIR QUALITY PERMIT APPLICATION
NOTICE OF AIR QUALITY PERMIT APPLICATION
NATIONAL PARK SERVICE LAW ENFORCEMENT
Serving our Community
Protecting our Land
Do You Have a Child . . .
Between the ages of 0 and 5 years?
Are you a Pregnant Mom?
36.7120 N 107.9920 W
1641.40m 5385.17ft
Feb 11, 2026 2:43 PM


UNITED STATES POST OFFICE
BLOOMFIELD, NEW MEXICO 87413
36.7119 N 107.9919 W
1641.40m 5385.17ft
Feb 11, 2026 2:44 PM


DOOBIE DAWG SERVICES
Yard / Dog Services
NOTICE
NOTICE OF AIR QUALITY PERMIT APPLICATION
Bloomfield Senior Center
124 West Ash
505-632-8351
High School Equivalency Program
36.7198 N 107.9795 W
1656.30m 5434.06ft
Feb 11, 2026 3:27 PM


CITY HALL
UTILITIES
915
FedEx
36.7199 N 107.9797 W
1656.80m 5435.70ft
Feb 11, 2026 3:27 PM

General Posting of Notices – Certification

I, Jennifer Nygren, the undersigned, certify that on **February 11, 2026,** posted a true and correct copy of the attached Public Notice in the following publicly accessible and conspicuous places in, or near, **Bloomfield, San Juan** County, state of New Mexico on the following dates:

1. Harvest Four Corners, LLC
   Milagro Gas Treating Plant
   Date: February 11, 2026

2. Bloomfield Post Office
   1108 W Broadway Ave
   Bloomfield, NM 87413
   Date: February 11, 2026

3. Bloomfield City Hall
   915 N 1st Street
   Bloomfield, NM 87413
   Date: February 11, 2026

4. Bloomfield City Public Library
   333 S 1st Street
   Bloomfield, NM 87413
   Date: February 11, 2026

Signed this 11th day of February , 2026 ,

Jennifer Nygren Digitally signed by Jennifer Nygren
DN: cn=Jennifer Nygren, c=US, o=Harvest Midstream, ou=EHS, email=jdeal@harvestmidstream.com
Date: 2026.02.12 07:29:09 -07'00'

Signature	2/11/2026 Date
Jennifer Nygren Printed Name	
Environmental Specialist Title	

PUBLIC SERVICE ANNOUNCEMENT

Harvest Four Corners, LLC announces its application to the New Mexico Environment Department for an air quality permit for the modification of its gas plant. The proposed revision consists of replacing one (1) Holman/Zurn 190 MMBtu/hr boiler (Unit 2) with one (1) Babcock & Wilcox 135.2 MMBtu/hr boiler (Unit 2A) equipped with a Flue Gas Recirculation (FGR), a low NOx burner (LNB), and with a Selective Catalytic Reduction (SCR) control device. Harvest is also updating emissions from the TEG dehydrator still vents (Units 9b, 10b, 11b, 14, 15), the amine regenerator vents (Units 16a, 16b, 17, 18, 19), startup, shutdown, and maintenance (Units SSM1, SSM2), and the fugitives (Unit F1) based on current gas analyses from the facility. In addition, malfunction emissions (Unit M1) are being removed from the permit. The date of application submittal to the Air Quality Bureau is February 17, 2026. This notice is a requirement according to New Mexico air quality regulations.

The exact location for the facility, known as Milagro Gas Treating Plant, is at latitude 36.735536 and longitude -107.941502. The approximate location of this facility is 3 miles northeast of Bloomfield in San Juan County.

The owner and/or operator of the Facility is:
Harvest Four Corners, LLC
1755 Arroyo Drive
Bloomfield, NM 87413

Notices were posted at the Milagro Gas Treating Plant and the following three locations:

Bloomfield Post Office
1108 W Broadway Ave
Bloomfield, NM 87413

Bloomfield City Hall
915 N 1st Street
Bloomfield, NM 87413

Bloomfield City Public Library
333 S 1st Street
Bloomfield, NM 87413

The address for submitting comments to the NMED is as follows:
New Mexico Environment Department
Air Quality Bureau – Permits Section
525 Camino de los Marquez, Suite 1
Santa Fe, New Mexico 87505

Submittal of Public Service Announcement – Certification

I, Laura Worthen Lodes, the undersigned, certify that on **February 12, 2026,** submitted a public service announcement to **KENN 1390 AM Radio** that serves the City\Town\Village of **Bloomfield and the surrounding areas, San Juan** County, New Mexico, in which the source is or is proposed to be located and that **KENN 1390 AM Radio** did not respond.

Signed this 12 day of February, 2026,



Signature — Date: 2/12/2026

Laura Worthen Lodes
Printed Name

Consultant
Title {APPLICANT OR RELATIONSHIP TO APPLICANT}

Notice To Landowners

1. Aztec City Manager
2. Bureau of Land Management
3. Bloomfield City Manager
4. Charles Glen Peterson
5. City of Farmington
6. Farmington City Manager
7. Iron Horse Trucking LLC
8. President of the Navajo Nation
9. San Juan County, County Manager
10. Transwestern Pipeline Company

PO Box 61229
Houston, TX 77208

1111 Travis Street
Houston, TX 77002
Phone: 713/209-2400
Fax: 713/209-2478
harvestmidstream.com

February 12, 2026

CERTIFIED MAIL 9589 0710 5270 2048 0846 05
RETURN RECEIPT REQUESTED

Aztec City Manager
201 W. Chaco St.
Aztec, NM 87410

Dear Madam/Sir,

According to New Mexico Environment Department (NMED) air quality regulations, Harvest Four Corners, LLC must announce its intent to submit an application to revise the air quality permit for its Milagro. The expected date of application submittal to the Air Quality Bureau is during the week of February 17, 2026.

The exact location for the facility, known as Milagro Gas Treating Plant, is at 1754 Arroyo Drive, Bloomfield, NM 87413. The approximate location of this facility is 2.3 miles east-northeast of Bloomfield, NM in San Juan County.

The proposed revision consists of replacing one (1) Holman/Zurn 190 MMBtu/hr boiler (Unit 2) with one (1) Babcock & Wilcox 135.2 MMBtu/hr boiler (Unit 2A) equipped with a Flue Gas Recirculation (FGR), a low NOx burner (LNB), and with a Selective Catalytic Reduction (SCR) control device. Harvest is also updating emissions from the TEG dehydrator still vents (Units 9b, 10b, 11b, 14, 15), the amine regenerator vents (Units 16a, 16b, 17, 18, 19), startup, shutdown, and maintenance (Units SSM1, SSM2), and the fugitives (Unit F1) based on current gas analyses from the facility. In addition, malfunction emissions (Unit M1) are being removed from the permit. No other permit changes are proposed.

The station's estimated maximum quantities of any regulated air contaminants will be as follows in pounds per hour and tons per year and may change slightly during the course of the Department's review:

	Pounds Per Hour	Tons Per Year
Nitrogen Oxides (NO_X)	44.0	142.0
Carbon Monoxide (CO)	56.0	240.0
Volatile Organic Compounds (VOCs)	8.0	75.0
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Particulate Matter Less Than 2.5 Microns ($PM_{2.5}$)	6.0	22.0
Total Sum of all Hazardous Air Pollutants (HAPs)	4.0	17.0
Green House Gas Emissions as Total CO_2e	N/A	1,461,451
Toxic Air Pollutant (TAP)	1.0	3.0

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

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

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

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Attencion

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Sincerely,

Jennifer Nygren

Jennifer Nygren
Environmental Specialist
Harvest Four Corners, LLC
1755 Arroyo Drive
Bloomfield, NM 87413

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PO Box 61229
Houston, TX 77208

1111 Travis Street
Houston, TX 77002
Phone: 713/209-2400
Fax: 713/209-2478
harvestmidstream.com

February 12, 2026

CERTIFIED MAIL 9589 0710 5270 2048 0846 12
RETURN RECEIPT REQUESTED

Bureau of Land Management
6251 College Blvd., Suite A
Farmington, NM 87402

Dear Madam/Sir,

According to New Mexico Environment Department (NMED) air quality regulations, Harvest Four Corners, LLC must announce its intent to submit an application to revise the air quality permit for its Milagro. The expected date of application submittal to the Air Quality Bureau is during the week of February 17, 2026.

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Total Sum of all Hazardous Air Pollutants (HAPs)	4.0	17.0
Green House Gas Emissions as Total CO_2e	N/A	1,461,451
Toxic Air Pollutant (TAP)	1.0	3.0

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

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

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Sincerely,

Jennifer Nygren

Jennifer Nygren
Environmental Specialist
Harvest Four Corners, LLC
1755 Arroyo Drive
Bloomfield, NM 87413

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1111 Travis Street
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Phone: 713/209-2400
Fax: 713/209-2478
harvestmidstream.com

February 12, 2026

CERTIFIED MAIL 9589 0710 5270 2048 0846 29
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Bloomfield City Manager
915 N. 1st Street
Bloomfield, NM 87413

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Sincerely,

Jennifer Nygren

Jennifer Nygren
Environmental Specialist
Harvest Four Corners, LLC
1755 Arroyo Drive
Bloomfield, NM 87413

Notice of Non-Discrimination

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PO Box 61229
Houston, TX 77208

1111 Travis Street
Houston, TX 77002
Phone: 713/209-2400
Fax: 713/209-2478
harvestmidstream.com

February 12, 2026

CERTIFIED MAIL 9589 0710 5270 2048 0846 36
RETURN RECEIPT REQUESTED

Charles Glen Peterson
1670 Solana
Los Alamos, NM 87544

Dear Madam/Sir,

According to New Mexico Environment Department (NMED) air quality regulations, Harvest Four Corners, LLC must announce its intent to submit an application to revise the air quality permit for its Milagro. The expected date of application submittal to the Air Quality Bureau is during the week of February 17, 2026.

The exact location for the facility, known as Milagro Gas Treating Plant, is at 1754 Arroyo Drive, Bloomfield, NM 87413. The approximate location of this facility is 2.3 miles east-northeast of Bloomfield, NM in San Juan County.

The proposed revision consists of replacing one (1) Holman/Zurn 190 MMBtu/hr boiler (Unit 2) with one (1) Babcock & Wilcox 135.2 MMBtu/hr boiler (Unit 2A) equipped with a Flue Gas Recirculation (FGR), a low NOx burner (LNB), and with a Selective Catalytic Reduction (SCR) control device. Harvest is also updating emissions from the TEG dehydrator still vents (Units 9b, 10b, 11b, 14, 15), the amine regenerator vents (Units 16a, 16b, 17, 18, 19), startup, shutdown, and maintenance (Units SSM1, SSM2), and the fugitives (Unit F1) based on current gas analyses from the facility. In addition, malfunction emissions (Unit M1) are being removed from the permit. No other permit changes are proposed.

The station's estimated maximum quantities of any regulated air contaminants will be as follows in pounds per hour and tons per year and may change slightly during the course of the Department's review:

	Pounds Per Hour	Tons Per Year
Nitrogen Oxides (NO_X)	44.0	142.0
Carbon Monoxide (CO)	56.0	240.0
Volatile Organic Compounds (VOCs)	8.0	75.0
Particulate Matter Less Than 10 Microns (PM_{10})	6.0	22.0
Particulate Matter Less Than 2.5 Microns ($PM_{2.5}$)	6.0	22.0
Total Sum of all Hazardous Air Pollutants (HAPs)	4.0	17.0
Green House Gas Emissions as Total CO_2e	N/A	1,461,451
Toxic Air Pollutant (TAP)	1.0	3.0

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

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

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

General information about air quality and the permitting process can be found at the Air Quality Bureau's web site. The regulation dealing with public participation in the permit review process is 20.2.72.206 NMAC. This regulation can be found in the "Permits" section of this web site.

Attencion

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Sincerely,

Jennifer Nygren

Jennifer Nygren
Environmental Specialist
Harvest Four Corners, LLC
1755 Arroyo Drive
Bloomfield, NM 87413

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harvestmidstream.com

February 12, 2026

CERTIFIED MAIL 9589 0710 5270 2048 0845 82
RETURN RECEIPT REQUESTED

City of Farmington
800 Municipal Drive
Farmington, NM 87401

Dear Madam/Sir,

According to New Mexico Environment Department (NMED) air quality regulations, Harvest Four Corners, LLC must announce its intent to submit an application to revise the air quality permit for its Milagro. The expected date of application submittal to the Air Quality Bureau is during the week of February 17, 2026.

