



ENTERPRISE PRODUCTS PARTNERS L.P.
ENTERPRISE PRODUCTS HOLDINGS LLC
(General Partner)

ENTERPRISE PRODUCTS OPERATING LLC

December 16, 2025

Return Receipt Requested

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

**Re: NSR Significant Revision Application
Enterprise Delaware Basin Treating LLC
Dark Horse Treating Facility**

Dear Sir or Madam:

Enterprise Delaware Basin Treating LLC is submitting this NSR Significant Revision Application pursuant to 20.2.72.219 D(1)(a) NMAC for the Dark Horse Treating Facility (Facility). The Facility is located near Lea County, New Mexico and is currently permitted under NSR Permit Number 9058M1R3 issued on October 22, 2025.

The purpose of this application is to authorize the following facility changes:

- 1. Adding additional facility compression capacity (2 scenarios)**
- 2. Adding two (2) generator turbines to power the previously permitted Treating Train 4**
- 3. Reroute Train 4 SSM emissions to FL-1950, instead of currently permitted FL-1850**
- 4. Increase permitted H₂S content for acid gas flaring streams for FL-1850BD and FL-1950BD**
- 5. Additional fugitive components associated with above changes**

A check for the \$500 application filing fee is enclosed. Electronic files will be provided to NMED upon request via electronic file transfer.

Should you have questions or require further information regarding this submittal, please contact Daniel Bissonnette at (713) 381-3669.

Sincerely,

Enterprise Delaware Basin Treating LLC

Daniel Bissonnette
Supervisor, Environmental Permitting

/bjm
Attachments



Air Permit Application Compliance History Disclosure Form

Pursuant to Subsection 74-2-7(S) of the New Mexico Air Quality Control Act ("AQCA"), NMSA §§ 74-2-1 to -17, the New Mexico Environment Department ("Department") may deny any permit application or revoke any permit issued pursuant to the AQCA if, within ten years immediately preceding the date of submission of the permit application, the applicant met any one of the criteria outlined below. In order for the Department to deem an air permit application administratively complete, or issue an air permit for those permits without an administrative completeness determination process, the applicant must complete this Compliance History Disclosure Form as specified in Subsection 74-2-7(P). An existing permit holder (permit issued prior to June 18, 2021) shall provide this Compliance History Disclosure Form to the Department upon request.

Permittee/Applicant Company Name		Expected Application Submittal Date
Enterprise Delaware Basin Treating LLC		December 17, 2025
Permittee/Company Contact	Phone	Email
Daniel Bissonnette	713-381-3669	DMBissonnette@eprod.com
Within the 10 years preceding the expected date of submittal of the application, has the permittee or applicant:		
1	Knowingly misrepresented a material fact in an application for a permit?	☐ Yes ☒ No
2	Refused to disclose information required by the provisions of the New Mexico Air Quality Control Act?	☐ Yes ☒ No
3	Been convicted of a felony related to environmental crime in any court of any state or the United States?	☐ Yes ☒ No
4	Been convicted of a crime defined by state or federal statute as involving or being in restraint of trade, price fixing, bribery, or fraud in any court of any state or the United States?	☐ Yes ☒ No
5a	Constructed or operated any facility for which a permit was sought, including the current facility, without the required air quality permit(s) under 20.2.70 NMAC, 20.2.72 NMAC, 20.2.74 NMAC, 20.2.79 NMAC, or 20.2.84 NMAC?	☐ Yes ☒ No
5b	If "No" to question 5a, go to question 6. If "Yes" to question 5a, state whether each facility that was constructed or operated without the required air quality permit met at least one of the following exceptions: a. The unpermitted facility was discovered after acquisition during a timely environmental audit that was authorized by the Department; or b. The operator of the facility estimated that the facility's emissions would not require an air permit, and the operator applied for an air permit within 30 calendar days of discovering that an air permit was required for the facility.	☐ Yes ☐ No
6	Had any permit revoked or permanently suspended for cause under the environmental laws of any state or the United States?	☐ Yes ☒ No
7	For each "yes" answer, please provide an explanation and documentation.	

Mail Application To:

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

**For Department use only:**

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.: **3790873**
- ☒ 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: 39823	Updating Permit/NOI #: 9058M1R3
1	Facility Name: Dark Horse Facility	Plant primary SIC Code (4 digits): 1311	
		Plant NAIC code (6 digits): 211130	
a	Facility Street Address (If no facility street address, provide directions from a prominent landmark): The approximate location of the facility is 5.9 miles west of Jal, NM. From the intersection of N 3rd Street and NM-128 (W Kansas Ave.) in Jal, head west on NM-128 for 5.4 miles and turn left at dirt access road. Travel 1.0 mile south and turn right at a second dirt access road. After 0.6 mile, turn left at a third dirt access road. The site is on the right-hand side of the road.		

2	Plant Operator Company Name: Enterprise Delaware Basin Treating LLC	Phone/Fax: (713) 381-6595
a	Plant Operator Address: P.O. Box 4324, Houston, TX 77210-4324	
b	Plant Operator's New Mexico Corporate ID or Tax ID: 32-89188	
3	Plant Owner(s) name(s): Enterprise Delaware Basin Treating LLC	Phone/Fax: (713) 381-6595
a	Plant Owner(s) Mailing Address(s): P.O. Box 4324, Houston, TX 77210-4324	
4	Bill To (Company): Enterprise Delaware Basin Treating LLC	Phone/Fax: (713) 381-6595
a	Mailing Address: P.O. Box 4324, Houston, TX 77210-4324	E-mail: environmental@eprod.com
5	☒ Preparer: Daniel Bissonnette ☐ Consultant:	Phone/Fax: (713) 381-3669
a	Mailing Address: P.O. Box 4324, Houston, TX 77210-4324	E-mail: DMBissonnette@eprod.com
6	Plant Operator Contact: Casey Fix	Phone/Fax: (575) 361-4865
a	Address: P.O. Box 4324, Houston, TX 77210-4324	E-mail: cfix@eprod.com
7	Air Permit Contact: Daniel Bissonnette	Title: Supervisor, Environmental
a	E-mail: DMBissonnette@eprod.com	Phone/Fax: (713) 381-3669
b	Mailing Address: P.O. Box 4324, Houston, TX 77210-4324	
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: N/A
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: 9058M1R3
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: Condensate (bbl/hr): 341.7 Gas (MMSCFHR): 41.3 NGL (bbl/hr): 85.5	Daily: Condensate (bbl/day): 8,200 Gas (MMSCFD): 990 NGL (bbl/day): 2,052	Annually: Condensate (bbl/yr): 2,992,585 Gas (MMSCFY): 361,350 NGL (bbl/yr): 749,020
b	Proposed	Hourly: Condensate (bbl/hr): 341.7 Gas (MMSCFHR): 41.3 NGL (bbl/hr): 85.5	Daily: Condensate (bbl/day): 8,200 Gas (MMSCFD): 990 NGL (bbl/day): 2,052	Annually: Condensate (bbl/yr): 2,992,585 Gas (MMSCFY): 361,350 NGL (bbl/yr): 749,020
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: Condensate (bbl/hr): 341.7 Gas (MMSCFHR): 41.3 NGL (bbl/hr): 85.5	Daily: Condensate (bbl/day): 8,200 Gas (MMSCFD): 990 NGL (bbl/day): 2,052	Annually: Condensate (bbl/yr): 2,992,585 Gas (MMSCFY): 361,350 NGL (bbl/yr): 749,020
b	Proposed	Hourly: Condensate (bbl/hr): 341.7 Gas (MMSCFHR): 41.3 NGL (bbl/hr): 85.5	Daily: Condensate (bbl/day): 8,200 Gas (MMSCFD): 990 NGL (bbl/day): 2,052	Annually: Condensate (bbl/yr): 2,992,585 Gas (MMSCFY): 361,350 NGL (bbl/yr): 749,020

Section 1-D: Facility Location Information

1	Latitude (decimal degrees): 32.120112	Longitude (decimal degrees): -103.289663	County: Lea	Elevation (ft): 3,100
2	UTM Zone: ☐ 12 or ☒ 13		Datum: ☐ NAD 83 ☒ WGS 84	
a	UTM E (in meters, to nearest 10 meters): 661,350		UTM N (in meters, to nearest 10 meters): 3,555,030	
3	Name and zip code of nearest New Mexico town: Jal, NM 88252			
4	Detailed Driving Instructions from nearest NM town (attach a road map if necessary): From the intersection of N 3rd Street and NM-128 (W Kansas Ave.) in Jal, head west on NM-128 for 5.4 miles and turn left at dirt access road. Travel 1.0 mile south and turn right at a second dirt access road. After 0.6 mile, turn left at a third dirt access road. The site is on the right-hand side of the road.			
5	The facility is 5.9 miles west of Jal, 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: Municipalities: Jal; Indian Tribes: None; Counties: Lea			
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:			
9	Name nearest Class I area: Carlsbad Caverns National Park			
10	Shortest distance (in km) from facility boundary to the boundary of the nearest Class I area (to the nearest 10 meters): 102.1			
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: Occupied structure approximately 2,955 meters to the northeast of the site.			
12	Method(s) used to delineate the Restricted Area: Continuous fencing "Restricted Area" is an area to which public entry is effectively precluded. Effective barriers include continuous fencing, continuous walls, or other continuous barriers approved by the Department, such as rugged physical terrain with steep grade that would require special equipment to traverse. If a large property is completely enclosed by fencing, a restricted area within the property may be identified with signage only. Public roads cannot be part of a Restricted Area.			
13	Does the owner/operator intend to operate this source as a portable stationary source as defined in 20.2.72.7.X NMAC? ☐ 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: Site is already constructed. New construction to begin in 2026.			
4	Month and year of anticipated construction completion: Site is already operating. New construction completion in 2026.			
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: Case No. PIN-39823-2401		
a	If yes, NOV date or description of issue: 6/27/2025	NOV Tracking No: PIN-39823-2401	
b	Is this application in response to any issue listed in 1-F, 1 or 1a above? ☐ Yes ☒ No If Yes, provide the 1c & 1d info below:		
c	Document Title: 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 Initial modelling was provided in NSR-Permit No. 9058M1, issued on October, 2023. This is a Significant Permit Revision Application, modeling is included.		
3	Does this facility require an "Air Toxics" permit under 20.2.72.400 NMAC & 20.2.72.502, Tables A and/or B? ☐ Yes ☒ No		
4	Will this facility be a source of federal Hazardous Air Pollutants (HAP)? ☒ Yes ☐ No		
a	If Yes, what type of source? ☒ Major (☒ ≥ 10 tpy of any single HAP OR ☒ ≥ 25 tpy of any combination of HAPS) OR ☐ Minor (☐ < 10 tpy of any single HAP AND ☐ < 25 tpy of any combination of HAPS)		
5	Is any unit exempt under 20.2.72.202.B.3 NMAC? ☐ Yes ☒ No		
a	If yes, include the name of company providing commercial electric power to the facility: _____ Commercial power is purchased from a commercial utility company, which specifically does not include power generated on site for the sole purpose of the user.		