The exact location for the facility, known as Milagro Gas Treating Plant, is at 1754 Arroyo Drive, Bloomfield, NM 87413. The approximate location of this facility is 2.3 miles east-northeast of Bloomfield, NM in San Juan County.

The proposed revision consists of replacing one (1) Holman/Zurn 190 MMBtu/hr boiler (Unit 2) with one (1) Babcock & Wilcox 135.2 MMBtu/hr boiler (Unit 2A) equipped with a Flue Gas Recirculation (FGR), a low NOx burner (LNB), and with a Selective Catalytic Reduction (SCR) control device. Harvest is also updating emissions from the TEG dehydrator still vents (Units 9b, 10b, 11b, 14, 15), the amine regenerator vents (Units 16a, 16b, 17, 18, 19), startup, shutdown, and maintenance (Units SSM1, SSM2), and the fugitives (Unit F1) based on current gas analyses from the facility. In addition, malfunction emissions (Unit M1) are being removed from the permit. No other permit changes are proposed.

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Total Sum of all Hazardous Air Pollutants (HAPs)	4.0	17.0
Green House Gas Emissions as Total CO_2e	N/A	1,461,451
Toxic Air Pollutant (TAP)	1.0	3.0

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

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Attencion

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Sincerely,

Jennifer Nygren

Jennifer Nygren
Environmental Specialist
Harvest Four Corners, LLC
1755 Arroyo Drive
Bloomfield, NM 87413

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Fax: 713/209-2478
harvestmidstream.com

February 12, 2026

CERTIFIED MAIL 9589 0710 5270 2048 0845 99
RETURN RECEIPT REQUESTED

Farmington City Manager
800 Municipal Drive
Farmington, NM 87401

Dear Madam/Sir,

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Sincerely,

Jennifer Nygren

Jennifer Nygren
Environmental Specialist
Harvest Four Corners, LLC
1755 Arroyo Drive
Bloomfield, NM 87413

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1111 Travis Street
Houston, TX 77002
Phone: 713/209-2400
Fax: 713/209-2478
harvestmidstream.com

February 12, 2026

CERTIFIED MAIL 9589 0710 5270 2048 0825 40
RETURN RECEIPT REQUESTED

Iron Horse Trucking LLC
2308 E Blanco Blvd
Bloomfield, NM 87413

Dear Madam/Sir,

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Sincerely,

Jennifer Nygren

Jennifer Nygren
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Harvest Four Corners, LLC
1755 Arroyo Drive
Bloomfield, NM 87413

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February 12, 2026

CERTIFIED MAIL 9589 0710 5270 2048 0825 57
RETURN RECEIPT REQUESTED

President of the Navajo Nation
100 Parkway.
Window Rock, AZ 86515

Dear Madam/Sir,

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February 12, 2026

CERTIFIED MAIL 9589 0710 5270 2048 0825 64
RETURN RECEIPT REQUESTED

County Manager
San Juan County
100 S. Oliver Dr.
Aztec, NM 87410

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Green House Gas Emissions as Total CO_2e	N/A	1,461,451
Toxic Air Pollutant (TAP)	1.0	3.0

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

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

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

General information about air quality and the permitting process can be found at the Air Quality Bureau's web site. The regulation dealing with public participation in the permit review process is 20.2.72.206 NMAC. This regulation can be found in the "Permits" section of this web site.

Attencion

Este es un aviso de la Agencia de Calidad de Aire del Departamento de Medio Ambiente de Nuevo México, acerca de las emisiones producidas por un establecimiento en esta área. Si usted desea información en español, por favor de comunicarse con la oficina de Calidad de Aire al teléfono 505-629-7748.

Sincerely,

Jennifer Nygren

Jennifer Nygren
Environmental Specialist
Harvest Four Corners, LLC
1755 Arroyo Drive
Bloomfield, NM 87413

Notice of Non-Discrimination

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

PO Box 61229
Houston, TX 77208

1111 Travis Street
Houston, TX 77002
Phone: 713/209-2400
Fax: 713/209-2478
harvestmidstream.com

February 12, 2026

CERTIFIED MAIL 9589 0710 5270 2048 0825 19
RETURN RECEIPT REQUESTED

Transwestern Pipeline Company
Attn: KE A
2424 Ridge Rd
Rockwall, TX 75087

Dear Madam/Sir,

According to New Mexico Environment Department (NMED) air quality regulations, Harvest Four Corners, LLC must announce its intent to submit an application to revise the air quality permit for its Milagro. The expected date of application submittal to the Air Quality Bureau is during the week of February 17, 2026.

The exact location for the facility, known as Milagro Gas Treating Plant, is at 1754 Arroyo Drive, Bloomfield, NM 87413. The approximate location of this facility is 2.3 miles east-northeast of Bloomfield, NM in San Juan County.

The proposed revision consists of replacing one (1) Holman/Zurn 190 MMBtu/hr boiler (Unit 2) with one (1) Babcock & Wilcox 135.2 MMBtu/hr boiler (Unit 2A) equipped with a Flue Gas Recirculation (FGR), a low NOx burner (LNB), and with a Selective Catalytic Reduction (SCR) control device. Harvest is also updating emissions from the TEG dehydrator still vents (Units 9b, 10b, 11b, 14, 15), the amine regenerator vents (Units 16a, 16b, 17, 18, 19), startup, shutdown, and maintenance (Units SSM1, SSM2), and the fugitives (Unit F1) based on current gas analyses from the facility. In addition, malfunction emissions (Unit M1) are being removed from the permit. No other permit changes are proposed.

The station's estimated maximum quantities of any regulated air contaminants will be as follows in pounds per hour and tons per year and may change slightly during the course of the Department's review:

	Pounds Per Hour	Tons Per Year
Nitrogen Oxides (NO_X)	44.0	142.0
Carbon Monoxide (CO)	56.0	240.0
Volatile Organic Compounds (VOCs)	8.0	75.0
Particulate Matter Less Than 10 Microns (PM_{10})	6.0	22.0
Particulate Matter Less Than 2.5 Microns ($PM_{2.5}$)	6.0	22.0
Total Sum of all Hazardous Air Pollutants (HAPs)	4.0	17.0
Green House Gas Emissions as Total CO_2e	N/A	1,461,451
Toxic Air Pollutant (TAP)	1.0	3.0

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

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

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

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Sincerely,

Jennifer Nygren

Jennifer Nygren
Environmental Specialist
Harvest Four Corners, LLC
1755 Arroyo Drive
Bloomfield, NM 87413

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, Suite 500
73105

9589 0710 5270 2048 0825 19

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ZIP 73105
02 7H
0006205145

$ 010.44⁰
FEB 12 2026

Transwestern Pipeline Company
Attn: KE A
2424 Ridge Rd
Rockwall, TX 75087

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Sent To TRANSWESTERN PIPELINE

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City, State, ZIP+4® HOBBS NM 88240 MILDO2

PS Form 3800, January 2023 PSN 7530-02-000-9047 See Reverse for Instructions

9589 0710 5270 2048 0825 19

TAMIRA
Park Dr, Suite 500
City, OK 73105

9589 0710 5270 2048 0825 64

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FEB 12 2026

County Manager
San Juan County
100 S. Oliver Dr.
Aztec, NM 87410

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Sent To San Juan Co. Manager

Street and Apt. No., or PO Box No.

City, State, ZIP+4® HOBBS NM 88240 MILDO2

PS Form 3800, January 2023 PSN 7530-02-000-9047 See Reverse for Instructions

9589 0710 5270 2048 0825 64

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PLACE STICKER AT TOP OF ENVELOPE TO THE RIGHT OF THE RETURN ADDRESS, FOLD AT DOTTED LINE

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1. Article Addressed to:

Transwestern Pipeline Company
Attn: KE A
2424 Ridge Rd
Rockwall, TX 75087

9590 9402 8254 3094 7058 30

2. Article Number *(Transfer from service label)*
9589 0710 5270 2048 0825 19

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A. Signature
X ☐ Agent ☐ Addressee

B. Received by *(Printed Name)* | C. Date of Delivery

D. Is delivery address different from item 1? ☐ Yes
If YES, enter delivery address below: ☐ No

3. Service Type
☐ Adult Signature
☐ Adult Signature Restricted Delivery
☒ Certified Mail®
☐ Certified Mail Restricted Delivery
☐ Collect on Delivery
☐ Collect on Delivery Restricted Delivery
☐ Mail
☐ Mail Restricted Delivery
(over $500)
☐ Priority Mail Express®
☐ Registered Mail™
☐ Registered Mail Restricted Delivery
☐ Signature Confirmation™
☐ Signature Confirmation Restricted Delivery

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County Manager
San Juan County
100 S. Oliver Dr.
Aztec, NM 87410

9590 9402 8254 3094 7058 47

2. Article Number *(Transfer from service label)*
9589 0710 5270 2048 0825 64

COMPLETE THIS SECTION ON DELIVERY

A. Signature
X ☐ Agent ☐ Addressee

B. Received by *(Printed Name)* | C. Date of Delivery

3. Service Type
☐ Adult Signature
☐ Adult Signature Restricted Delivery
☒ Certified Mail®
☐ Certified Mail Restricted Delivery
☐ Collect on Delivery
☐ Collect on Delivery Restricted Delivery
☐ Mail
☐ Mail Restricted Delivery
(over $500)
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☐ Registered Mail™
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☐ Signature Confirmation™
☐ Signature Confirmation Restricted Delivery

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MIRA
Dr, Suite 500
K 73105

9589 0710 5270 2048 0825 57

President of the Navajo Nation
100 Parkway.
Window Rock, AZ 86515

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City, State, ZIP+4® HARANM2401 MILOO2

PS Form 3800, January 2023 PSN 7530-02-000-9047 See Reverse for Instructions

MIRA
Dr, Suite 500
K 73105

9589 0710 5270 2048 0825 40

Iron Horse Trucking LLC
2308 E Blanco Blvd
Bloomfield, NM 87413

FIRST-CLASS

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0006205145

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City, State, ZIP+4® HARANM2401 MILOO2

PS Form 3800, January 2023 PSN 7530-02-000-9047 See Reverse for Instructions

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PLACE STICKER AT TOP OF ENVELOPE TO THE RIGHT OF THE RETURN ADDRESS, FOLD AT DOTTED LINE

SENDER: COMPLETE THIS SECTION

- Complete items 1, 2, and 3.
- Print your name and address on the reverse so that we can return the card to you.
- Attach this card to the back of the mailpiece, or on the front if space permits.

1. Article Addressed to:

President of the Navajo Nation
100 Parkway.
Window Rock, AZ 86515

9590 9402 8254 3094 7058 54

2. Article Number *(Transfer from service label)*

9589 0710 5270 2048 0825 57

COMPLETE THIS SECTION ON DELIVERY

A. Signature

X ☐ Agent ☐ Addressee

B. Received by *(Printed Name)* | C. Date of Delivery

D. Is delivery address different from item 1? ☐ Yes
r delivery address below: ☐ No

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☐ Adult Signature Restricted Delivery
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☐ Collect on Delivery
☐ Collect on Delivery Restricted Delivery
☐ Mail
☐ Mail Restricted Delivery
)0)

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- Print your name and address on the reverse so that we can return the card to you.
- Attach this card to the back of the mailpiece, or on the front if space permits.

1. Article Addressed to:

Iron Horse Trucking LLC
2308 E Blanco Blvd
Bloomfield, NM 87413

9590 9402 8254 3094 7058 61

2. Article Number *(Transfer from service label)*

9589 0710 5270 2048 0825 40

COMPLETE THIS SECTION ON DELIVERY

A. Signature

X ☐ Agent ☐ Addressee

B. Received by *(Printed Name)* | C. Date of Delivery

address different from item 1? ☐ Yes
er delivery address below: ☐ No

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PS Form 3811, July 2020 PSN 7530-02-000-9053 Domestic Return Receipt

LTAMIRA
l Park Dr, Suite 500
City, OK 73105

9589 0710 5270 2048 0845 99

Farmington City Manager
800 Municipal Drive
Farmington, NM 87401

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ZIP 73105
02 7H
0006205145
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FEB 12 2026

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- ☐ Adult Signature Restricted Delivery $

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Sent To Farmington City Manager
Street and Apt. No., or PO Box No.
City, State, ZIP+4® HARANM 87401 MLOO2

PS Form 3800, January 2023 PSN 7530-02-000-9047 See Reverse for Instructions

AMIRA
rk Dr, Suite 500
, OK 73105

9589 0710 5270 2048 0845 82

City of Farmington
800 Municipal Drive
Farmington, NM 87401

FIRST-CLASS
US POSTAGE IMI PITNEY BOWES
ZIP 73105
02 7H
0006205145
$ 010.44⁰
FEB 12 2026

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Street and Apt. No., or PO Box No.
City, State, ZIP+4® HARANM 87401 MLOO2

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PLACE STICKER AT TOP OF ENVELOPE TO THE RIGHT OF THE RETURN ADDRESS, FOLD AT DOTTED LINE

SENDER: *COMPLETE THIS SECTION*

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- Print your name and address on the reverse so that we can return the card to you.
- Attach this card to the back of the mailpiece, or on the front if space permits.