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

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

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

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

1	Responsible Official (R.O.) (20.2.70.300.D.2 NMAC): Graham Bacon		Phone: (713) 381-6595
a	R.O. Title: EVP and Chief Operating Officer	R.O. e-mail: environmental@eprod.com	
b	R. O. Address: P.O. Box 4324, Houston, TX		
2	Alternate Responsible Official (20.2.70.300.D.2 NMAC): Pranav Kulkarni		Phone: (713) 381-6595
a	A. R.O. Title: Director, Environmental	A. R.O. e-mail: environmental@eprod.com	
b	A. R. O. Address: P.O. Box 4324, Houston, TX		
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): Enterprise Delaware Basin Treating LLC and Enterprise Products Operating LLC		
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.): Enterprise Products Partners L.P.		
a	Address of Parent Company: 1100 Louisiana St., Houston, TX 77210		
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: It is 14.2 km from Other States- Texas; State, Local Air Pollution Control Program – None; Indian Tribes and Pueblos – None
---	---

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 Daniel Bissonnete, Email DMBissonnette@eprod.com
Phone number 713-381-3669.

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

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

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

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

- 1) All required electronic documents shall be submitted as 2 separate CDs or submitted through the AQB secure file transfer service. Submit a single PDF document of the entire application as submitted and the individual documents comprising the application.
- 2) The documents should also be submitted in Microsoft Office compatible file format (Word, Excel, etc.) allowing us to access the text and formulas in the documents (copy & paste). Any documents that cannot be submitted in a Microsoft Office compatible format shall be saved as a PDF file from within the electronic document that created the file. If you are unable to provide Microsoft office compatible electronic files or internally generated PDF files of files (items that were not created electronically: i.e. brochures, maps, graphics, etc.), submit these items in hard copy format. We must be able to review the formulas and inputs that calculated the emissions.
- 3) It is preferred that this application form be submitted as 4 electronic files (**3 MSWord docs**: Universal Application section 1 [UA1], Universal Application section 3-19 [UA3], and Universal Application 4, the modeling report [UA4]) and **1 Excel file** of the tables (Universal Application section 2 [UA2]). Please include as many of the 3-19 Sections as practical in a single MS Word electronic document. Create separate electronic file(s) if a single file becomes too large or if portions must be saved in a file format other than MS Word.
- 4) The **electronic file names** shall be a maximum of 25 characters long (including spaces, if any). The format of the electronic Universal Application shall be in the format: "A-3423-FacilityName". The "A" distinguishes the file as an application submittal, as opposed to other documents the Department itself puts into the database. Thus, all electronic application submittals should begin with "A-". Modifications to existing facilities should use the **core permit number** (i.e. '3423') the Department assigned to the facility as the next 4 digits. Use 'XXXX' for new facility applications. The format of any separate electronic submittals (additional submittals such as non-Word attachments, re-submittals, application updates) and Section document shall be in the format: "A-3423-9-description", where "9" stands for the **section #** (in this case Section 9-Public Notice). Please refrain, as much as possible, from submitting any scanned documents as this file format is extremely large, which uses up too much storage capacity in our database. Please take the time to fill out the **header information** throughout all submittals as this will identify any loose pages, including the Application Date (date submitted) & Revision number (0 for original, 1, 2, etc.; which will help keep track of subsequent partial update(s) to the original submittal. Do not use special symbols (#, @, etc.) in file names. The footer information should not be modified by the applicant.

Table of Contents

Section 1:	General Facility Information
Section 2:	Tables
Section 3:	Application Summary
Section 4:	Process Flow Sheet
Section 5:	Plot Plan Drawn to Scale
Section 6:	All Calculations
Section 7:	Information Used to Determine Emissions
Section 8:	Map(s)
Section 9:	Proof of Public Notice
Section 10:	Written Description of the Routine Operations of the Facility
Section 11:	Source Determination
Section 12:	PSD Applicability Determination for All Sources & Special Requirements for a PSD Application
Section 13:	Discussion Demonstrating Compliance with Each Applicable State & Federal Regulation
Section 14:	Operational Plan to Mitigate Emissions
Section 15:	Alternative Operating Scenarios
Section 16:	Air Dispersion Modeling
Section 17:	Compliance Test History
Section 18:	Addendum for Streamline Applications (streamline applications only)
Section 19:	Requirements for the Title V (20.2.70 NMAC) Program (Title V applications only)
Section 20:	Other Relevant Information
Section 21:	Addendum for Landfill Applications
Section 22:	Certification Page

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 #	Manufact-urer's Rated Capacity ³ (Specify Units)	Requested Permitted Capacity ³ (Specify Units)	Date of Manufacture ²	Controlled by Unit #	Source Classi- fication Code (SCC)	For Each Piece of Equipment, Check One	RICE Ignition Type (CI, SI, 4SLB, 4SRB, 2SLB) ⁴	Replacing Unit No.	
							Date of Construction/ Reconstruction ²	Emissions vented to Stack #					
C-1200	LP Inlet Compressor	Caterpillar	G3608 A4	XH701545	2500 hp	2500 hp	>7/1/2010	CAT-1200	20200254	☒ Existing (unchanged) ☐ New/Additional ☐ To Be Modified	☐ To be Removed ☐ Replacement Unit ☐ To be Replaced	4SLB	N/A
							2024	C-1200					
C-1210	LP Inlet Compressor	Caterpillar	G3608 A4	XH701546	2500 hp	2500 hp	>7/1/2010	CAT-1210	20200254	☒ Existing (unchanged) ☐ New/Additional ☐ To Be Modified	☐ To be Removed ☐ Replacement Unit ☐ To be Replaced	4SLB	N/A
							2024	C-1210					
C-1220	LP Inlet Compressor	Caterpillar	G3608 A4	XH701671	2500 hp	2500 hp	>7/1/2010	CAT-1220	20200254	☒ Existing (unchanged) ☐ New/Additional ☐ To Be Modified	☐ To be Removed ☐ Replacement Unit ☐ To be Replaced	4SLB	N/A
							2024	C-1220					
C-1230	LP Inlet Compressor	Caterpillar	G3608 A4	XH701665	2500 hp	2500 hp	>7/1/2010	CAT-1230	20200254	☒ Existing (unchanged) ☐ New/Additional ☐ To Be Modified	☐ To be Removed ☐ Replacement Unit ☐ To be Replaced	4SLB	N/A
							2024	C-1230					
H-1600	Stabilizer Hot Oil Heater	Tulsa Heaters	N/A	MJ20-451	6.97 MMBTU/hr	6.97 MMBTU/hr	2021	N/A	31000404	☒ Existing (unchanged) ☐ New/Additional ☐ To Be Modified	☐ To be Removed ☐ Replacement Unit ☐ To be Replaced	N/A	N/A
							2021	H-1600					
H-1620	Amine Hot Oil Heater	Tulsa Heaters	N/A	MJ19-416	37 MMBTU/hr	37 MMBTU/hr	2021	N/A	31000404	☒ Existing (unchanged) ☐ New/Additional ☐ To Be Modified	☐ To be Removed ☐ Replacement Unit ☐ To be Replaced	N/A	N/A
							2021	H-1620					
H-2600	Stabilizer Hot Oil Heater	TBD	TBD	TBD	27 MMBTU/hr	27 MMBTU/hr	2021	N/A	31000404	☒ Existing (unchanged) ☐ New/Additional ☐ To Be Modified	☐ To be Removed ☐ Replacement Unit ☐ To be Replaced	N/A	N/A
							2021	H-2600					
H-2620	Amine Hot Oil Heater	Tulsa Heaters	N/A	MJ21-454	37 MMBTU/hr	37 MMBTU/hr	2021	N/A	31000404	☒ Existing (unchanged) ☐ New/Additional ☐ To Be Modified	☐ To be Removed ☐ Replacement Unit ☐ To be Replaced	N/A	N/A
							2021	H-2620					
H-3620	Amine Hot Oil Heater	Tulsa Heaters	N/A	MJ22-551	37 MMBTU/hr	37 MMBTU/hr	2021	N/A	31000404	☒ Existing (unchanged) ☐ New/Additional ☐ To Be Modified	☐ To be Removed ☐ Replacement Unit ☐ To be Replaced	N/A	N/A
							2021	H-3620					
H-4620	Amine Hot Oil Heater	TBD	TBD	TBD	82 MMBTU/hr	82 MMBTU/hr	2024	N/A	31000404	☒ Existing (unchanged) ☐ New/Additional ☐ To Be Modified	☐ To be Removed ☐ Replacement Unit ☐ To be Replaced	N/A	N/A
							2024	H-4620					
H-5620	Utility Hot Oil Heater	TBD	TBD	TBD	86 MMBTU/hr	86 MMBTU/hr	2024	N/A	31000404	☒ Existing (unchanged) ☐ New/Additional ☐ To Be Modified	☐ To be Removed ☐ Replacement Unit ☐ To be Replaced	N/A	N/A
							2024	H-5620					
H-6620	Utility Hot Oil Heater	TBD	TBD	TBD	86 MMBTU/hr	86 MMBTU/hr	2024	N/A	31000404	☒ Existing (unchanged) ☐ New/Additional ☐ To Be Modified	☐ To be Removed ☐ Replacement Unit ☐ To be Replaced	N/A	N/A
							2024	H-6620					
E-1566	TEG Reboiler (Direct Fired Heater)	Profire	BullsEye	J6872-02	1.5 MMBTU/hr	1.5 MMBTU/hr	2021	N/A	31000404	☒ Existing (unchanged) ☐ New/Additional ☐ To Be Modified	☐ To be Removed ☐ Replacement Unit ☐ To be Replaced	N/A	N/A
							2021	E-1566					
E-2566	TEG Reboiler (Direct Fired Heater)	Profire	BullsEye	J6942-02	1.5 MMBTU/hr	1.5 MMBTU/hr	2021	N/A	31000404	☒ Existing (unchanged) ☐ New/Additional ☐ To Be Modified	☐ To be Removed ☐ Replacement Unit ☐ To be Replaced	N/A	N/A
							2021	E-2566					
E-3566	TEG Reboiler (Direct Fired Heater)	Profire	BullsEye	9300-0000- 21F1	1.5 MMBTU/hr	1.5 MMBTU/hr	2021	N/A	31000404	☒ Existing (unchanged) ☐ New/Additional ☐ To Be Modified	☐ To be Removed ☐ Replacement Unit ☐ To be Replaced	N/A	N/A
							2021	E-3566					
E-4566	TEG Reboiler (Direct Fired Heater)	TBD	TBD	TBD	3 MMBTU/hr	3 MMBTU/hr	2024	N/A	31000404	☒ Existing (unchanged) ☐ New/Additional ☐ To Be Modified	☐ To be Removed ☐ Replacement Unit ☐ To be Replaced	N/A	N/A
							2024	E-4566					

Unit Number ¹	Source Description	Make	Model #	Serial #	Manufact-urer's Rated Capacity ³ (Specify Units)	Requested Permitted Capacity ³ (Specify Units)	Date of Manufacture ²	Controlled by Unit #	Source Classi- fication Code (SCC)	For Each Piece of Equipment, Check One	RICE Ignition Type (CI, SI, 4SLB, 4SRB, 2SLB) ⁴	Replacing Unit No.
							Date of Construction/ Reconstruction ²	Emissions vented to Stack #				
H-1781	Cryo Trim Heater	TBD	TBD	TBD	22 MMBTU/hr	22 MMBTU/hr	2024	N/A	31000404	☒ Existing (unchanged) ☐ To be Removed ☐ New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced	N/A	N/A
							2024	H-1781				
H-2781	Cryo Trim Heater	TBD	TBD	TBD	22 MMBTU/hr	22 MMBTU/hr	2024	N/A	31000404	☒ Existing (unchanged) ☐ To be Removed ☐ New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced	N/A	N/A
							2024	H-2781				
H-1741	Cryo Regen Heater	TBD	TBD	TBD	9 MMBTU/hr	9 MMBTU/hr	2024	N/A	31000404	☒ Existing (unchanged) ☐ To be Removed ☐ New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced	N/A	N/A
							2024	H-1741				
H-2741	Cryo Regen Heater	TBD	TBD	TBD	9 MMBTU/hr	9 MMBTU/hr	2024	N/A	31000404	☒ Existing (unchanged) ☐ To be Removed ☐ New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced	N/A	N/A
							2024	H-2741				
FL-1850	Plant Flare	Hero Flare	N/A	H20192	2,380 MMBTu/hr	2,380 MMBTu/hr	2021	N/A	31000205	☐ Existing (unchanged) ☐ To be Removed ☐ New/Additional ☐ Replacement Unit ☒ To Be Modified ☐ To be Replaced	N/A	N/A
							2021	FL-1850				
FL-1850 BD	FL-1850 Facility Blowdown	Hero Flare	N/A	H20192	2,380 MMBTu/hr	2,380 MMBTu/hr	2021	N/A	31000205	☐ Existing (unchanged) ☐ To be Removed ☐ New/Additional ☐ Replacement Unit ☒ To Be Modified ☐ To be Replaced	N/A	N/A
							2021	FL-1850 BD				
FL-1950	Train 4, 5, and 6 Process Flare	Hero Flare	N/A	TBD	2,380 MMBTu/hr	2,380 MMBTu/hr	2024	N/A	31000205	☐ Existing (unchanged) ☐ To be Removed ☐ New/Additional ☐ Replacement Unit ☒ To Be Modified ☐ To be Replaced	N/A	N/A
							2024	FL-1950				
FL-1950 BD	FL-1950 Blowdown	Hero Flare	N/A	TBD	2,380 MMBTu/hr	2,380 MMBTu/hr	2024	N/A	31000205	☐ Existing (unchanged) ☐ To be Removed ☐ New/Additional ☐ Replacement Unit ☒ To Be Modified ☐ To be Replaced	N/A	N/A
							2024	FL-1950 BD				
FL-2050	Cryogenic Process Flare	Zeeco Flare	N/A	TBD	4,760 MMBTu/hr	4,760 MMBTu/hr	2024	N/A	31000205	☒ Existing (unchanged) ☐ To be Removed ☐ New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced	N/A	N/A
							2024	FL-2050				
FL-2050 BD	FL-2050 Blowdown	Zeeco Flare	N/A	TBD	4,760 MMBTu/hr	4,760 MMBTu/hr	2024	N/A	31000205	☒ Existing (unchanged) ☐ To be Removed ☐ New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced	N/A	N/A
							2024	FL-2050 BD				
FL-1967	Dehy Regen Combustor	Cimmaron	N/A	ECDPIN0001	1.93 MMBTu/hr	1.93 MMBTu/hr	2021	N/A	31000205	☒ Existing (unchanged) ☐ To be Removed ☐ New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced	N/A	N/A
							2021	FL-1967				
FL-2967	Dehy Regen Combustor	Cimmaron	N/A	ECDPIN0003	1.93 MMBTu/hr	1.93 MMBTu/hr	2021	N/A	31000205	☒ Existing (unchanged) ☐ To be Removed ☐ New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced	N/A	N/A
							2021	FL-2967				
FL-3967	Dehy Regen Combustor	Cimmaron	N/A	H23138	1.93 MMBTu/hr	1.93 MMBTu/hr	2021	N/A	31000205	☒ Existing (unchanged) ☐ To be Removed ☐ New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced	N/A	N/A
							2021	FL-3967				
FL-4967	Dehy Regen Combustor	Cimmaron	N/A	TBD	3.28 MMBTu/hr	3.28 MMBTu/hr	2024	N/A	31000205	☒ Existing (unchanged) ☐ To be Removed ☐ New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced	N/A	N/A
							2024	FL-4967				
FL-5967	Dehy Regen Combustor	Cimmaron	N/A	TBD	3.28 MMBTu/hr	3.28 MMBTu/hr	2024	N/A	31000205	☒ Existing (unchanged) ☐ To be Removed ☐ New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced	N/A	N/A
							2024	FL-5967				
FL-6967	Dehy Regen Combustor	Cimmaron	N/A	TBD	3.28 MMBTu/hr	3.28 MMBTu/hr	2024	N/A	31000205	☒ Existing (unchanged) ☐ To be Removed ☐ New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced	N/A	N/A
							2024	FL-6967				
FL-7967	Tank Loading Combustor	Cimmaron	N/A	TBD	1.67 MMBTu/hr	1.67 MMBTu/hr	2024	N/A	31000205	☒ Existing (unchanged) ☐ To be Removed ☐ New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To be Replaced	N/A	N/A
							2024	FL-7967				