1. Article Addressed to:

Farmington City Manager
800 Municipal Drive
Farmington, NM 87401

9590 9402 8254 3094 7058 78

2. Article Number *(Transfer from service label)*
9589 0710 5270 2048 0845 99

COMPLETE THIS SECTION ON DELIVERY

A. Signature
X ☐ Agent ☐ Addressee

B. Received by *(Printed Name)* | C. Date of Delivery

D. Is delivery address different from item 1? ☐ Yes
delivery address below: ☐ No

☐ Adult Signature
☐ Adult Signature Restricted Delivery
☒ Certified Mail®
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☐ Collect on Delivery Restricted Delivery
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PS Form 3811, July 2020 PSN 7530-02-000-9053 Domestic Return Receipt

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1. Article Addressed to:

City of Farmington
800 Municipal Drive
Farmington, NM 87401

9590 9402 8254 3094 7058 85

2. Article Number *(Transfer from service label)*
9589 0710 5270 2048 0845 82

COMPLETE THIS SECTION ON DELIVERY

A. Signature
X ☐ Agent ☐ Addressee

B. Received by *(Printed Name)* | C. Date of Delivery

D. Is delivery address different from item 1? ☐ Yes
delivery address below: ☐ No

☐ Adult Signature
☐ Adult Signature Restricted Delivery
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☐ Collect on Delivery Restricted Delivery
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00)

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PS Form 3811, July 2020 PSN 7530-02-000-9053 Domestic Return Receipt

LTAMIRA

al Park Dr, Suite 500
City, OK 73105

9589 0710 5270 2048 0846 36

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FEB 12 2026

Charles Glen Peterson
1670 Solana
Los Alamos, NM 87544

9589 0710 5270 2048 0846 36

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- ☐ Adult Signature Restricted Delivery $

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Sent To Charles Glen Peterson

Street and Apt. No., or PO Box No.

City, State, ZIP+4® HARANM2401 MILOO2

PS Form 3800, January 2023 PSN 7530-02-000-9047 See Reverse for Instructions

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TAMIRA

Park Dr, Suite 500
ty, OK 73105

9589 0710 5270 2048 0846 12

FIRST-CLASS

US POSTAGE IMI PITNEY BOWES

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02 7H
0006205145

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FEB 12 2026

Bureau of Land Management
6251 College Blvd., Suite A
Farmington, NM 87402

9589 0710 5270 2048 0846 12

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- ☐ Certified Mail Restricted Delivery $
- ☐ Adult Signature Required $
- ☐ Adult Signature Restricted Delivery $

Postage
$

Total Postage and Fees
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2/12/26

Sent To BLM

Street and Apt. No., or PO Box No.

City, State, ZIP+4® HARANM2401 MILOO2

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- Attach this card to the back of the mailpiece, or on the front if space permits.

1. Article Addressed to:

Charles Glen Peterson
1670 Solana
Los Alamos, NM 87544

9590 9402 8254 3094 7058 92

2. Article Number (Transfer from service label)

9589 0710 5270 2048 0846 36

COMPLETE THIS SECTION ON DELIVERY

A. Signature

X ☐ Agent ☐ Addressee

B. Received by (Printed Name) | C. Date of Delivery

D. Is delivery address different from item 1? ☐ Yes
delivery address below: ☐ No

☐ Adult Signature
☐ Adult Signature Restricted Delivery
☒ Certified Mail®
☐ Certified Mail Restricted Delivery
☐ Collect on Delivery
☐ Collect on Delivery Restricted Delivery
☐ Mail
☐ Mail Restricted Delivery
(over $500)

☐ Priority Mail Express®
☐ Registered Mail™
☐ Registered Mail Restricted Delivery
☐ Signature Confirmation™
☐ Signature Confirmation Restricted Delivery

PS Form 3811, July 2020 PSN 7530-02-000-9053 Domestic Return Receipt

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1. Article Addressed to:

Bureau of Land Management
6251 College Blvd., Suite A
Farmington, NM 87402

9590 9402 8254 3094 7059 15

2. Article Number (Transfer from service label)

9589 0710 5270 2048 0846 12

COMPLETE THIS SECTION ON DELIVERY

A. Signature

X ☐ Agent ☐ Addressee

B. Received by (Printed Name) | C. Date of Delivery

D. Is delivery address different from item 1? ☐ Yes
delivery address below: ☐ No

☐ Adult Signature
☐ Adult Signature Restricted Delivery
☒ Certified Mail®
☐ Certified Mail Restricted Delivery
☐ Collect on Delivery
☐ Collect on Delivery Restricted Delivery
☐ Mail
☐ Mail Restricted Delivery
(over $500)

☐ Priority Mail Express®
☐ Registered Mail™
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Section 10

Written Description of the Routine Operations of the Facility

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

The primary function of the Milagro Gas Treating Plant is to remove CO_2 and water from raw natural gas and deliver pipeline quality sales gas to downstream pipelines.

The raw natural gas feeding the plant contains both CO_2 and water exceeding pipeline quality specifications. The gas stream is treated through five process trains. Each process train routes inlet gas through an amine contactor to remove CO_2, followed by a triethylene glycol (TEG) contactor to remove water.

Trains 1-3 are designed for a maximum throughput of 145 MMscfd each. Train 4 is designed for a maximum throughput of 90 MMscfd. Train 5 is designed for a maximum throughput of 120 MMscfd.

Amine is regenerated in the amine regenerators, equipped on all 5 trains using 60 psig steam as a heat medium (Units 16a, 16b, 17, 18, 19). Released CO_2 is routed to atmosphere.

The dehydrator reboilers (Units 9a, 10a, and 11a) for trains 1-3 burn natural gas to provide heat needed to regenerate the TEG while the reboilers associated with trains 4 & 5 utilize 400 psig steam as a heat input. The dehydrators associated with trains 1-3 & 5 are equipped with flash tanks, while train 4 is not. Hydrocarbons from the flash tanks are recycled back into the plant fuel system. Emissions from the five dehydrator still vents are cooled and routed through either of the two vapor recovery units (VRU). The VRUs capture the still vent gas, compress it, and route it back into the plant fuel system. All condensate and produced water that results from cooling the dehydrator vent streams is piped to the condensate storage tanks (T25). From here produced water is separated and stored in the produced water tank (T33).

The facility is built around a 400 psig / 60 psig steam system. Superheated 400 psig steam drives steam turbines throughout the facility, which are coupled to pumps, FD fans, and electricity generators. The 60 psig steam is a byproduct of the 400 psig steam system and is designed to provide process heat to regenerate amine. Today the plant steam is provided by four package boilers; Boiler 1 (Unit 1), Boiler 2 (Unit 2), Boiler 3 (Unit 3), and Boiler 5 (Unit 20).

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)**:**
Please refer to Section 2, Table 2-A.

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. **The Milagro Gas Treating Plant facility is not one of the listed 20.2.74.501 Table I – PSD Source Categories, however, the power station inside of the facility is one of the listed 20.2.74.501 Table I – PSD Source Categories, creating a nested PSD source. The "project" emissions** for this modification are **not significant. The purpose of this project is to add one boiler (Unit 2A) as a replacement unit for Unit 2 to comply with NMAC 20.2.50 and to revise emissions from the glycol dehydration and amine units to reflect updated analyses. The "project" emissions listed below do only result from changes described in this permit application, thus no emissions from other revisions or modifications, past or future are considered to this facility. This Project does not debottleneck any processes since there is no increase in boiler capacity or capacity of the glycol or amine units. The project emissions for this project are as follows:**

a. **NOx: 7.36 TPY**
b. **CO: 25.30 TPY**
c. **VOC: 2.37 TPY**
d. **SOx: 0.39 TPY**
e. **PM: 2.96 TPY**
f. **PM10: 2.96 TPY**
g. **PM2.5: 2.96 TPY**
h. **Fluorides: 0.0 TPY**
i. **Lead: 0.0 TPY**
j. **Sulfur compounds: 0.0 TPY**
k. **GHG: 76,886 TPY**

C. **Netting is not required because the project is not significant.**

D. **BACT** is **required, for this application since there was a prior BACT determination for NOx from this unit. The project does not trigger PSD.** A BACT determination for NOx is attached to this document to this Section.

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. **The project does not trigger PSD review because**

the project increases from the replacement boiler and revised glycol dehydration and amine units are not significant.

BACT Analysis

Methodology

The PSD regulations require new or modified major stationary sources to apply Best Available Control Technology (BACT) to each emission unit which is subject to regulation under the Clean Air Act and which has the potential to emit (PTE) air pollutants in significant amounts as defined by OAC 252:100-8-31.

Best Available Control Technology (BACT) is defined in OAC 252:100-8-31 as follows:

> *…an emissions limitation (including a visible emissions standard) based on the maximum degree of reduction for each regulated NSR pollutant which would be emitted from any proposed major stationary source or major modification which the Director, on a case-by-case basis, taking into account energy, environmental, and economic impacts and other costs, determines is achievable for such source or modification through application of production processes or available methods, systems, and techniques, including fuel cleaning or treatment or innovative fuel combination techniques for control of such pollutant. In no event shall application of BACT result in emissions of any pollutant which would exceed the emissions allowed by any applicable standard under 40 CFR parts 60 and 61. If the Director determines that technological or economic limitations on the application of measurement methodology to a particular emissions unit would make the imposition of an emissions standard infeasible, a design, equipment, work practice, operational standard or combination thereof, may be prescribed instead to satisfy the requirement for the application of BACT. Such standard shall, to the degree possible, set forth the emissions reduction achievable by implementation of such design, equipment, work practice or operation, and shall provide for compliance by means which achieve equivalent results.*

BACT results in a specific emission limitation based on the maximum degree of reduction for each pollutant, on a case-by-case basis. BACT analysis can occur using several different methods. Based on a review of recently issued PSD permits, AQB has expressed a preference for “top down” BACT.

After determining if the applicable equipment is subject to any New Source Performance Standard (NSPS) or National Emission Standards for Hazardous Air Pollutants (NESHAP), the five basic steps involved in a “top down” BACT analysis are listed below:

Step 1. Identify Available Control Technologies

Available control technologies are identified for each emission unit in question. The following methods are used to identify potential technologies: 1) researching the Reasonably Available Control Technology (RACT)/BACT/Lowest Achievable Emission Rate (LAER) Clearinghouse (RBLC) database, 2) surveying regulatory agencies, 3) drawing from previous engineering experience, 4) surveying air pollution control equipment vendors, and 5) surveying available literature. Potential technologies must control the regulated pollutant being evaluated and must have a practical application to the emission unit in question.

Step 2. Eliminate Technically Infeasible Options

After the identification of control options, if the most stringent control technology identified in Step 1 is selected as BACT, then no further analysis is required. Otherwise, an analysis is conducted to eliminate technically infeasible options.

Determining the technical feasibility starts with evaluating the “available” term in BACT. A control technology is available if it is applicable to the emission unit in question and has reached the licensing and commercial sales stage of development. In addition to being available, the control technology must also be applicable. The control technology is determined to not be applicable if any physical, chemical, and/or engineering principle would preclude the successful use of the control technology on the emission source being evaluated. A control technology must be both applicable and available or it is technically infeasible.

Step 3. Rank Remaining Control Technologies by Control Effectiveness

Once technically infeasible options are removed from consideration, the remaining options are ranked based on their control effectiveness. If there is only one remaining option, or all of the remaining technologies could achieve equivalent control efficiencies, ranking based on control efficiency is not required.

Step 4. Evaluate Most Effective Controls Based on Energy, Environmental, and Economic Impacts

Beginning with the most efficient control option in the ranking from Step 3, a detailed economic, energy, and environmental impact evaluation is performed.