Unit Number ¹	Source Description	Make	Model #	Serial #	Manufact-urer's Rated Capacity ³ (Specify Units)	Requested Permitted Capacity ³ (Specify Units)	Date of Manufacture ²	Controlled by Unit #	Source Classi- fication Code (SCC)	For Each Piece of Equipment, Check One	RICE Ignition Type (CI, SI, 4SLB, 4SRB, 2SLB) ⁴	Replacing Unit No.	
							Date of Construction/ Reconstruction ²	Emissions vented to Stack #					
DEHY-1	TEG Dehydrator	N/A	N/A	TBD	110 MMSCFD	110 MMSCFD	2021	FL-1967	31000303	☒ Existing (unchanged) ☐ New/Additional ☐ To Be Modified	☐ To be Removed ☐ Replacement Unit ☐ To be Replaced	N/A	N/A
							2021	DEHY-1					
DEHY-2	TEG Dehydrator	N/A	N/A	TBD	110 MMSCFD	110 MMSCFD	2021	FL-2967	31000303	☒ Existing (unchanged) ☐ New/Additional ☐ To Be Modified	☐ To be Removed ☐ Replacement Unit ☐ To be Replaced	N/A	N/A
							2021	DEHY-2					
DEHY-3	TEG Dehydrator	N/A	N/A	TBD	110 MMSCFD	110 MMSCFD	2021	FL-3967	31000303	☒ Existing (unchanged) ☐ New/Additional ☐ To Be Modified	☐ To be Removed ☐ Replacement Unit ☐ To be Replaced	N/A	N/A
							2021	DEHY-3					
DEHY-4	TEG Dehydrator	N/A	N/A	TBD	220 MMSCFD	220 MMSCFD	2024	FL-4967	31000303	☒ Existing (unchanged) ☐ New/Additional ☐ To Be Modified	☐ To be Removed ☐ Replacement Unit ☐ To be Replaced	N/A	N/A
							2024	DEHY-4					
DEHY-5	TEG Dehydrator	N/A	N/A	TBD	220 MMSCFD	220 MMSCFD	2024	FL-5967	31000303	☒ Existing (unchanged) ☐ New/Additional ☐ To Be Modified	☐ To be Removed ☐ Replacement Unit ☐ To be Replaced	N/A	N/A
							2024	DEHY-5					
DEHY-6	TEG Dehydrator	N/A	N/A	TBD	220 MMSCFD	220 MMSCFD	2024	FL-6967	31000303	☒ Existing (unchanged) ☐ New/Additional ☐ To Be Modified	☐ To be Removed ☐ Replacement Unit ☐ To be Replaced	N/A	N/A
							2024	DEHY-6					
AMINE-1	Amine Unit	N/A	N/A	TBD	110 MMSCFD	110 MMSCFD	2021	AGI	31000305	☒ Existing (unchanged) ☐ New/Additional ☐ To Be Modified	☐ To be Removed ☐ Replacement Unit ☐ To be Replaced	N/A	N/A
							2021	N/A					
AMINE-2	Amine Unit	N/A	N/A	TBD	110 MMSCFD	110 MMSCFD	2021	AGI	31000305	☒ Existing (unchanged) ☐ New/Additional ☐ To Be Modified	☐ To be Removed ☐ Replacement Unit ☐ To be Replaced	N/A	N/A
							2021	N/A					
AMINE-3	Amine Unit	N/A	N/A	TBD	110 MMSCFD	110 MMSCFD	2021	AGI	31000305	☒ Existing (unchanged) ☐ New/Additional ☐ To Be Modified	☐ To be Removed ☐ Replacement Unit ☐ To be Replaced	N/A	N/A
							2021	N/A					
AMINE-4	Amine Unit	N/A	N/A	TBD	220 MMSCFD	220 MMSCFD	2024	AGI	31000305	☒ Existing (unchanged) ☐ New/Additional ☐ To Be Modified	☐ To be Removed ☐ Replacement Unit ☐ To be Replaced	N/A	N/A
							2024	N/A					
AMINE-5	Amine Unit	N/A	N/A	TBD	220 MMSCFD	220 MMSCFD	2024	AGI	31000305	☒ Existing (unchanged) ☐ New/Additional ☐ To Be Modified	☐ To be Removed ☐ Replacement Unit ☐ To be Replaced	N/A	N/A
							2024	N/A					
AMINE-6	Amine Unit	N/A	N/A	TBD	220 MMSCFD	220 MMSCFD	2024	AGI	31000305	☒ Existing (unchanged) ☐ New/Additional ☐ To Be Modified	☐ To be Removed ☐ Replacement Unit ☐ To be Replaced	N/A	N/A
							2024	N/A					
TK-1900	Stabilized Condensate Storage Tank	TOCE	N/A	TK-1006-01	400 bbl	400 bbl	2021	VRU	40400311	☒ Existing (unchanged) ☐ New/Additional ☐ To Be Modified	☐ To be Removed ☐ Replacement Unit ☐ To be Replaced	N/A	N/A
							2021	N/A					
TK-1901	Stabilized Condensate Storage Tank	TOCE	N/A	TBD	400 bbl	400 bbl	2021	VRU	40400311	☒ Existing (unchanged) ☐ New/Additional ☐ To Be Modified	☐ To be Removed ☐ Replacement Unit ☐ To be Replaced	N/A	N/A
							2021	N/A					
TK-1970	Sour Water Storage Tank	TOCE	N/A	TK-1006-02	400 bbl	400 bbl	2021	VRU	40400315	☒ Existing (unchanged) ☐ New/Additional ☐ To Be Modified	☐ To be Removed ☐ Replacement Unit ☐ To be Replaced	N/A	N/A
							2021	N/A					
TK-1971	Sour Water Storage Tank	TOCE	N/A	TBD	400 bbl	400 bbl	2021	VRU	40400315	☒ Existing (unchanged) ☐ New/Additional ☐ To Be Modified	☐ To be Removed ☐ Replacement Unit ☐ To be Replaced	N/A	N/A
							2021	N/A					

Unit Number ¹	Source Description	Make	Model #	Serial #	Manufact-urer's Rated Capacity ³ (Specify Units)	Requested Permitted Capacity ³ (Specify Units)	Date of Manufacture ²	Controlled by Unit #	Source Classi- fication Code (SCC)	For Each Piece of Equipment, Check One	RICE Ignition Type (CI, SI, 4SLB, 4SRB, 2SLB) ⁴	Replacing Unit No.	
							Date of Construction/ Reconstruction ²	Emissions vented to Stack #					
TK-1980	Slop Tank	TOCE	N/A	TBD	400 bbl	400 bbl	2021	VRU	40400313	☒ Existing (unchanged) ☐ New/Additional ☐ To Be Modified	☐ To be Removed ☐ Replacement Unit ☐ To be Replaced	N/A	N/A
							2021	N/A					
TK-1981	Slop Tank	TOCE	N/A	TBD	400 bbl	400 bbl	2021	VRU	40400313	☒ Existing (unchanged) ☐ New/Additional ☐ To Be Modified	☐ To be Removed ☐ Replacement Unit ☐ To be Replaced	N/A	N/A
							2021	N/A					
TK-2010	Slop Tank	TOCE	N/A	TBD	400 bbl	400 bbl	2024	VRU	40400313	☒ Existing (unchanged) ☐ New/Additional ☐ To Be Modified	☐ To be Removed ☐ Replacement Unit ☐ To be Replaced	N/A	N/A
							2024	N/A					
TK-2020	Slop Tank	TOCE	N/A	TBD	400 bbl	400 bbl	2024	VRU	40400313	☒ Existing (unchanged) ☐ New/Additional ☐ To Be Modified	☐ To be Removed ☐ Replacement Unit ☐ To be Replaced	N/A	N/A
							2024	N/A					
TK-2030	Sour Water Storage Tank	TOCE	N/A	TBD	400 bbl	400 bbl	2024	VRU	40400315	☒ Existing (unchanged) ☐ New/Additional ☐ To Be Modified	☐ To be Removed ☐ Replacement Unit ☐ To be Replaced	N/A	N/A
							2024	N/A					
TK-2040	Sour Water Storage Tank	TOCE	N/A	TBD	400 bbl	400 bbl	2024	VRU	40400315	☒ Existing (unchanged) ☐ New/Additional ☐ To Be Modified	☐ To be Removed ☐ Replacement Unit ☐ To be Replaced	N/A	N/A
							2024	N/A					
TK-2050	Stabilized Condensate Storage Tank	TOCE	N/A	TBD	400 bbl	400 bbl	2024	VRU	40400311	☒ Existing (unchanged) ☐ New/Additional ☐ To Be Modified	☐ To be Removed ☐ Replacement Unit ☐ To be Replaced	N/A	N/A
							2024	N/A					
TK-2060	Stabilized Condensate Storage Tank	TOCE	N/A	TBD	400 bbl	400 bbl	2024	VRU	40400311	☒ Existing (unchanged) ☐ New/Additional ☐ To Be Modified	☐ To be Removed ☐ Replacement Unit ☐ To be Replaced	N/A	N/A
							2024	N/A					
TK-2070	Stabilized Condensate Storage Tank	TOCE	N/A	TBD	400 bbl	400 bbl	2024	VRU	40400311	☒ Existing (unchanged) ☐ New/Additional ☐ To Be Modified	☐ To be Removed ☐ Replacement Unit ☐ To be Replaced	N/A	N/A
							2024	N/A					
TK-2080	Stabilized Condensate Storage Tank	TOCE	N/A	TBD	400 bbl	400 bbl	2024	VRU	40400311	☒ Existing (unchanged) ☐ New/Additional ☐ To Be Modified	☐ To be Removed ☐ Replacement Unit ☐ To be Replaced	N/A	N/A
							2024	N/A					
COND- LOAD 1-3	Condensate and Sour Water Loadout	N/A	N/A	N/A	710,658 bbl/yr	710,658 bbl/yr	2021	VRU	40600132	☒ Existing (unchanged) ☐ New/Additional ☐ To Be Modified	☐ To be Removed ☐ Replacement Unit ☐ To be Replaced	N/A	N/A
							2021	COND-LOAD 1-3					
COND- LOAD 4-6	Condensate and Sour Water Loadout	N/A	N/A	N/A	3,005,228 bbl/yr	3,005,228 bbl/yr	2024	VRU	40600132	☒ Existing (unchanged) ☐ New/Additional ☐ To Be Modified	☐ To be Removed ☐ Replacement Unit ☐ To be Replaced	N/A	N/A
							2024	COND-LOAD 4-6					
NGL-LOAD	Pressurized NGL Loadout	N/A	N/A	N/A	738,756 bbl/yr	738,756 bbl/yr	2024	N/A	40600132	☒ Existing (unchanged) ☐ New/Additional ☐ To Be Modified	☐ To be Removed ☐ Replacement Unit ☐ To be Replaced	N/A	N/A
							2024	NGL-LOAD					
HAUL	Condensate, Water and NGL Truck Haul	N/A	N/A	N/A	N/A	N/A	2021	N/A	31088811	☒ Existing (unchanged) ☐ New/Additional ☐ To Be Modified	☐ To be Removed ☐ Replacement Unit ☐ To be Replaced	N/A	N/A
							2021	HAUL					
FUG	Fugitive Emissions	N/A	N/A	N/A	N/A	N/A	2021	N/A	31088811	☐ Existing (unchanged) ☐ New/Additional ☒ To Be Modified	☐ To be Removed ☐ Replacement Unit ☐ To be Replaced	N/A	N/A
							2021	FUG					
SSM	Startup, Shutdown, Maintenance	N/A	N/A	N/A	N/A	N/A	N/A	N/A	31088811	☒ Existing (unchanged) ☐ New/Additional ☐ To Be Modified	☐ To be Removed ☐ Replacement Unit ☐ To be Replaced	N/A	N/A
							N/A	SSM					
C-1001	Compressor Engine (Scenario 1)	Caterpillar	G3608	TBD	2750 hp	2750 hp	>7/1/2010	CAT-1001	20200254	☐ Existing (unchanged) ☒ New/Additional ☐ To Be Modified	☐ To be Removed ☐ Replacement Unit ☐ To be Replaced	4SLB	N/A
							TBD	C-1001					
C-1002	Compressor Engine (Scenario 1)	Caterpillar	G3608	TBD	2750 hp	2750 hp	>7/1/2010	CAT-1002	20200254	☐ Existing (unchanged) ☒ New/Additional ☐ To Be Modified	☐ To be Removed ☐ Replacement Unit ☐ To be Replaced	4SLB	N/A
							TBD	C-1002					

Unit Number ¹	Source Description	Make	Model #	Serial #	Manufact-urer's Rated Capacity ³ (Specify Units)	Requested Permitted Capacity ³ (Specify Units)	Date of Manufacture ²	Controlled by Unit #	Source Classi- fication Code (SCC)	For Each Piece of Equipment, Check One	RICE Ignition Type (CI, SI, 4SLB, 4SRB, 2SLB) ⁴	Replacing Unit No.	
							Date of Construction/ Reconstruction ²	Emissions vented to Stack #					
C-1003	Compressor Engine (Scenario 1)	Caterpillar	G3608	TBD	2750 hp	2750 hp	>7/1/2010	CAT-1003	20200254	☐ Existing (unchanged) ☒ New/Additional ☐ To Be Modified	☐ To be Removed ☐ Replacement Unit ☐ To be Replaced	4SLB	N/A
							TBD	C-1003					
G-1001	Generator Turbine	Solar	Taurus SMT60	TBD	4925 kW	4925 kW	>2/18/2005	N/A	20200201	☐ Existing (unchanged) ☒ New/Additional ☐ To Be Modified	☐ To be Removed ☐ Replacement Unit ☐ To be Replaced	N/A	N/A
							TBD	G-1001					
G-1002	Generator Turbine	Solar	Taurus SMT60	TBD	4925 kW	4925 kW	>2/18/2005	N/A	20200201	☐ Existing (unchanged) ☒ New/Additional ☐ To Be Modified	☐ To be Removed ☐ Replacement Unit ☐ To be Replaced	N/A	N/A
							TBD	G-1002					
C-2001	Compressor Engine (Scenario 2)	Caterpillar	G3612	TBD	3335 hp	3335 hp	June 2002	CAT-2001	20200254	☐ Existing (unchanged) ☒ New/Additional ☐ To Be Modified	☐ To be Removed ☐ Replacement Unit ☐ To be Replaced	4SLB	N/A
							TBD	C-2001					
C-2002	Compressor Engine (Scenario 2)	Caterpillar	G3612	TBD	3335 hp	3335 hp	June 2002	CAT-2002	20200254	☐ Existing (unchanged) ☒ New/Additional ☐ To Be Modified	☐ To be Removed ☐ Replacement Unit ☐ To be Replaced	4SLB	N/A
							TBD	C-2002					

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 Activities¹ (20.2.70 NMAC) OR Exempted Equipment (20.2.72 NMAC)

All 20.2.70 NMAC (Title V) applications must list all Insignificant Activities in this table. All 20.2.72 NMAC applications must list Exempted Equipment in this table. If equipment listed on this table is exempt under 20.2.72.202.B.5, include emissions calculations and emissions totals for 20.2.B.5 "similar functions" units, operations, and activities in Section 6, Calculations. Equipment and activities exempted under 20.2.72.202 NMAC may not necessarily be Insignificant under 20.2.70 NMAC (and vice versa). Unit & stack numbering must be consistent throughout the application package. Per Exemptions Policy 02-012.00 (see http://www.env.nm.gov/aqb/permit/aqb_pol.html), 20.2.72.202.B NMAC Exemptions do not apply, but 20.2.72.202.A NMAC exemptions do apply to NOI facilities under 20.2.73 NMAC. List 20.2.72.301.D.4 NMAC Auxiliary Equipment for Streamline applications in Table 2-A. The List of Insignificant Activities (for TV) can be found online at <https://www.env.nm.gov/wp-content/uploads/sites/2/2017/10/InsignificantListTitleV.pdf>. TV sources may elect to enter both TV Insignificant Activities and Part 72 Exemptions on this form.

Unit Number	Source Description	Manufacturer	Model No.	Max Capacity	List Specific 20.2.72.202 NMAC Exemption (e.g. 20.2.72.202.B.5)	Date of Manufacture /Reconstruction ²	For Each Piece of Equipment, Check One
			Serial No.	Capacity Units	Insignificant Activity citation (e.g. IA List Item #1.a)	Date of Installation /Construction ²	
TK-1903	Lube Oil Tank	N/A	N/A	TBD	20.2.72.202.B(2) NMAC	2021	☒ Existing (unchanged) ☐ To Be Removed
			N/A	TBD		2021	☐ New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To Be Replaced
TK-1904	Lube Oil Tank	N/A	N/A	TBD	20.2.72.202.B(2) NMAC	2021	☒ Existing (unchanged) ☐ To Be Removed
			N/A	TBD		2021	☐ New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To Be Replaced
TK-1905	Lube Oil Tank	N/A	N/A	TBD	20.2.72.202.B(2) NMAC	2021	☒ Existing (unchanged) ☒ To Be Removed
			N/A	TBD		2021	☐ New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To Be Replaced
TK-1907	Coolant Tank	N/A	N/A	TBD	20.2.72.202.B(2) NMAC	2021	☒ Existing (unchanged) ☐ To Be Removed
			N/A	TBD		2021	☐ New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To Be Replaced
TK-1500	Amine Make-up Tank	N/A	N/A	100	20.2.72.202.B(2) NMAC	2021	☒ Existing (unchanged) ☐ To Be Removed
			N/A	bbl		2021	☐ New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To Be Replaced
TK-1501	Water Make-up Tank	N/A	N/A	210	20.2.72.202.B(2) NMAC	2021	☒ Existing (unchanged) ☐ To Be Removed
			N/A	bbl		2021	☐ New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To Be Replaced
TK-2500	Amine Make-up Tank	N/A	N/A	100	20.2.72.202.B(2) NMAC	2021	☒ Existing (unchanged) ☐ To Be Removed
			N/A	bbl		2021	☐ New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To Be Replaced
TK-2501	Water Make-up Tank	N/A	N/A	210	20.2.72.202.B(2) NMAC	2021	☒ Existing (unchanged) ☐ To Be Removed
			N/A	bbl		2021	☐ New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To Be Replaced
TK-3500	Amine Make-up Tank	N/A	N/A	400	20.2.72.202.B(2) NMAC	2021	☒ Existing (unchanged) ☐ To Be Removed
			N/A	bbl		2021	☐ New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To Be Replaced
TK-3501	Water Make-up Tank	N/A	N/A	500	20.2.72.202.B(2) NMAC	2021	☒ Existing (unchanged) ☐ To Be Removed
			N/A	bbl		2021	☐ New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To Be Replaced
TK-3502	Water Make-up Tank	N/A	N/A	500	20.2.72.202.B(2) NMAC	2021	☒ Existing (unchanged) ☐ To Be Removed
			N/A	bbl		2021	☐ New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To Be Replaced
TK-3503	TEG Make-up Tank	N/A	N/A	150	20.2.72.202.B(2) NMAC	2021	☒ Existing (unchanged) ☐ To Be Removed
			N/A	bbl		2021	☐ New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To Be Replaced
TK-1515	RO Reject Tank	N/A	N/A	210	20.2.72.202.B(2) NMAC	2021	☒ Existing (unchanged) ☐ To Be Removed
			N/A	bbl		2021	☐ New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To Be Replaced
C-1580	Electric AGI Compressor	TBD	TBD	2250	20.2.72.202.B(5) NMAC	2021	☒ Existing (unchanged) ☐ To Be Removed
			TBD	hp		2021	☐ New/Additional ☐ Replacement Unit ☐ To Be Modified ☐ To Be Replaced