The economic evaluation centers on the cost effectiveness of the control option. Costs of installing and operating control technologies are estimated following the methodologies outlined in the EPA's OAQPS Control Cost Manual (CCM) and other industry resources. Cost effectiveness is expressed as dollars per ton of pollutant controlled. Objective analyses of energy and environmental impacts associated with each option are also conducted. Both beneficial and adverse impacts are discussed and quantified. If a control technology has too high of an economic, energy, or environmental impact, then it is eliminated. The evaluation process is continued until the control technology can't be eliminated due to high economic, energy, or environmental costs.

Step 5. Select BACT and Document the Selection as BACT

In the final step, one pollutant specific control option is proposed as BACT for each emission unit under review based on evaluations from the previous step. In no event can the application of BACT be less stringent than any applicable NSPS or NESHAP standard. BACT is established as a numerical limit and can be based on things such as the application of an air pollution control technology or a work practice standard.

Pollutant Accountability

BACT applies to each regulated NSR pollutant for which there will be a significant increase in emissions. As presented in Section 6, emissions of NOx from the equipment associated with the addition of Unit 2A are above the PSD significance thresholds.

Emission Units Applicability

The emission unit associated with the Project for which a BACT analysis is required include:

- Boilers

BACT Analysis for Boilers

NOx - Step 1: Identify All Control Technologies

The first step in a top-down analysis is to identify all available control options. Available control options are those air pollution control technologies or techniques with a practical potential for application to the emission units and the NOx emission limits that are being evaluated. NOx is formed during the combustion process as a result of the incomplete oxidation of the carbon contained in the fuel; or simply, it is the product of incomplete combustion. The following subsections review the available NOx control technologies.

Good Combustion and Operations Controls

As products of incomplete combustion, NOx emissions are very effectively controlled by ensuring the complete and efficient combustion of the fuel in the boilers (i.e., good combustion controls). Typically, the measures taken to minimize the formation of NO_X during combustion tend to inhibit complete combustion, which increases the emissions of CO. On the other hand, high combustion temperatures, adequate excess air, and good air/fuel mixing during combustion minimize CO emissions, but tend to increase NO_X formation. Therefore, in terms of combustion controls, the best control technology for NOx directly conflicts with the ability to reduce CO. Nonetheless, burner manufacturers' strive for the delicate balance of decreasing NO_X emissions while at the same time limiting CO formation, resulting in good combustion control practices based on a heater-specific and fuel-specific burner design.

Low NOx Burners

Low NOx burners (LNB) focus on minimizing the formation of NOx by optimizing the air-to-fuel ratio in the burner. By maximizing the air mixing, reducing the peak flame temperature and delaying combustion, LNB are effective at reducing NOx emissions. However, the reduced NOx emissions does generally cause an increase in CO emission rates and as such, LNBs can vary in guaranteed NOx emission limits.

Low NOx Burners with Flue Gas Recirculation

Low NOx burners with Flue Gas Recirculation (LNB + FGR) is an integrated combustion-based NOx control strategy that reduces the formation of thermal NOx during fuel combustion. The technology combines advanced burner design with controlled recirculation of cooled flue gas back into the combustion zone. When combined, LNB + FGR provides enhanced NOx reduction beyond what can be achieved by burner design alone.

Selective Catalytic Reduction

Ammonia or urea is used as a reduction reagent to lower NOx emissions. The reagent is injected into the exhaust stream. Very high reductions in NOx can be achieved using this method, but it has a high capital and operational cost. In addition, the urea/ammonia usage presents additional

environmental impacts that need to be considered. SCR is generally only found on units with a rating greater than 250 MMBtu/hr.

NOx - Step 2: Eliminate Technically Infeasible Options

Step 2 of the BACT analysis involves the evaluation of all the identified available control technologies in Step 1 of the BACT analysis to determine their technical feasibility. A control technology is technically feasible if it has been previously installed and operated successfully at a similar type of source of comparable size, or there is technical agreement that the technology can be applied to the source. Available and applicable are the two terms used to define the technical feasibility of a control technology.

Good Combustion Controls (GCC) include proper burner tuning, maintenance, control of excess air, optimization of air-to-fuel ratios, and load management to minimize NOx formation. GCC is inherent to the operation of all industrial boilers and requires no specialized equipment beyond standard combustion controls and instrumentation. GCC has been extensively demonstrated on boilers of all sizes and configurations and is considered technically feasible and not eliminated in this step.

Low NOx Burners (LNB) reduced NOx formation by controlling flame geometry, staging fuel and air, and lowering peak flame temperatures during combustion. LNB has been successfully demonstrated on boilers comparable in size, fuel type, and design and is considered technically feasible and not eliminated in this step.

Low NOx Burners with Flue Gas Recirculation (LNB + FGR) reduced NOx formation by routing a portion of cooled exhaust gas back into the combustion zone, diluting oxygen concentration and reducing flame temperature. FGR is commonly paired with LNB for enhanced control effectiveness. Given the boiler size, LNB + FGR is considered technically feasible and not eliminated in this step.

Selective Catalytic Reduction (SCR) has been demonstrated to be effective in reducing NOx exhaust from boilers. Optimal temperatures for the operation of SCR ranges from 480°F to 800°F and typical SCR systems have the ability to function effectively under temperature fluctuation of up to 200°F. Given the boiler size and the typical exhaust conditions for natural gas-fired boilers, SCR is considered technically feasible and not eliminated in this step.

Table 0-1 summarizes the evaluation of the technically feasible NOx options.

Table 0-1 Summary of Step 2 – Eliminate Technically Infeasible Options

TECHNOLOGY ALTERNATIVE	TECHNICALLY FEASIBLE (YES/NO)	
	AVAILABLE	APPLICABLE
Good Combustion Controls	Yes	Yes
Low NOx Burners	Yes	Yes
Low NOx Burners with Flue Gas Recirculation (LNB + FGR)	Yes	Yes
Selective Catalytic Reduction	Yes	Yes

NOx - Step 3: Rank Remaining Control Technologies by Effectiveness

A search of the information contained in the USEPA RACT/BACT/LAER Clearinghouse (RBLC) was conducted to determine the top level of NOx control for natural gas-fired boilers with similar firing rates. The results, which are documented below, indicate that selective catalytic reduction (SCR) is the top control for NOx emissions from similar natural gas-fired boilers. There are some units that utilize LNBs in addition to SCR.

Table 0-2 Summary of Step 3 – Rank of Potential NOx Control Technologies

CONTROL TECHNOLOGY	NOX EMISSION RATE	% CONTROL
Selective Catalytic Reduction	0.006-0.021 lb/MMBtu	80-95% NOx reduction
Low NOx Burners with Flue Gas Recirculation (LNB + FGR)	0.013-0.06 lb/MMBtu	60-80% NOx reduction
Low NOx Burners	0.006-0.086 lb/MMBtu	40-60% NOx reduction
Good Combustion Controls	0.01-0.18 lb/MMBtu	10-30% NOx reduction

The data presented below exhibits a very large range of NOx BACT emission limit determinations by various permitting authorities across the country for similar units. The data sorted from lowest to highest (i.e., top down BACT methodology) the NOx BACT emission limit determinations range from 0.006 lb/MMBtu to as high as 0.086 lb/MMBtu. The more than an order of magnitude range in NOx BACT determinations are reflective of the high variability of this pollutant's formation and indicative of the boiler-specific design and fuel conditions that must be taken into consideration when determining a NOx BACT emission limit.

Step 4. Evaluate Most Effective Controls Based on Energy, Environmental, and Economic Impacts

In the following subsections, the technically feasible control alternatives are evaluated in a comparative approach with respect to their energy, environmental, and economic impacts on the Project.

Selective Catalytic Reduction

Energy Evaluation of Alternatives

SCR increases energy consumption due to additional pressure drop across the catalyst, increases fan power requirements, and energy usage for ammonia injection and control systems. These impacts result in a minor reduction in overall boiler efficiency.

Environmental Evaluation of Alternatives

There are several environmental impacts associated with SCRs. There is potential ammonia slip, risk of ammonia salt formation downstream, on-site storage and handling of ammonia or urea, and catalyst disposal at the end of its useful life.

Economic Evaluation of Alternatives

The economic impact evaluation examines the cost-effectiveness of each control technology, on a dollar per ton of pollutant removed basis. Annual emissions using a particular control device are subtracted from base case emissions to calculate tons of pollutant controlled per year. Annual costs are calculated by adding annual operation and maintenance costs to the annualized capital cost of an option. The capital cost includes equipment costs, other direct and indirect installation and startup costs. Capital costs are based on budgetary quotations from equipment manufacturers. The direct and indirect installation costs are percentages of equipment costs. Annual operating costs include catalyst replacement, energy impacts, operating personnel, annual operation and maintenance costs, reagents and chemical costs, and heat rate penalty. Cost effectiveness ($/ton) of an option is simply the annual cost ($/yr) divided by the annual pollution controlled (ton/yr).

Elimination of a control technology option based on adverse economic impacts requires a demonstration that costs of pollutant removal for the control alternative are disproportionately high when compared to the cost of control for that particular pollutant and source type. Cost-effectiveness values above the levels experienced by other sources of the same type and pollutant, indicate that differences exist with respect to the source under review and that the control technology does not provide economically effective pollutant control. Where the cost-effectiveness of a control alternative is within the range of costs incurred by similar sources, the alternative, in certain circumstances, may still be eligible for elimination when taking into consideration energy and environmental impacts.

Using the Air Pollution Control Cost Estimated Spreadsheet for Selective Catalytic Reduction from the U.S Environmental Protection Agency, the following table illustrates the economic impact for SCR:

COST INCURRED	COST IN 2026 DOLLARS
Total Capital Investment	$4,958,437
Total Annual Cost	$489,533
Direct Annual Cost	$70,595
Indirect Annual Cost	$418,938
Cost Effectiveness	$32,981 per ton NOx removed

Based on this capital and annual costs, SCR would typically be excluded from consideration as BACT based on economic impacts since the cost is greater than $12,000/ton of reduction.

Low NOx Burners plus Flue Gas Recirculation

Energy Evaluation of Alternatives

The energy impacts for LNB + FGR include increased fan power for flue gas recirculation. This has a minor impact on overall boiler efficiency due to altered combustion dynamics. The energy impacts for LNBs are minor and primarily associated with burner modifications and tuning. There are no significant energy impacts that would preclude the use of good combustion controls to limit the emissions of NOx.

Environmental Evaluation of Alternatives

The environmental impacts for LNB + FGR as well as LNBs are minimal. There are no secondary pollutants introduced as well as no hazardous reagents or waste streams. There are no adverse environmental impacts associated with GCC.

Economic Evaluation of Alternatives

LNB + FGR is necessary for Boiler 2 to meet the requirements of NMAC 20.2.50.119; therefore, it has not been excluded for economic reasons.

Step 5. Selection of BACT

Primary NOx BACT Emission Limit

Based on the preceding BACT analysis, Harvest proposes an LNB, FGR, and an SCR along with good combustion control and operations, as BACT for the emissions of NOx. Harvest has received emission guarantees from the burner manufacturer for NOx emissions of 0.01 lb/MMBtu (9 ppm @ 3% O_2) utilizing a LNB, FGR, and an SCR along with good control and operation practices.