Unit Number	Source Description	Manufacturer	Model No.	Max Capacity	List Specific 20.2.72.202 NMAC Exemption (e.g. 20.2.72.202.B.5)	Date of Manufacture /Reconstruction ²	For Each Piece of Equipment, Check One	
			Serial No.	Capacity Units	Insignificant Activity citation (e.g. IA List Item #1.a)	Date of Installation /Construction ²		
C-1585	Electric AGI Compressor	TBD	TBD	2250	20.2.72.202.B(5) NMAC	2021	☒ Existing (unchanged)	☐ To be Removed
			TBD	hp		2021	☐ New/Additional	☐ Replacement Unit
							☐ To Be Modified	☐ To be Replaced
C-1590	Electric AGI Compressor	TBD	TBD	2250	20.2.72.202.B(5) NMAC	2021	☒ Existing (unchanged)	☐ To be Removed
			TBD	hp		2021	☐ New/Additional	☐ Replacement Unit
							☐ To Be Modified	☐ To be Replaced
C-1595	Electric AGI Compressor	TBD	TBD	2250	20.2.72.202.B(5) NMAC	2021	☒ Existing (unchanged)	☐ To be Removed
			TBD	hp		2021	☐ New/Additional	☐ Replacement Unit
							☐ To Be Modified	☐ To be Replaced
C-1680	Electric AGI Compressor	TBD	TBD	TBD	20.2.72.202.B(5) NMAC	2024	☒ Existing (unchanged)	☐ To be Removed
			TBD	TBD		2024	☐ New/Additional	☐ Replacement Unit
							☐ To Be Modified	☐ To be Replaced
C-1685	Electric AGI Compressor	TBD	TBD	TBD	20.2.72.202.B(5) NMAC	2024	☒ Existing (unchanged)	☐ To be Removed
			TBD	TBD		2024	☐ New/Additional	☐ Replacement Unit
							☐ To Be Modified	☐ To be Replaced
C-1690	Electric AGI Compressor	TBD	TBD	TBD	20.2.72.202.B(5) NMAC	2024	☒ Existing (unchanged)	☐ To be Removed
			TBD	TBD		2024	☐ New/Additional	☐ Replacement Unit
							☐ To Be Modified	☐ To be Replaced
C-1695	Electric AGI Compressor	TBD	TBD	TBD	20.2.72.202.B(5) NMAC	2024	☒ Existing (unchanged)	☐ To be Removed
			TBD	TBD		2024	☐ New/Additional	☐ Replacement Unit
							☐ To Be Modified	☐ To be Replaced
C-1205	Electric Residue Compressor	TBD	TBD	TBD	20.2.72.202.B(5) NMAC	2021	☒ Existing (unchanged)	☐ To be Removed
			TBD	TBD		2021	☐ New/Additional	☐ Replacement Unit
							☐ To Be Modified	☐ To be Replaced
C-1225	Electric Residue Compressor	TBD	TBD	TBD	20.2.72.202.B(5) NMAC	2021	☒ Existing (unchanged)	☐ To be Removed
			TBD	TBD		2021	☐ New/Additional	☐ Replacement Unit
							☐ To Be Modified	☐ To be Replaced
C-1250	Electric Residue Compressor	TBD	TBD	TBD	20.2.72.202.B(5) NMAC	2021	☒ Existing (unchanged)	☐ To be Removed
			TBD	TBD		2021	☐ New/Additional	☐ Replacement Unit
							☐ To Be Modified	☐ To be Replaced
C-1275	Electric Residue Compressor	TBD	TBD	TBD	20.2.72.202.B(5) NMAC	2021	☒ Existing (unchanged)	☐ To be Removed
			TBD	TBD		2021	☐ New/Additional	☐ Replacement Unit
							☐ To Be Modified	☐ To be Replaced
C-2200	Electric Residue Compressor	TBD	TBD	TBD	20.2.72.202.B(5) NMAC	2024	☒ Existing (unchanged)	☐ To be Removed
			TBD	TBD		2024	☐ New/Additional	☐ Replacement Unit
							☐ To Be Modified	☐ To be Replaced
C-2225	Electric Residue Compressor	TBD	TBD	TBD	20.2.72.202.B(5) NMAC	2024	☒ Existing (unchanged)	☐ To be Removed
			TBD	TBD		2024	☐ New/Additional	☐ Replacement Unit
							☐ To Be Modified	☐ To be Replaced
C-2250	Electric Residue Compressor	TBD	TBD	TBD	20.2.72.202.B(5) NMAC	2024	☒ Existing (unchanged)	☐ To be Removed
			TBD	TBD		2024	☐ New/Additional	☐ Replacement Unit
							☐ To Be Modified	☐ To be Replaced
C-2275	Electric Residue Compressor	TBD	TBD	TBD	20.2.72.202.B(5) NMAC	2024	☒ Existing (unchanged)	☐ To be Removed
			TBD	TBD		2024	☐ New/Additional	☐ Replacement Unit
							☐ To Be Modified	☐ To be Replaced
							☐ Existing (unchanged)	☐ To be Removed
							☐ New/Additional	☐ Replacement Unit
							☐ To Be Modified	☐ To be Replaced

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

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

Table 2-C: Emissions Control Equipment

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

Control Equipment Unit No.	Control Equipment Description	Date Installed	Controlled Pollutant(s)	Controlling Emissions for Unit Number(s) ¹	Efficiency (% Control by Weight)	Method used to Estimate Efficiency
CAT-1200	Engine Oxidation Catalyst	2021	CO, Formaldehyde	C-1200	CO = 86.8% CH2O = 78.8%	Manufacturer Guarantee
CAT-1210	Engine Oxidation Catalyst	2021	CO, Formaldehyde	C-1210	CO = 86.8% CH2O = 78.8%	Manufacturer Guarantee
CAT-1220	Engine Oxidation Catalyst	2021	CO, Formaldehyde	C-1220	CO = 86.8% CH2O = 78.8%	Manufacturer Guarantee
CAT-1230	Engine Oxidation Catalyst	2021	CO, Formaldehyde	C-1230	CO = 86.8% CH2O = 78.8%	Manufacturer Guarantee
FL-1850 and FL-1850 BD	Trains 1-3 Blowdown Flare	2021	VOC, HAPs, H2S	Trains 1-3 Blowdown Activities and COND-LOAD 1-3	98%	Manufacturer Guarantee
FL-1950 and FL-1950 BD	Trains 4, 5 and 6 Blowdown Flare	2024	VOC, HAPs, H2S	Trains 4, 5 and 6 Blowdown Activities	98%	Manufacturer Guarantee
FL-2050 and FL-2050 BD	Cryogenic Process Blowdown Flare	2024	VOC, HAPs, H2S	Cryogenic Process Blowdown Activities	98%	Manufacturer Guarantee
FL-1967	Dehy Regen Combustor	2021	VOC, HAPs, H2S	DEHY-1	98%	Manufacturer Guarantee
FL-2967	Dehy Regen Combustor	2021	VOC, HAPs, H2S	DEHY-2	98%	Manufacturer Guarantee
FL-3967	Dehy Regen Combustor	2021	VOC, HAPs, H2S	DEHY-3	98%	Manufacturer Guarantee
FL-4967	Dehy Regen Combustor	2024	VOC, HAPs, H2S	DEHY-4	98%	Manufacturer Guarantee
FL-5967	Dehy Regen Combustor	2024	VOC, HAPs, H2S	DEHY-5	98%	Manufacturer Guarantee
FL-6967	Dehy Regen Combustor	2024	VOC, HAPs, H2S	DEHY-6	98%	Manufacturer Guarantee
FL-7967	Tank Loading Combustor	2024	VOC, HAPs, H2S	COND-LOAD 4-6 and TK-2050 through TK-2080)	98%	Manufacturer Guarantee
SK-1975	Vapor Recovery Unit	2021	VOC, HAPs, H2S	Storage Tanks (TK-1900 through TK-1981)	100% (redundant VRUs)	Engineering Judgement
SK-1976	Vapor Recovery Unit	2021	VOC, HAPs, H2S	Storage Tanks (TK-1900 through TK-1981)	100% (redundant VRUs)	Engineering Judgement
SK-1988	Vapor Recovery Unit	2021	VOC, HAPs, H2S	AGI Compressor Packing	100% (redundant VRUs)	Engineering Judgement
SK-1989	Vapor Recovery Unit	2021	VOC, HAPs, H2S	AGI Compressor Packing	100% (redundant VRUs)	Engineering Judgement
SK-2075	Vapor Recovery Unit	2024	VOC, HAPs, H2S	Storage Tanks (TK-2010 through TK-2080)	100% (redundant VRUs)	Engineering Judgement
SK-2076	Vapor Recovery Unit	2024	VOC, HAPs, H2S	Storage Tanks (TK-2010 through TK-2080)	100% (redundant VRUs)	Engineering Judgement
SK-2088	Vapor Recovery Unit	2024	VOC, HAPs, H2S	AGI Compressor Packing	100% (redundant VRUs)	Engineering Judgement
SK-2089	Vapor Recovery Unit	2024	VOC, HAPs, H2S	AGI Compressor Packing	100% (redundant VRUs)	Engineering Judgement
AGI	Acid Gas Injection Well	2021	VOC, HAPs, H2S	AMINE-1 through AMINE-6	100%	Engineering Judgement
SK-2088	Acid Gas Injection Well	2024	VOC, HAPs, H2S	AGI Compressor Packing	1	Engineering Judgement
SK-2089	Acid Gas Injection Well	2024	VOC, HAPs, H2S	AGI Compressor Packing	1	Engineering Judgement