RBLC Data for Boilers Between 100 MMBTU/hr and 250 MMBTU/hr

RBLCID	FACILITY NAME	STATE	PERMIT NUM	PERMIT ISSUANCE DATE	PROCESS NAME	HEAT INPUT	CONTROL TYPE	NOx EMISSION LIMIT	CASE-BY-CASE BASIS
AK-0083	KENAI NITROGEN OPERATIONS	AK	AQ0083CPT06	1/6/2015	Three (3) Package Boilers	243 MMBTU/H	Ultra Low NOx Burners	0.01 LB/MMBTU	BACT-PSD
AK-0083	KENAI NITROGEN OPERATIONS	AK	AQ0083CPT06	1/6/2015	Startup Heater	101 MMBTU/H	Limited Use (200 hr/yr)	0.098 LB/MMBTU	BACT-PSD
AK-0086	KENAI NITROGEN OPERATIONS	AK	AQ0083CPT07	3/26/2021	Three (3) Package Boilers	243 MMBtu/hr	Selective Catalytic Reduction	0.01 LB/MMBTU	BACT-PSD
AK-0086	KENAI NITROGEN OPERATIONS	AK	AQ0083CPT07	3/26/2021	Startup Heater	101 MMBtu/hr	Good Combustion Practices and Limited Use	0.098 LB/MMBTU	BACT-PSD
IL-0134	CRONUS CHEMICALS	IL	19110020	12/21/2023	Boilers	179.4 mmBtu/hr	LNB and SCR	0.01 LB/MMBTU	BACT-PSD
IN-0263	MIDWEST FERTILIZER COMPANY LLC	IN	129-36943-00059	3/23/2017	NATURAL GAS AUXILIARY BOILERS (EU-012A, EU-012B, EU-012C)	218.6 MMBTU/H	LOW NOX BURNERS WITH FLUE GAS RECIRCULATION AND GOOD COMBUSTION PRACTICES	20.4 LB/MMCF EACH	BACT-PSD
IN-0324	MIDWEST FERTILIZER COMPANY LLC	IN	129-44510-00059	5/6/2022	natural gas-fired auxiliary boilers EU 012A and EU 012B	218.6 MMBtu/hr	The natural gas-fired auxiliary boilers shall combust natural gas	20.4 LB/MMCF	BACT-PSD
IN-0371	WABASH VALLEY RESOURCES, LLC	IN	167-45208-00091	1/11/2024	Auxiliary Boiler (Unit 1C)	217.65 MMBtu/hr	Low NOx burner and SCR with good combustion practices	0.01 LB/MMBTU	BACT-PSD
LA-0307	MAGNOLIA LNG FACILITY	LA	PSD-LA-792	3/21/2016	Auxiliary boilers	171 mm btu/hr	Low NOx burners		BACT-PSD

RBLCID	FACILITY NAME	STATE	PERMIT NUM	PERMIT ISSUANCE DATE	PROCESS NAME	HEAT INPUT	CONTROL TYPE	NOx EMISSION LIMIT	CASE-BY-CASE BASIS
LA-0314	INDORAMA LAKE CHARLES FACILITY	LA	PSD-LA-813	8/3/2016	Boiler A and B (010 and 011)	248 mm btu/hr (each)	good combustion practices; fueled by natural gas or process fuel gas; ULNB (FGR and economizer)	0.06 LB/MM BTU	BACT-PSD
LA-0314	INDORAMA LAKE CHARLES FACILITY	LA	PSD-LA-813	8/3/2016	Boiler B-201	229 mm btu	good combustion practices; fueled by natural gas or process fuel gas; ULNB (FGR and economizer)	0.06 LB/MM BTU	BACT-PSD
LA-0339	SHINTECH PLAQUEMINE PLANT 3	LA	PSD-LA-817(M1)	1/19/2021	Boiler D (EQT0482)	250 mm btu/hr	LNB + SCR Good combustion practices	0.01 LB/MM BTU	BACT-PSD
LA-0352	PLAQUEMINE ETHYLENE PLANT 1	LA	PSD-LA-788(M3)	12/12/2019	BP Steam Boiler Packages (EU-2/EU-2, EQT0266/EQT0267)	180.13 mm btu/hr (each)	LNB + SCR and good combustion practices	0.021 LB/MM BTU	LAER
LA-0397	WESTLAKE ETHYLENE PLANT	LA	PSD-LA-813(M3)	4/29/2022	Boilers (EQT0011, EQT0012, EQT0016)		SCR + LNB + FGR	0.01 LB/MM BTU	BACT-PSD
*LA-0405	SHINTECH LOUISIANA, LLC - PLAQUEMINE ETHYLENE PLANT 2	LA	PSD-LA-856	12/16/2024	High Pressure Steam Boilers	197.83 mm BTU/h	Low NOx burners, SCR, and good combustion practices	0.021 LB/MM BTU	BACT-PSD
MI-0423	INDECK NILES, LLC	MI	75-16	1/4/2017	EUAUXBOILER (Auxiliary Boiler)	182 MMBTU/H	Low NOx burners/Flue gas recirculation and good combustion practices.	0.04 LB/MMBTU	BACT-PSD
MI-0427	FILER CITY STATION	MI	66-17	11/17/2017	EUAUXBOILER (Auxiliary boiler)	182 MMBTU/H	LNB that incorporate internal (within the burner) FGR and good combustion practices.	0.04 LB/MMBTU	BACT-PSD
*MI-0445	INDECK NILES, LLC	MI	75-16B	11/26/2019	EUAUXBOILER	182 MMBTU/H	Low NOx burners/flue gas recirculation and good combustion practices.	0.04 LB/MMBTU	BACT-PSD

RBLCID	FACILITY NAME	STATE	PERMIT NUM	PERMIT ISSUANCE DATE	PROCESS NAME	HEAT INPUT	CONTROL TYPE	NOx EMISSION LIMIT	CASE-BY-CASE BASIS
OH-0374	GUERNSEY POWER STATION LLC	OH	P0122594	10/23/2017	Auxiliary Boiler (B001)	185 MMBTU/H	low-NOx burners and flue gas recirculation	3.7 LB/H	BACT-PSD
OH-0379	PETMIN USA INCORPORATED	OH	P0125024	2/6/2019	Process gas heater (P001)	218.9 MMBTU/H	Low NOX burners, use of natural gas and good combustion practices	14.01 LB/H	BACT-PSD
OH-0383	PETMIN USA INCORPORATED	OH	P0127678	7/17/2020	Process gas heater (P001)	218.9 MMBTU/H	Low NOX burners, use of natural gas and good combustion practices	18.88 LB/H	BACT-PSD
PA-0306	TENASKA PA PARTNERS/WESTMORELAND GEN FAC	PA	65-00990 C/E	2/12/2016	245 MMBtu natural gas fired Auxiliary boiler	1052 MMscf/yr	Good combustion practices and ULNOx burners	0.011 LB/MMBTU	LAER
TX-0811	LINEAR ALPHA OLEFINS PLANT	TX	136130 AND N250	11/3/2016	Industrial-Sized Furnaces, Natural Gas-fired	217 MM BTU / H	Low-NOX burners and Selective Catalytic Reduction (SCR). Ammonia slip limited to 10 ppmv (corrected to 3% O2) on a 1-hr block average.	0.006 LB / MM BTU	LAER
VA-0325	GREENSVILLE POWER STATION	VA	52525	6/17/2016	AUXILIARY BOILER (1) AND FUEL GAS HEATERS (6)	185 MMBTU/HR	ultra low-NOx burners	0.011 LB/MMBTU	N/A
VA-0328	C4GT, LLC	VA	52588	4/26/2018	Auxiliary Boiler	902 mmcf/y	Low NOx burners	0.011 LB/MMBTU	BACT-PSD
VA-0332	CHICKAHOMINY POWER LLC	VA	52610-1	6/24/2019	Two (2) Auxiliary Boilers	721 MMCF/YR	Low NOx burners	0.011 LB/MMBTU	BACT-PSD

(*) Project has not been constructed.

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/

Table for State Regulations:

State Regulation 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	This regulation is applicable because it establishes procedures for protecting confidential information, procedures for seeking a variance, NMAQB's authority to require sampling equipment, severability, and the effective date for conformance with the NMACs, and prohibits the violation of other requirements in attempting to comply with the NMACs.
20.2.3 NMAC	Ambient Air Quality Standards NMAAQS	Yes	Facility	This is a State Implementation Plan (SIP) approved regulation that limits the maximum allowable concentrations of Total Suspended Particulates, Sulfur Compounds, Carbon Monoxide and Nitrogen Dioxide. These requirements are not applicable under 20.2.70 NMAC (see 20.2.3.9 NMAC).
20.2.7 NMAC	Excess Emissions	Yes	Facility	This regulation is applicable because it prohibits excess emissions unless proper notification procedures are followed.
20.2.8 NMAC	Emissions Leaving New Mexico	Yes	Facility	This regulation is applicable because it establishes prohibitions on the release of pollutants that cross New Mexico State boundaries.
20.2.23 NMAC	Fugitive Dust Control	No	N/A	This regulation does not apply because this application is not for a Notice of Intent.
20.2.33 NMAC	Gas Burning Equipment - Nitrogen Dioxide	Yes	Units 1, 2A, 3, 9a, 10a, 11a & 20	This regulation is applicable because the facility is equipped with external gas burning equipment which have heat input rates exceeding the trigger level (one million MMBtu/year) established by the regulation. Since all the boilers were constructed after February 17, 1972, they are all required to meet the emissions limit identified in 20.2.33.108.A NMAC.
20.2.34 NMAC	Oil Burning Equipment: NO_2	No	N/A	This regulation is not applicable because the facility does not burn oil.
20.2.35 NMAC	Natural Gas Processing Plant – Sulfur	No	N/A	This regulation establishes sulfur emission standards for natural gas processing plants. This facility meets the definition of a new gas processing plant under this regulation but does not emit over 7.5 tpy of sulfur dioxide. Therefore, this regulation does not apply.
20.2.37 and 20.2.36 NMAC	Petroleum Processing Facilities and Petroleum Refineries	N/A	N/A	These regulations were repealed by the Environmental Improvement Board. If you had equipment subject to 20.2.37 NMAC before the repeal, your combustion emission sources are now subject to 20.2.61 NMAC.
20.2.38 NMAC	Hydrocarbon Storage Facility	No	N/A	This regulation is not applicable because the facility does not store hydrocarbons containing hydrogen sulfide, nor is there a tank battery storing hydrocarbon liquids with a capacity greater than or equal to 65,000 gallons.
20.2.39 NMAC	Sulfur Recovery Plant - Sulfur	No	N/A	This regulation is not applicable as this facility is not a sulfur recovery plant.
20.2.50 NMAC	Oil and Gas Sector – Ozone Precursor Pollutants	Yes	**Section 116** F1 **Section 118** 9b, 10b, 11b, 14, 15 **Section 119** 1, 2A, 3, 20 **Section 122** Pumps	This regulation establishes emission standards for volatile organic compounds (VOC) and oxides of nitrogen (NOx) for oil and gas production, processing, compression, and transmission sources. 20.2.50 NMAC subparts below: ☐113 – Engines and Turbines ☐114 – Compressor Seals ☐115 – Control Devices and Closed Vent Systems ☒116 – Equipment Leaks and Fugitive Emissions ☐ 117 – Natural Gas Well Liquid Unloading ☒ 118 – Glycol Dehydrators ☒ 119 – Heaters ☐ 120 – Hydrocarbon Liquid Transfers ☐121 – Pig Launching and Receiving ☒122 – Pneumatic Controllers and Pumps ☐ 123 – Storage Vessels ☐124 – Well Workovers ☐ 125 – Small Business Facilities

State Regulation 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.)
				☐126 – Produced Water Management Unit ☐127 – Flowback Vessels and Preproduction Operations 113 – N/A – There are no natural gas combustion turbines rated ≥ 15,900 hp located at this facility; therefore, this subpart does not apply. 114 – N/A – There are no centrifugal or reciprocating compressor located at this facility; therefore, this subpart does not apply. 115 – N/A – The VRU control device at this a facility is not used to comply with the emission standards and emission reduction requirements of this Part, therefore, this subpart does not apply. 116 – Harvest will comply with the requirements of this subpart. 117 – N/A – There are natural gas wells located at this facility; therefore, this subpart does not apply. 118 – Units 9b, 10b, 11b, 14 & 15 are dehydrators that have a PTE ≥ 2 tpy VOC and are therefore subject to the requirements of this subpart. 119 – Boiler Units 1, 2A, 3, and 20 all have a rated heat input > 20 MMBtu/hr and are therefore subject to the requirements of this subpart. 120 – N/A - TK33 is a produced water tank that has less than 13 loads per year of hydrocarbon liquid unloading and is located at this facility; therefore, this subpart does not apply. 121 – N/A – There are no pipeline pig launching or receiving operations at this facility; therefore, this subpart does not apply. 122 – Harvest will comply with the requirements of this subpart. 123 – N/A – The existing storage vessels at this facility do not have a PTE ≥ 4 tpy VOC; therefore, this subpart does not apply. 124 – N/A – There are no oil or natural gas wells located at this facility; therefore, this subpart does not apply. 125 – N/A – This facility does not qualify as a small business facility; therefore, this subpart does not apply. 126 – N/A – There are no produced water management units located at this facility; therefore, this subpart does not apply. 127 – N/A – There are no wells located at this facility; therefore, this subpart does not apply.
20.2.61.109 NMAC	Smoke & Visible Emissions	Yes	Units 1, 2A, 3, 9a, 10a, 11a, and 20	This regulation is applicable because the facility is equipped with stationary combustion sources, such as boilers, and reboilers. Emissions from these combustion sources are limited to less than 20% opacity (see 20.2.61.109 NMAC). The regulation is not applicable to the Title V insignificant heaters (see 20.2.61.111.D).
20.2.70 NMAC	Operating Permits	Yes	Facility	This regulation establishes requirements for obtaining an operating permit. This regulation is applicable because the facility is a Title V major source of NO_X, CO, and HAP.
20.2.71 NMAC	Operating Permit Fees	Yes	Facility	This regulation establishes a schedule of operating permit emission fees. This regulation is applicable because the facility is subject to 20.2.70 NMAC.
20.2.72 NMAC	Construction Permits	Yes	Facility	This regulation establishes the requirements for obtaining a construction permit. The facility is a stationary source that has a potential emission rate greater than 10 pounds per hour or 25 tons per year of any regulated air contaminant for which there is a National or New Mexico Air Quality Standard. The facility has a construction permit to meet the requirements of this regulation.
20.2.73 NMAC	NOI & Emissions Inventory Requirements	Yes	Facility	Emissions Inventory Reporting per 20.2.73.300 NMAC applies to the site. All facilities that are a Title V Major Source as defined at 20.2.70.7.R NMAC are subject to Emissions Inventory Reporting.
20.2.74 NMAC	Permits – Prevention of Significant	No	N/A	This regulation is applicable to PSD major sources. This facility is currently a PSD major source.

State Regulation 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.)
	Deterioration (PSD)			
20.2.75 NMAC	Construction Permit Fees	Yes	Facility	This regulation is applicable because the facility is subject to 20.2.72 NMAC.
20.2.77 NMAC	New Source Performance	Yes	Units 2A, 20, 31b	20.2.77 NMAC, New Source Performance Standards, incorporates by reference specific Standards of Performance for New Stationary Sources (NSPS) codified under 40 CFR Part 60, as amended in the Federal Register through June 28, 2023. The regulation is applicable because it adopts by reference the federal NSPS codified in 40 CFR 60. Units 2A and 20 are subject to 40 CFR 60 Subpart Db and Unit 31b is subject to 40 CFR 60 Subpart IIII.
20.2.78 NMAC	Emission Standards for HAPS	No	N/A	This regulation is not applicable because it incorporates by reference the NESHAPs codified under 40 CFR 61. The facility is not subject to 40 CFR 61.
20.2.79 NMAC	Permits – Nonattainment Areas	No	N/A	This regulation is not applicable because the facility is neither located in nor has a significant impact on a non attainment area.
20.2.80 NMAC	Stack Heights	Yes	Units 1, 2A, 3, 9a, 10a, 11a, and 20	This regulation is applicable because it establishes guidelines for the selection of an appropriate stack height for the purposes of atmospheric dispersion modeling.
20.2.82 NMAC	MACT Standards for source categories of HAPS	Yes	Units 9b, 10b, 11b, 14, 15	20.2.82 NMAC, Maximum Achievable Control Technology Standards for Source Categories of Hazardous Air Pollutants, incorporates by reference specified federal Maximum Available Control Technology (MACT) Standards codified in 40 CFR Part 63, as amended in the Federal Register through June 29, 2023. The facility includes equipment that are subject to 40 CFR 63, subparts A and HH as they were promulgated through March 6, 2013. Therefore, the regulation is applicable.

Table for Applicable Federal Regulations:

Federal Regulation Citation	Title	Applies? Enter Yes or No	Unit(s) or Facility	Justification:
40 CFR 50	NAAQS	Yes	Facility	This regulation applies because the facility is subject to 20.2.70 and 20.2.72 NMAC.
NSPS 40 CFR 60, Subpart A	General Provisions	Yes	Units 2A, 20, 31b	This regulation applies because 40 CFR 60, Subparts Db and IIII apply.
NSPS 40 CFR60.40a, Subpart Da	Subpart Da, Performance Standards for **Electric Utility Steam Generating Units**	No	N/A	This regulation establishes standards for electric utility steam generating units that are capable of combusting more than 73 megawatts (MW) (250 million British thermal units per hour (MMBtu/hr)) heat input of fossil fuel (either alone or in combination with any other fuel) and were constructed, modified, or reconstructed after September 18, 1978. The facility is not equipped with fossil-fuel-fired generating units with heat input rates greater than the threshold capacity of 250 MMBtu/hr (40 CFR 60.40Da(a)); therefore, the subpart does not apply.

Federal Regulation Citation	Title	Applies? Enter Yes or No	Unit(s) or Facility	Justification:
NSPS 40 CFR60.40b Subpart Db	**Electric Utility Steam Generating Units**	Yes	Units 2A, 20	This regulation establishes standards for electric utility steam generating units which were constructed, modified, or reconstructed after June 19, 1984 that have a heat input capacity from fuels combusted in the steam generating unit of greater than 29 megawatts (MW) (100 million British thermal units per hour (MMBtu/hr)). Units 2A and 20 must comply with the NO_X standards of the subpart (see §60.44b). As the units burn only natural gas, the SO_2 and particulate standards of the subpart are not applicable (see §60.42b(k)(2) & §60.43b).
40 CFR 60.40c, Subpart Dc	Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units	No	N/A	This regulation establishes standards for steam generating units which were constructed, modified, or reconstructed after June 9, 1989 that have a maximum design heat input capacity of 29 megawatts (MW) (100 million British thermal units per hour (MMBtu/hr)) or less, but greater than or equal to 2.9 MW (10 MMBtu/hr). This regulation is not applicable because the facility is not equipped with steam generating units with heat inputs greater than 10 MMBtu/hr but less than or equal to 100 MMBtu/hr.
NSPS 40 CFR 60, Subpart Ka	Standards of Performance for **Storage Vessels for Petroleum Liquids** for which Construction, Reconstruction, or Modification Commenced After May 18, 1978, and **Prior** to July 23, 1984	No	N/A	This regulation is not applicable because the storage tanks at the facility have capacities less than the minimum applicability threshold capacity of 40,000 gallons.
NSPS 40 CFR 60, Subpart Kb	Standards of Performance for **Volatile Organic Liquid Storage Vessels** (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced **After** July 23, 1984	No	N/A	This regulation is not applicable because the storage tanks at the facility have capacities less than the minimum applicability threshold capacity of 75 cubic meters (19,812 gallons) and/or do not contain volatile organic liquids (see §60.110b(a)). Note that the maximum true vapor pressure of methyldiethanolamine (<0.1 kPa), stored in the 21,000 gallon tank T17, is less then the 15 kPa threshold.
NSPS 40 CFR 60.330 Subpart GG	**Stationary Gas Turbines**	No	N/A	This regulation establishes the standards for stationary gas turbines with a heat input at peak load equal to or greater than 10.7 gigajoules (10 million Btu) per hour, based on the lower heating value of the fuel fired in which construction, modification, or reconstruction after October 3, 1977. There are no turbines located at the facility; therefore, this subpart is not applicable.
NSPS 40 CFR 60, Subpart KKK	Leaks of VOC from **Onshore Gas Plants**	No	N/A	This regulation is not applicable because the facility is not a natural gas processing plant as defined in this subpart.
NSPS	Standards of Performance for **Onshore Natural**	No	N/A	This regulation is not applicable because the facility is not a natural gas processing plant as defined by the subpart.

Federal Regulation Citation	Title	Applies? Enter Yes or No	Unit(s) or Facility	Justification:
40 CFR Part 60 Subpart LLL	**Gas Processing**: SO_2 Emissions			
NSPS 40 CFR Part 60 Subpart OOOO	Standards of Performance for Crude Oil and Natural Gas Production, Transmission, and Distribution for which construction, modification or reconstruction commenced after August 23, 2011 and before September 18, 2015	No	N/A	This regulation does not apply because the facility is not equipped with "affected" sources that are constructed, modified, or reconstructed after August 23, 2011 and on or before September 18, 2015: gas wells, centrifugal or reciprocating compressors, pneumatic controllers, and storage vessels (see §60.5365). Note that the facility is not a natural gas processing plant as defined by the subpart (see §60.5430).
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	N/A	This regulation does not apply because the facility is not equipped with "affected" sources that are constructed, modified, or reconstructed after September 18, 2015: gas wells, centrifugal or reciprocating compressors, pneumatic controllers, storage vessels, pneumatic pumps, and equipment leaks (see §60.5365a). Note that the facility is not a natural gas processing plant as defined by the subpart (see §60.5430a).
NSPS 40 CFR Part 60 Subpart OOOOb	Standards of Performance for Crude Oil and Natural Gas Facilities for which Construction, Modification or Reconstruction Commenced **After** December 6, 2022	No	N/A	The amine units are sweetening units as defined in this subpart that were constructed prior to December 6, 2022. Therefore, they are not subject to this subpart. The facility is not defined as an onshore natural gas processing plant defined by the subpart (see §60.5430b). Therefore, they are not subject to this subpart.
NSPS 40 CFR 60 Subpart IIII	Standards of performance for Stationary Compression Ignition Internal Combustion Engines	Yes	31b	Under §60.4200(a)(2)(i), the requirement of the subpart applies to owners and operators of stationary compression ignition (CI) internal combustion engine (ICE) that commence construction after July 11, 2005, where the ICE are manufactured after April 1, 2006, and are not fire pump engines. Unit 31b CI ICE was manufactured in 2014 and constructed in 2017, which is after the specified regulatory threshold dates under § 60.4200(a)(2)(i); therefore, the engine is subject to the regulation. The engine is an emergency stationary CI ICE with an engine cylinder displacement of 2.25 liters per cylinder. The engine must meet the fuel use requirements of § 60.4207(b), including fuel sulfur and cetane/aromatics content requirements under 40 CFR 80.510. Under §60.4205(b) and §60.4202(a)(2), the engine must meet the certification emission standards for new non-road CI engines for the same model year and maximum engine power in 40 CFR 89.112 and 40 CFR 89.113 for all pollutants beginning in model year 2007.

Federal Regulation 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	N/A	This regulation establishes standards of stationary spark ignition internal combustion engines. This regulation does not apply as there are no stationary spark ignition internal combustion engines located at this facility.
40 CFR Subpart KKKK	Standards of Performance for Stationary Combustion Turbines	No	N/A	This subpart establishes standards for stationary combustion turbines that commenced construction, modification or reconstruction after February 18, 2005. There are no gas turbines at the facility; therefore, the subpart does not apply.
NSPS 40 CFR 60 Subpart TTTT	Standards of Performance for Greenhouse Gas Emissions for Electric Generating Units	No	N/A	This subpart establishes standards for the control of greenhouse gas emissions from a steam generating unit, IGCC, or a stationary combustion turbine that was constructed after January 8, 2014 or modified or reconstructed after June 18, 2014. This regulation does not apply as the steam generating units located at this facility were constructed before the applicability date.
NSPS 40 CFR 60 Subpart UUUUa	Emissions Guidelines for Greenhouse Gas Emissions and Compliance Times for Electric Utility Generating Units	No	N/A	This subpart establishes emission guidelines and approval criteria for State plans that establish standards of performance limiting greenhouse gas (GHG) emissions from an affected steam generating unit. This regulation does not apply.
NSPS 40 CFR 60, Subparts WWW, XXX, Cc, and Cf	Standards of performance for Municipal Solid Waste (MSW) Landfills	No	N/A	This regulation does not apply as the facility is not a municipal solid waste landfill.
NESHAP 40 CFR 61 Subpart A	General Provisions	No	N/A	This regulation does not apply because no 40 CFR 61 subparts apply.
NESHAP 40 CFR 61 Subpart E	National Emission Standards for **Mercury**	No	N/A	This regulation establishes a national emission standard for mercury. The facility does not have stationary sources which process mercury ore to recover mercury, use mercury chlor-alkali cells to produce chlorine gas and alkali metal hydroxide, and incinerate or dry wastewater treatment plant sludge [40 CFR Part 61.50]. The facility is not subject to this regulation.
NESHAP 40 CFR 61 Subpart V	National Emission Standards for **Equipment Leaks** (Fugitive Emission Sources)	No	N/A	The provisions of this subpart apply to each of the following sources that are intended to operate in volatile hazardous air pollutant (VHAP) service: pumps, compressors, pressure relief devices, sampling connection systems, open-ended valves or lines, valves, connectors, surge control vessels, bottoms receivers, and control devices or systems required by this subpart (see §61.240(a)). VHAP service means a piece of equipment either contains or contacts a fluid (liquid or gas) that is at least 10 percent by weight of VHAP. VHAP means a substance regulated under this subpart for which a standard for equipment leaks of the substance has been promulgated (see §61.241). The facility is not subject to this regulation.
MACT 40 CFR 63, Subpart A	General Provisions	Yes	Units 9b, 10b, 11b, 14, 15	This regulation applies because 40 CFR Subpart HH applies.