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
AGI	Acid Gas Injection Well	2021	VOC, HAPs, H2S	AMINE-1 through AMINE-6	100%	Engineering Judgement
CAT-1001	Engine Oxidation Catalyst	TBD	CO, VOC, Formaldehyde	C-1001	CO = 83.1% VOC = 16.7% CH2O = 33.3%	Manufacturer Guarantee
CAT-1002	Engine Oxidation Catalyst	TBD	CO, VOC, Formaldehyde	C-1002	CO = 83.1% VOC = 16.7% CH2O = 33.3%	Manufacturer Guarantee
CAT-1003	Engine Oxidation Catalyst	TBD	CO, VOC, Formaldehyde	C-1003	CO = 83.1% VOC = 16.7% CH2O = 33.3%	Manufacturer Guarantee
CAT-2001	Engine Oxidation Catalyst	TBD	CO, Formaldehyde	C-2001	CO = 90.0% CH2O = 73.3%	Manufacturer Guarantee
CAT-2002	Engine Oxidation Catalyst	TBD	CO, Formaldehyde	C-2002	CO = 90.0% CH2O = 73.3%	Manufacturer Guarantee
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 ₂ S		Lead	
	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr
C-1200	1.65	7.24	13.78	60.35	2.53	11.07	0.22	0.98	0.19	0.82	0.19	0.82	0.19	0.82	1.1E-04	4.7E-04	-	-
C-1210	1.65	7.24	13.78	60.35	2.53	11.07	0.22	0.98	0.19	0.82	0.19	0.82	0.19	0.82	1.1E-04	4.7E-04	-	-
C-1220	1.65	7.24	13.78	60.35	2.53	11.07	0.22	0.98	0.19	0.82	0.19	0.82	0.19	0.82	1.1E-04	4.7E-04	-	-
C-1230	1.65	7.24	13.78	60.35	2.53	11.07	0.22	0.98	0.19	0.82	0.19	0.82	0.19	0.82	1.1E-04	4.7E-04	-	-
H-1600	0.28	1.22	0.28	1.24	0.13	0.59	0.08	0.36	0.11	0.48	0.11	0.48	0.11	0.48	4.0E-05	1.7E-04	-	-
H-1620	1.48	6.50	1.51	6.60	0.71	3.11	0.44	1.94	0.58	2.53	0.58	2.53	0.58	2.53	2.1E-04	9.3E-04	-	-
H-2600	1.08	4.74	1.10	4.81	0.52	2.27	0.32	1.41	0.42	1.84	0.42	1.84	0.42	1.84	1.5E-04	6.8E-04	-	-
H-2620	1.48	6.50	1.51	6.60	0.71	3.11	0.44	1.94	0.58	2.53	0.58	2.53	0.58	2.53	2.1E-04	9.3E-04	-	-
H-3620	1.48	6.50	1.51	6.60	0.71	3.11	0.44	1.94	0.58	2.53	0.58	2.53	0.58	2.53	2.1E-04	9.3E-04	-	-
H-4620	3.29	14.40	3.34	14.62	1.57	6.90	0.98	4.29	1.28	5.60	1.28	5.60	1.28	5.60	4.7E-04	2.1E-03	-	-
H-5620	3.45	15.10	3.50	15.33	1.65	7.23	1.03	4.50	1.34	5.88	1.34	5.88	1.34	5.88	4.9E-04	2.2E-03	-	-
H-6620	3.45	15.10	3.50	15.33	1.65	7.23	1.03	4.50	1.34	5.88	1.34	5.88	1.34	5.88	4.9E-04	2.2E-03	-	-
E-1566	0.15	0.64	0.12	0.54	0.01	0.04	0.02	0.08	0.01	0.05	0.01	0.05	0.01	0.05	8.6E-06	3.8E-05	-	-
E-2566	0.15	0.64	0.12	0.54	0.01	0.04	0.02	0.08	0.01	0.05	0.01	0.05	0.01	0.05	8.6E-06	3.8E-05	-	-
E-3566	0.15	0.64	0.12	0.54	0.01	0.04	0.02	0.08	0.01	0.05	0.01	0.05	0.01	0.05	8.6E-06	3.8E-05	-	-
E-4566	0.29	1.29	0.25	1.08	0.02	0.07	0.04	0.16	0.02	0.10	0.02	0.10	0.02	0.10	1.7E-05	7.5E-05	-	-
H-1781	2.16	9.45	1.81	7.94	0.12	0.52	0.26	1.15	0.16	0.72	0.16	0.72	0.16	0.72	1.3E-04	5.5E-04	-	-
H-2781	2.16	9.45	1.81	7.94	0.12	0.52	0.26	1.15	0.16	0.72	0.16	0.72	0.16	0.72	1.3E-04	5.5E-04	-	-
H-1741	0.88	3.86	0.74	3.25	0.05	0.21	0.11	0.47	0.07	0.29	0.07	0.29	0.07	0.29	5.1E-05	2.3E-04	-	-
H-2741	0.88	3.86	0.74	3.25	0.05	0.21	0.11	0.47	0.07	0.29	0.07	0.29	0.07	0.29	5.1E-05	2.3E-04	-	-
FL-1850	0.29	1.26	0.57	2.51	0.01	0.04	0.02	0.10	-	-	-	-	-	-	5.9E-04	2.6E-03	-	-
FL-1850 BD	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
FL-1950	0.29	1.27	0.58	2.54	0.01	0.04	0.02	0.11	-	-	-	-	-	-	6.0E-04	2.6E-03	-	-
FL-1950 BD	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
FL-2050	0.55	2.42	1.10	4.82	0.02	0.07	0.05	0.20	-	-	-	-	-	-	1.1E-03	5.0E-03	-	-
FL-2050 BD	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
FL-1967	0.00	0.02	0.00	0.02	-	-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.3E-05	5.5E-05	-	-
FL-2967	0.00	0.02	0.00	0.02	-	-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.3E-05	5.5E-05	-	-
FL-3967	0.00	0.02	0.00	0.02	-	-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.3E-05	5.5E-05	-	-
FL-4967	0.00	0.02	0.00	0.02	-	-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.3E-05	5.5E-05	-	-
FL-5967	0.00	0.02	0.00	0.02	-	-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.3E-05	5.5E-05	-	-
FL-6967	0.00	0.02	0.00	0.02	-	-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.3E-05	5.5E-05	-	-
FL-7967	0.02	0.07	0.01	0.06	-	-	0.00	0.01	-	-	-	-	-	-	4.6E-05	5.3E-03	-	-

Unit No.	NOx		CO		VOC		SOx		PM ¹		PM10 ¹		PM2.5 ¹		H ₂ S		Lead	
	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr
DEHY-1	-	-	-	-	223.30	978.05	-	-	-	-	-	-	-	-	3.1E-03	1.4E-02	-	-
DEHY-2	-	-	-	-	223.30	978.05	-	-	-	-	-	-	-	-	3.1E-03	1.4E-02	-	-
DEHY-3	-	-	-	-	223.30	978.05	-	-	-	-	-	-	-	-	3.1E-03	1.4E-02	-	-
DEHY-4	-	-	-	-	368.20	1612.72	-	-	-	-	-	-	-	-	4.7E-03	2.1E-02	-	-
DEHY-5	-	-	-	-	368.20	1612.72	-	-	-	-	-	-	-	-	4.7E-03	2.1E-02	-	-
DEHY-6	-	-	-	-	368.20	1612.72	-	-	-	-	-	-	-	-	4.7E-03	2.1E-02	-	-
TK-1900	-	-	-	-	2.49	10.91	-	-	-	-	-	-	-	-	2.8E-08	1.2E-07	-	-
TK-1901	-	-	-	-	2.49	10.91	-	-	-	-	-	-	-	-	2.8E-08	1.2E-07	-	-
TK-1970	-	-	-	-	0.05	0.20	-	-	-	-	-	-	-	-	2.8E-08	1.2E-07	-	-
TK-1971	-	-	-	-	0.05	0.20	-	-	-	-	-	-	-	-	2.8E-08	1.2E-07	-	-
TK-1980	-	-	-	-	0.01	0.03	-	-	-	-	-	-	-	-	2.8E-01	1.2E+00	-	-
TK-1981	-	-	-	-	0.01	0.03	-	-	-	-	-	-	-	-	2.8E-01	1.2E+00	-	-
TK-2010	-	-	-	-	0.01	0.03	-	-	-	-	-	-	-	-	2.8E-01	1.2E+00	-	-
TK-2020	-	-	-	-	0.01	0.03	-	-	-	-	-	-	-	-	2.8E-01	1.2E+00	-	-
TK-2030	-	-	-	-	0.12	0.52	-	-	-	-	-	-	-	-	2.2E+00	9.7E+00	-	-
TK-2040	-	-	-	-	0.12	0.52	-	-	-	-	-	-	-	-	2.2E+00	9.7E+00	-	-
TK-2050	-	-	-	-	5.17	22.63	-	-	-	-	-	-	-	-	4.8E-08	2.1E-07	-	-
TK-2060	-	-	-	-	5.17	22.63	-	-	-	-	-	-	-	-	4.8E-08	2.1E-07	-	-
TK-2070	-	-	-	-	5.17	22.63	-	-	-	-	-	-	-	-	4.8E-08	2.1E-07	-	-
TK-2080	-	-	-	-	5.17	22.63	-	-	-	-	-	-	-	-	4.8E-08	2.1E-07	-	-
COND-LOAD 1-3	-	-	-	-	0.21	0.92	-	-	-	-	-	-	-	-	7.9E-03	3.4E-02	-	-
COND-LOAD 4-6	-	-	-	-	1.03	4.51	-	-	-	-	-	-	-	-	2.0E-02	8.7E-02	-	-
NGL-LOAD	-	-	-	-	0.00	0.00	-	-	-	-	-	-	-	-	5.6E-10	2.4E-09	-	-
HAUL	-	-	-	-	-	-	-	-	0.63	0.86	0.63	0.86	0.06	0.09	-	-	-	-
FUG	-	-	-	-	14.13	61.90	-	-	-	-	-	-	-	-	5.9E-01	2.6E+00	-	-
SSM	-	-	-	-	-	10.00	-	-	-	-	-	-	-	-	-	1.0E+00	-	-
C-1001	1.82	7.97	14.37	62.93	3.81	16.69	0.25	1.07	0.21	0.90	0.21	0.90	0.21	0.90	1.2E-04	5.1E-04	-	-
C-1002	1.82	7.97	14.37	62.93	3.81	16.69	0.25	1.07	0.21	0.90	0.21	0.90	0.21	0.90	1.2E-04	5.1E-04	-	-
C-1003	1.82	7.97	14.37	62.93	3.81	16.69	0.25	1.07	0.21	0.90	0.21	0.90	0.21	0.90	1.2E-04	5.1E-04	-	-
G-1001	3.92	17.15	3.15	13.81	0.22	0.98	0.66	2.87	0.36	1.59	0.36	1.59	0.36	1.59	3.1E-04	1.4E-03	-	-
G-1002	3.92	17.15	3.15	13.81	0.22	0.98	0.66	2.87	0.36	1.59	0.36	1.59	0.36	1.59	3.1E-04	1.4E-03	-	-
C-2001	5.15	22.54	18.38	80.51	6.07	26.59	0.27	1.18	0.23	0.99	0.23	0.99	0.23	0.99	1.3E-04	5.6E-04	-	-
C-2002	5.15	22.54	18.38	80.51	6.07	26.59	0.27	1.18	0.23	0.99	0.23	0.99	0.23	0.99	1.3E-04	5.6E-04	-	-
Totals	54.18	237.30	165.54	725.06	1,858.07	8,148.34	9.17	40.18	9.91	41.52	9.91	41.52	9.34	40.74	6.19	28.14	-	-