Federal Regulation Citation	Title	Applies? Enter Yes or No	Unit(s) or Facility	Justification:
MACT 40 CFR 63.760 Subpart HH	Oil and Natural Gas Production Facilities	Yes	Units 9b, 10b, 11b, 14, 15	This regulation is applicable because the facility is equipped with dehydrators. Note, however, the plant is a HAP area source as defined by the subpart and the dehydrators emit less than one tpy benzene and are exempt (see §63.764(e)). The plant does not contain storage vessels with the potential for flashing losses or compressors or ancillary equipment in volatile HAP service as defined by the subpart, thus these portions of the regulation are not applicable (see §63.761). This subpart defines a natural gas processing plant as "any processing site engaged in the extraction of natural gas liquids from field gas, or the fractionation of mixed NGL to natural gas products, or a combination of both". The Milagro plant does not engage in either of these activities; therefore, it is not a processing plant as defined by the subpart. This subpart defines a production field facility as a facility "located prior to the point of custody transfer" (see §63.761). The Milagro plant is a production field facility. The subpart states, "For facilities that are production field facilities, only HAP emissions from glycol dehydration units and storage vessels shall be aggregated for a major source determination" (see §63.761). Therefore, the Milagro plant is an area HAP source.
MACT 40 CFR 63 Subpart HHH	National Emission Standards for Hazardous Air Pollutants From Natural Gas Transmission and Storage Facilities	No	N/A	This regulation does not apply as the facility is not a natural gas transmission and storage facility as defined by the subpart.
MACT 40 CFR 63 Subpart DDDDD	National Emission Standards for Hazardous Air Pollutants for Major Industrial, Commercial, and Institutional Boilers & Process Heaters	No	N/A	This regulation establishes national emission limitations and work practice standards for HAPs emitted from industrial, commercial, and institutional boilers and process heaters located at major sources of HAP. The facility is not a major source of HAPs; therefore, this subpart does not apply.
MACT 40 CFR 63 Subpart UUUUU	National Emission Standards for Hazardous Air Pollutants Coal & Oil Fire Electric Utility Steam Generating Unit	No	N/A	This regulation establishes national emission limitations and work practice standards for HAPs emitted from coal- and oil-fired electric utility steam generating units as defined in this subpart. This regulation does not apply as the electric utility steam generating units at this facility are neither coal-fired nor oil-fired.
MACT 40 CFR 63 Subpart ZZZZ	National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (**RICE MACT**)	Yes	31b	40 CFR 63, Subpart ZZZZ establishes national emission limitations and operating limitations for hazardous air pollutants (HAP) emitted from existing, new, modified and reconstructed stationary reciprocating internal combustion engines (RICE), including compression ignition (CI) RICE, located at major and area sources of HAP. The regulation contains provisions for initial and continuous compliance demonstration. The facility is a production field facility for the purpose of determining HAP major source status. As defined under §63.6675 (Definitions), only HAP emissions from glycol dehydration units, storage vessels with the potential for flash emissions, combustion turbines and reciprocating internal combustion engines are to be aggregated for a major source determination at production and field facilities. (The HAP emissions from the amine regenerator vents are not included in the major source determination for the facility.) Thus, based on §63.6585(b), the facility is an area source of HAP.

Federal Regulation Citation	Title	Applies? Enter Yes or No	Unit(s) or Facility	Justification:
				Under §63.6590(a)(2)(iii), a stationary RICE with a site rating of more than 500 bhp located at an area source of HAP is new if the engine was constructed on or after June 12, 2006. ("Construction" does not include the reinstallation of an existing engine at another location.) As shown in Table 2-A of this application, the installed RICE unit 31b was constructed in 2017, which is after the June 12, 2006 new source threshold date. Therefore, the unit 31b emergency generator RICE is a "new" engine under the subpart. Under §63.6590(c)(1), a new stationary RICE located at an area source of HAP must meet the requirements of the part (40 CFR 63) by meeting the requirements of 40 CFR, Part 60, Subpart IIII. No further (i.e., 40 CFR 63) requirements apply.
40 CFR 64	**Compliance Assurance Monitoring**	No	N/A	This regulation is not applicable because none of the equipment at the facility uses a control device to achieve compliance with emission limits or standards where pre control emissions equal or exceed the major source threshold (100 tons per year).
40 CFR 68	**Chemical Accident Prevention**	No	N/A	This regulation is not applicable because the facility does not store any of the identified toxic and flammable substances in quantities exceeding the applicability thresholds.
Title IV – Acid Rain 40 CFR 72	**Acid Rain**	Yes	Facility	CFR 72, Permits Regulation, is applicable because the station operates a source subject to Title IV of the Clean Air Act (CAA) and is required to obtain an Acid Rain Permit. The Milagro facility operates under the authority of State Acid Rain Permit P101AR3.
Title IV – Acid Rain 40 CFR 73	**Sulfur Dioxide** Allowance Emissions	Yes	Facility	This regulation is applicable or potentially applicable to the Milagro facility because it operates a source subject to Title IV of the Clean Air Act (CAA).
Title IV-Acid Rain 40 CFR 75	**Continuous Emissions Monitoring**	Yes	Facility	This regulation is applicable to the facility based on it is subject to Acid Rain Permit requirements under Title IV of the Clean Air Act (CAA).
Title IV – Acid Rain 40 CFR 76	**Acid Rain** Nitrogen Oxides **Emission Reduction Program**	Yes	Facility	This regulation is applicable to the facility because it operates sources subject to Title IV of the Clean Air Act (CAA).
Title VI – 40 CFR 82	Protection of **Stratospheric Ozone**	No	N/A	This regulation is not applicable because the facility does not produce, manufacture, transform, destroy, import, or export ozone-depleting substances; does not maintain or service motor vehicle air conditioning units or refrigeration equipment; and does not sell, distribute, or offer for sale or distribution any product that contains ozone depleting substances.

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.

Startup and shutdown procedures are performed according to guidelines, which dictate proper procedural sequence to minimize emissions from the facility during such activities.

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

Section 15

Alternative Operating Scenarios

(Submitting under 20.2.70, 20.2.72, 20.2.74 NMAC)

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

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

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

There are no alternate operating scenarios represented 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.	X
Reporting existing pollutants that were not previously reported.	
Reporting existing pollutants where the ambient impact is being addressed for the first time.	
Title V application (new, renewal, significant, or minor modification. 20.2.70 NMAC). See #3 above.	
Relocation (20.2.72.202.B.4 or 72.202.D.3.c NMAC)	
Minor Source Technical Permit Revision 20.2.72.219.B.1.d.vi NMAC for like-kind unit replacements.	
Other: i.e. SSM modeling. See #2 above.	
This application does not require modeling since this is a No Permit Required (NPR) application.	
This application does not require modeling since this is a Notice of Intent (NOI) application (20.2.73 NMAC).	
This application does not require modeling according to 20.2.70.7.E(11), 20.2.72.203.A(4), 20.2.74.303, 20.2.79.109.D NMAC and in accordance with the Air Quality Bureau's Modeling Guidelines.	

Check each box that applies:

☒ See attached, approved modeling **waiver for all** pollutants from the facility.

☐ See attached, approved modeling **waiver for some** pollutants from the facility.

☐ Attached in Universal Application Form 4 (UA4) is a **modeling report for all** pollutants from the facility.

☐ Attached in UA4 is a **modeling report for some** pollutants from the facility.

☐ No modeling is required.

From: Mustafa, Sufi A., ENV
To: Laura Worthen-Lodes
Cc: Jennifer Nygren
Subject: RE: [EXTERNAL] Harvest Four Corners - Milagro Modeling Waiver
Date: Tuesday, January 13, 2026 3:44:00 PM
Attachments: image001.png
image002.png
Harvest Four Corners_Milagro Gas Plant_Air_Dispersion_Modeling_Waiver_Request_01132026.pdf

---

Laura

I approved your request.

Sufi A. Mustafa, Ph.D.
Manager Air Dispersion Modeling and Emission Inventory Section
New Mexico Environment Department's Air Quality Bureau
Office: (505) 629 6186
sufi.mustafa@state.nm.us
525 Camino de los Marquez
Suite 1
Santa Fe, New Mexico, 87505
https://www.env.nm.gov/air-quality/

"Innovation, Science, Collaboration, Compliance"

From: Laura Worthen-Lodes <Laura.Worthen-Lodes@Altamira-US.com>
Sent: Friday, January 9, 2026 2:25 PM
To: Mustafa, Sufi A., ENV <sufi.mustafa@env.nm.gov>
Cc: Jennifer Nygren <jdeal@harvestmidstream.com>
Subject: RE: [EXTERNAL] Harvest Four Corners - Milagro Modeling Waiver

Sufi,
It will be the same stack, same stack parameters and location.

Laura Worthen Lodes, PE
Chief Engineering Officer | O 405.702.1618 | C 405.919.4129

From: Mustafa, Sufi A., ENV <sufi.mustafa@env.nm.gov>
Sent: Friday, January 9, 2026 1:02 PM
To: Laura Worthen-Lodes <Laura.Worthen-Lodes@Altamira-US.com>
Cc: Jennifer Nygren <jdeal@harvestmidstream.com>
Subject: RE: [EXTERNAL] Harvest Four Corners - Milagro Modeling Waiver

Laura
I am sorry for the delay inn my response.
Please provide comparison of the new and old stack parameters. Will the new stack be at the same location as the old one?
Thank you.

Sufi A. Mustafa, Ph.D.
Manager Air Dispersion Modeling and Emission Inventory Section
New Mexico Environment Department's Air Quality Bureau
Office: (505) 629 6186
sufi.mustafa@state.nm.us
525 Camino de los Marquez
Suite 1
Santa Fe, New Mexico, 87505
https://www.env.nm.gov/air-quality/

"Innovation, Science, Collaboration, Compliance"

From: Laura Worthen-Lodes <Laura.Worthen-Lodes@Altamira-US.com>
Sent: Thursday, December 18, 2025 3:40 PM
To: Mustafa, Sufi A., ENV <sufi.mustafa@env.nm.gov>
Cc: Jennifer Nygren <jdeal@harvestmidstream.com>
Subject: [EXTERNAL] Harvest Four Corners - Milagro Modeling Waiver

CAUTION: This email originated outside of our organization. Exercise caution prior to clicking on links or opening attachments.

Sufi,
The permitting division has determined that the Boiler 2 replacement, to meet the ozone precursor rule, needs to be processed as a significant revision in lieu of a tech revision. There are no increase in emissions from the current permit for any pollutant and there are no changes in the stack parameters. In fact emissions decrease for all pollutants. I am not sure I need a modeling waiver, but i have attached one. Your concurrence or approval is appreciated.

Thanks,

Laura Worthen Lodes, PE
Chief Engineering Officer | O 405.702.1618 | C 405.919.4129 | altamira-us.com
525 Central Park Dr., Suite 500
Oklahoma City, OK 73105

New Mexico Environment Department
Air Quality Bureau
Modeling Section
525 Camino de Los Marquez - Suite 1
Santa Fe, NM 87505

Phone: (505) 476-4300
Fax: (505) 476-4375
www.env.nm.gov/air-quality/

For Department use only:

Approved by:

Date:

Air Dispersion Modeling Waiver Request Form

This form must be completed and submitted with all air dispersion modeling waiver requests.

If an air permit application requires air dispersion modeling, in some cases the demonstration that ambient air quality standards and Prevention of Significant Deterioration (PSD) increments will not be violated can be satisfied with a discussion of previous modeling. The purpose of this form is to document and streamline requests to certify that previous modeling satisfies all or some of the current modeling requirements. The criteria for requesting and approving modeling waivers are found in the Air Quality Bureau Modeling Guidelines. Typically, only construction permit applications submitted per 20.2.72, 20.2.74, or 20.2.79 NMAC require air dispersion modeling. However, modeling is sometimes also required for a Title V permit application.

A waiver may be requested by e-mailing this completed form in **MS Word** format to the modeling manager, sufi.mustafa@env.nm.gov.

This modeling waiver is not valid if the emission rates in the application are higher than those listed in the approved waiver request.

Section 1 and Table 1: Contact and facility information:

Contact name	Laura Worthen Lodes
E-mail Address:	Laura.worthen-lodes@altamira-us.com
Phone	405-702-1618
Facility Name	Milagro Gas Treating Plant
Air Quality Permit Number(s)	0859 M10R4
Agency Interest Number (if known)	1277
Latitude and longitude of facility (decimal degrees)	36.736, -107.941°

General Comments: (Add introductory remarks or comments here, including the purpose of and type of permit application.)

Harvest Four Corners, LLC (Harvest) is submitting this application for a Significant Revision to NSR Permit No. 0859-M10R4 pursuant to 20.2.72.219.D.(1)(f) NMAC for the Milagro Gas Treating Plant (Milagro). The facility is located in San Juan County, New Mexico. In this application, Harvest is requesting to do an end of life replacement of one (1) Holman/Zurn 190 MMBtu/hr boiler (Unit 2) with one (1) Babcock & Wilcox 135.2 MMBtu/hr boiler (Unit 2A) equipped with a Flue Gas Recirculation (FGR), a low NOx burner (LNB), and with a Selective Catalytic Reduction (SCR) control device to comply with the requirements of 20.2.50.119

Unit 2 had a Fuel Induce Recirculation (FIR) control device and the new Unit 2A will have a Flue Gas Recirculation (FGR) control device. The current FIR control device uses fuel gas flow to induce recirculated flue gas from the boiler stack, into the burner fuel zone. The presence of flue gas with fuel results in delayed combustion. Delayed combustion produces a lower adiabatic flame temperature and reduced NOx emissions from thermal NOx. The proposed modification to a unit equipped with a SCR control device would require the injection of ammonia to drive the chemical

reaction necessary to reduce NOx from the flue gas from the boiler. The reaction chamber contains a catalyst bed where NOx from the flue gas is reduced to nitrogen and water by the reaction of NOx and ammonia. The proposed modification will not result in an increase in the potential emission rate for any pollutant.

Section 2 – List All Regulated Pollutants from the Entire Facility - Required

In Table 2, below, list all regulated air pollutants emitted from your facility, except for New Mexico Toxic Air Pollutants, which are listed in Table 6 of this form. All pollutants emitted from the facility must be listed whether or not a modeling waiver is requested for that pollutant or if the pollutant emission rate is subject to the proposed permit changes.

Table 2: Air Pollutant summary table (Check all that apply. Include all pollutants emitted by the facility):

Pollutant	Pollutant is not emitted at the facility and modeling or waiver are not required.	Pollutant does not increase in emission rate at any emission unit (based on levels currently in the permit) and stack parameters are unchanged. Modeling or waiver are not required.	Stack parameters or stack location has changed.	Pollutant is new to the permit, but already emitted at the facility.	Pollutant is increased at any emission unit (based on levels currently in the permit).	A modeling waiver is being requested for this pollutant.	Modeling for this pollutant will be included in the permit application.
CO		X					
NO_2		X					
SO_2		X					
PM10		X					
PM2.5		X					
H_2S	X						
Reduced S	X						
O_3 (PSD only)	X						
Pb	X						

Section 3: Pollutants, other than NMTAPs, with very small emission rates

The Air Quality Bureau has performed generic modeling to demonstrate that small sources, as listed in Appendix 2 of this form, do not need computer modeling. This modeling compared emissions from a project (the increase in emissions from the previous permit or total facility emissions for a new facility) with significance levels. After comparing the project's emission rates for various pollutants to Appendix 2, list in Table 3 the pollutants that do not need to be modeled because of very small emission rates.

The facility must be at least 2 km from the nearest Class I area to qualify for a waiver due to very small emission rates. List the nearest Class I area and the distance from the facility in Section 3 comments.

Section 3 Comments. (If you are not requesting a waiver for any pollutants based on their low emission rate, then note that here. You do not need to complete the rest of Section 3 or Table 3.)

There are no applicable pollutants.

Table 3: List of Pollutants with very small emission rates from the project

Pollutant	Requested Allowable Emission Rate for Project (pounds/hour)	Release Type (select "all from stacks >20 m" or "other")	Waiver Threshold (from appendix 2) (lb/hr)

Section 4: Pollutants that have previously been modeled at equal or higher emission rates

List the pollutants and averaging periods in Table 4 for which you are requesting a modeling waiver based on previous modeling for this facility. The previous modeling reports that apply to the pollutant must be submitted with the modeling waiver request. Request previous modeling reports from the Modeling Section of the Air Quality Bureau if you do not have them and believe they exist in the AQB modeling file archive.

Section 4 Comments. (If you are not asking for a waiver based on previously modeled pollutants, note that here. You do not need to complete the rest of section 4 or table 4.)

N/A

Table 4: List of previously modeled pollutants (facility-wide emission rates)

Pollutant	Averaging period	Proposed emission rate (pounds/hour)	Previously modeled emission rate (pounds/hour)	Proposed minus modeled emissions (lb/hr)	Modeled percent of standard or increment	Year modeled

Section 4, Table 5: Questions about previous modeling:

Question	Yes	No
Was AERMOD used to model the facility?		
Did previous modeling predict concentrations less than 95% of each air quality standard and PSD increment?		
Were all averaging periods modeled that apply to the pollutants listed above?		
Were all applicable startup/shutdown/maintenance scenarios modeled?		
Did modeling include all sources within 1000 meters of the facility fence line that now exist?		

Did modeling include background concentrations at least as high as current background concentrations?		
If a source is changing or being replaced, is the following equation true for all pollutants for which the waiver is requested? (Attach calculations if applicable.) EXISTING SOURCE REPLACMENT SOURCE $\frac{[(g) \times (h1)] + [(v1)^2/2] + [(c) \times (T1)]}{q1} <= \frac{[(g) \times (h2)] + [(v2)^2/2] + [(c) \times (T2)]}{q2}$ Where g = gravitational constant = 32.2 ft/sec^2 h1 = existing stack height, feet v1 = exhaust velocity, existing source, feet per second c = specific heat of exhaust, 0.28 BTU/lb-degree F T1 = absolute temperature of exhaust, existing source = degree F + 460 q1 = emission rate, existing source, lbs/hour h2 = replacement stack height, feet v2 = exhaust velocity, replacement source, feet per second T2 = absolute temperature of exhaust, replacement source = degree F + 460 q2 = emission rate, replacement source, lbs/hour		

If you checked "no" for any of the questions, provide an explanation for why you think the previous modeling may still be used to demonstrate compliance with current ambient air quality standards.

Section 5: Modeling waiver using scaled emission rates and scaled concentrations

At times it may be possible to scale the results of modeling one pollutant and apply that to another pollutant. Increases in emissions of one pollutant might also demonstrate compliance by applying a scaling factor to the modeling results. If the analysis for the waiver gets too complicated, then it becomes a modeling review rather than a modeling waiver, and applicable modeling fees will be charged for the modeling. Plume depletion, ozone chemical reaction modeling, post-processing, and unequal pollutant ratios from different sources are likely to invalidate scaling.

If you are not scaling previous results, note that here. You do not need to complete the rest of section 5. Scaling analyses are not intended to be used for previously modeled pollutants with decreasing emissions, which is already addressed in section 4.

To demonstrate compliance with standards for a pollutant describe scenarios below that you wish the modeling section to consider for scaling results.

Section 6: New Mexico Toxic air pollutants – 20.2.72.400 NMAC

Modeling must be provided for any New Mexico Toxic Air Pollutant (NMTAP) with a facility-wide controlled emission rate in excess of the pound per hour emission levels specified in Tables A and B at **20.2.72.502 NMAC** - Toxic Air Pollutants and Emissions. An applicant may use a stack height correction factor based on the release height of the stack for the purpose of determining whether modeling is required. See Table C - Stack Height Correction Factor at 20.2.72.502 NMAC. Divide the emission rate for each release point of a NMTAP by the correction factor for that release height and add the total values together to determine the total adjusted pound per hour emission rate for that NMTAP. If the total adjusted pound per hour emission rate is lower than the emission rate screening level found in Tables A and B, then modeling is not required.

In Table 6, below, list the total facility-wide emission rates for each New Mexico Toxic Air Pollutant emitted by the facility. The table is pre-populated with common examples. Extra rows may be added for NMTAPS not listed or for NMTAPS emitted from multiple stack heights. NMTAPS not emitted at the facility may be deleted, left blank, or noted as

0 emission rate. Toxics previously modeled may be addressed in Section 5 of this waiver form. For convenience, we have listed the stack height correction factors in Appendix 1 of this form.

Section 6 Comments. (If you are not requesting a waiver for any NMTAPs then note that here. You do not need to complete the rest of section 6 or Table 6.)
No NMTAC are emitted.

Table 6: New Mexico Toxic Air Pollutants emitted at the facility
If requesting a waiver for any NMTAP, all NMTAPs from this facility must be listed in Table 3 regardless of if a modeling waiver is requested for that pollutant or if the pollutant emission rate is subject to the proposed permit changes.

Pollutant	Requested Allowable Emission Rate (pounds/hour)	Release Height (Meters)	Correction Factor	Allowable Emission Rate Divided by Correction Factor	Emission Rate Screening Level (pounds/hour)
Ammonia					1.20
Asphalt (petroleum) fumes					0.333
Carbon black					0.233
Chromium metal					0.0333
Glutaraldehyde					0.0467
Nickel Metal					0.0667
Wood dust (certain hard woods as beech & oak)					0.0667
Wood dust (soft wood)					0.333
(add additional toxics if they are present)					

Section 7: Approval or Disapproval of Modeling Waiver

The AQB air dispersion modeler should list each pollutant for which the modeling waiver is approved, the reasons why, and any other relevant information. If not approved, this area may be used to document that decision.

Appendix 1: Stack Height Release Correction Factor (adapted from 20.2.72.502 NMAC)

Release Height in Meters	Correction Factor
0 to 9.9	1
10 to 19.9	5
20 to 29.9	19
30 to 39.9	41
40 to 49.9	71
50 to 59.9	108
60 to 69.9	152
70 to 79.9	202
80 to 89.9	255
90 to 99.9	317
100 to 109.9	378
110 to 119.9	451
120 to 129.9	533
130 to 139.9	617
140 to 149.9	690
150 to 159.9	781
160 to 169.9	837
170 to 179.9	902
180 to 189.9	1002
190 to 199.9	1066
200 or greater	1161

Appendix 2. Very small emission rate modeling waiver requirements (updated 3/4/2024 to correct feet to meters)
Modeling is waived if emissions of a pollutant for the project are below the amount:

Pollutant	If all emissions come from stacks 20 meters or greater in height and there are no horizontal stacks or raincaps (lb/hr)	If not all emissions come from stacks 20 meters or greater in height, or there are horizontal stacks, raincaps, volume, or area sources (lb/hr)
CO	16.037	2.580
H_2S (Pecos-Permian Basin)	0.114	0.015
H_2S (Not in Pecos-Permian Basin)	0.022	0.003
Lead	0.005	0.001
NO_2	0.189	0.024
PM2.5 – Point Sources	0.056	0.009
PM2.5 – Volume Sources		0.003
PM10 – Point Sources	0.255	0.039
PM10 – Volume Sources		0.015
SO_2	0.179	0.023
Reduced sulfur (Pecos-Permian Basin)	0.033	No waiver
Reduced sulfur (Not in Pecos-Permian Basin)	No waiver	No waiver

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.

Compliance Test History Table

Unit No.	Test Description	Test Date
1	Tested for NO_x and CO in accordance with EPA test methods 1-4, 7, 10 and 19.	6/19/2025 11/21/2025
3	Tested for NO_x and CO in accordance with EPA test methods 1-4, 7, 10 and 19.	6/19/2025 11/21/2025
20	Tested for NO_x and CO in accordance with EPA test methods 1-4, 7, 10 and 19.	6/19/2025 11/21/2025

Section 20

Other Relevant Information

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

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

There is no other relevant information being provided with this application.

Section 22: Certification

Company Name: Harvest Four Corners, LLC

I, Jennifer Nygren, 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 9 day of February, 2026, upon my oath or affirmation, before a notary of the State of New Mexico.

Jennifer Nygren
*Signature

2/9/2026
Date

Jennifer Nygren
Printed Name

Environmental Specialist
Title

Scribed and sworn before me on this 9th day of February, 2026

My authorization as a notary of the State of New Mexico expires on the

16th day of April, 2028.

Kori D Gathings
Notary's Signature

2/9/2026
Date

Kori D. Gathings
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.

KORI D GATHINGS
Notary Public
State of New Mexico
Comm. # 2002674
My Comm. Exp. Apr 16, 2028