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

Table 2-E: Requested Allowable Emissions (Scenario 1)

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.	NO _x		CO		VOC		SO _x		PM ¹		PM ₁₀ ¹		PM _{2.5} ¹		H ₂ S		Lead	
	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr
C-1200	1.65	7.24	1.82	7.97	1.83	8.02	0.22	0.98	0.19	0.82	0.19	0.82	0.19	0.82	1.07E-04	4.68E-04	-	-
C-1210	1.65	7.24	1.82	7.97	1.83	8.02	0.22	0.98	0.19	0.82	0.19	0.82	0.19	0.82	1.07E-04	4.68E-04	-	-
C-1220	1.65	7.24	1.82	7.97	1.83	8.02	0.22	0.98	0.19	0.82	0.19	0.82	0.19	0.82	1.07E-04	4.68E-04	-	-
C-1230	1.65	7.24	1.82	7.97	1.83	8.02	0.22	0.98	0.19	0.82	0.19	0.82	0.19	0.82	1.07E-04	4.68E-04	-	-
H-1600	0.28	1.22	0.28	1.24	0.13	0.59	0.08	0.36	0.11	0.48	0.11	0.48	0.11	0.48	3.98E-05	1.74E-04	-	-
H-1620	1.48	6.50	1.51	6.60	0.71	3.11	0.44	1.94	0.58	2.53	0.58	2.53	0.58	2.53	2.11E-04	9.25E-04	-	-
H-2600	1.08	4.74	1.10	4.81	0.52	2.27	0.32	1.41	0.42	1.84	0.42	1.84	0.42	1.84	1.54E-04	6.75E-04	-	-
H-2620	1.48	6.50	1.51	6.60	0.71	3.11	0.44	1.94	0.58	2.53	0.58	2.53	0.58	2.53	2.11E-04	9.25E-04	-	-
H-3620	1.48	6.50	1.51	6.60	0.71	3.11	0.44	1.94	0.58	2.53	0.58	2.53	0.58	2.53	2.11E-04	9.25E-04	-	-
H-4620	3.29	14.40	3.34	14.62	1.57	6.90	0.98	4.29	1.28	5.60	1.28	5.60	1.28	5.60	4.68E-04	2.05E-03	-	-
H-5620	3.45	15.10	3.50	15.33	1.65	7.23	1.03	4.50	1.34	5.88	1.34	5.88	1.34	5.88	4.91E-04	2.15E-03	-	-
H-6620	3.45	15.10	3.50	15.33	1.65	7.23	1.03	4.50	1.34	5.88	1.34	5.88	1.34	5.88	4.91E-04	2.15E-03	-	-
E-1566	0.15	0.64	0.12	0.54	0.01	0.04	0.02	0.08	0.01	0.05	0.01	0.05	0.01	0.05	8.56E-06	3.75E-05	-	-
E-2566	0.15	0.64	0.12	0.54	0.01	0.04	0.02	0.08	0.01	0.05	0.01	0.05	0.01	0.05	8.56E-06	3.75E-05	-	-
E-3566	0.15	0.64	0.12	0.54	0.01	0.04	0.02	0.08	0.01	0.05	0.01	0.05	0.01	0.05	8.56E-06	3.75E-05	-	-
E-4566	0.29	1.29	0.25	1.08	0.02	0.07	0.04	0.16	0.02	0.10	0.02	0.10	0.02	0.10	1.71E-05	7.50E-05	-	-
H-1781	2.16	9.45	1.81	7.94	0.12	0.52	0.26	1.15	0.16	0.72	0.16	0.72	0.16	0.72	1.26E-04	5.50E-04	-	-
H-2781	2.16	9.45	1.81	7.94	0.12	0.52	0.26	1.15	0.16	0.72	0.16	0.72	0.16	0.72	1.26E-04	5.50E-04	-	-
H-1741	0.88	3.86	0.74	3.25	0.05	0.21	0.11	0.47	0.07	0.29	0.07	0.29	0.07	0.29	5.14E-05	2.25E-04	-	-
H-2741	0.88	3.86	0.74	3.25	0.05	0.21	0.11	0.47	0.07	0.29	0.07	0.29	0.07	0.29	5.14E-05	2.25E-04	-	-
FL-1850	0.29	1.26	0.57	2.51	0.01	0.04	0.02	0.10	-	-	-	-	-	-	5.95E-04	2.60E-03	-	-
FL-1950	0.29	1.27	0.58	2.54	0.01	0.04	0.02	0.11	-	-	-	-	-	-	6.00E-04	2.63E-03	-	-
FL-2050	0.55	2.42	1.10	4.82	0.02	0.07	0.05	0.20	-	-	-	-	-	-	1.14E-03	5.00E-03	-	-
FL-1967	0.19	0.85	0.16	0.71	1.85	8.12	0.00	0.02	0.01	0.06	0.01	0.06	0.01	0.06	5.83E-05	2.55E-04	-	-
FL-2967	0.19	0.85	0.16	0.71	1.85	8.12	0.00	0.02	0.01	0.06	0.01	0.06	0.01	0.06	5.83E-05	2.55E-04	-	-
FL-3967	0.19	0.85	0.16	0.71	1.85	8.12	0.00	0.02	0.01	0.06	0.01	0.06	0.01	0.06	5.83E-05	2.55E-04	-	-
FL-4967	0.33	1.43	0.27	1.20	3.15	13.79	0.01	0.03	0.02	0.11	0.02	0.11	0.02	0.11	8.10E-05	3.55E-04	-	-
FL-5967	0.33	1.43	0.27	1.20	3.15	13.79	0.01	0.03	0.02	0.11	0.02	0.11	0.02	0.11	8.10E-05	3.55E-04	-	-
FL-6967	0.33	1.43	0.27	1.20	3.15	13.79	0.01	0.03	0.02	0.11	0.02	0.11	0.02	0.11	8.10E-05	3.55E-04	-	-
FL-7967	0.18	0.79	0.15	0.66	0.43	1.90	0.04	0.17	0.01	0.05	0.01	0.05	0.01	0.05	4.46E-04	1.95E-03	-	-
DEHY-1	-	-	-	-	0.00	0.00	-	-	-	-	-	-	-	-	2.31E-05	1.01E-04	-	-
DEHY-2	-	-	-	-	0.00	0.00	-	-	-	-	-	-	-	-	2.31E-05	1.01E-04	-	-
DEHY-3	-	-	-	-	0.00	0.00	-	-	-	-	-	-	-	-	2.31E-05	1.01E-04	-	-

Unit No.	NOx		CO		VOC		SOx		PM ¹		PM10 ¹		PM2.5 ¹		H ₂ S		Lead	
	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr
DEHY-4	-	-	-	-	0.00	0.00	-	-	-	-	-	-	-	-	3.46E-05	1.52E-04	-	-
DEHY-5	-	-	-	-	0.00	0.00	-	-	-	-	-	-	-	-	3.46E-05	1.52E-04	-	-
DEHY-6	-	-	-	-	0.00	0.00	-	-	-	-	-	-	-	-	3.46E-05	1.52E-04	-	-
TK-1900	-	-	-	-	0.00	0.00	-	-	-	-	-	-	-	-	0.00	0.00	-	-
TK-1901	-	-	-	-	0.00	0.00	-	-	-	-	-	-	-	-	0.00	0.00	-	-
TK-1970	-	-	-	-	0.00	0.00	-	-	-	-	-	-	-	-	0.00	0.00	-	-
TK-1971	-	-	-	-	0.00	0.00	-	-	-	-	-	-	-	-	0.00	0.00	-	-
TK-1980	-	-	-	-	0.00	0.00	-	-	-	-	-	-	-	-	0.00	0.00	-	-
TK-1981	-	-	-	-	0.00	0.00	-	-	-	-	-	-	-	-	0.00	0.00	-	-
TK-2010	-	-	-	-	0.00	0.00	-	-	-	-	-	-	-	-	0.00	0.00	-	-
TK-2020	-	-	-	-	0.00	0.00	-	-	-	-	-	-	-	-	0.00	0.00	-	-
TK-2030	-	-	-	-	0.00	0.00	-	-	-	-	-	-	-	-	0.00	0.00	-	-
TK-2040	-	-	-	-	0.00	0.00	-	-	-	-	-	-	-	-	0.00	0.00	-	-
TK-2050	-	-	-	-	0.00	0.00	-	-	-	-	-	-	-	-	0.00	0.00	-	-
TK-2060	-	-	-	-	0.00	0.00	-	-	-	-	-	-	-	-	0.00	0.00	-	-
TK-2070	-	-	-	-	0.00	0.00	-	-	-	-	-	-	-	-	0.00	0.00	-	-
TK-2080	-	-	-	-	0.00	0.00	-	-	-	-	-	-	-	-	0.00	0.00	-	-
COND-LOAD 1-3	-	-	-	-	0.00	0.02	-	-	-	-	-	-	-	-	1.57E-04	6.88E-04	-	-
COND-LOAD 4-6	-	-	-	-	0.02	0.09	-	-	-	-	-	-	-	-	4.00E-04	1.75E-03	-	-
NGL-LOAD	-	-	-	-	0.00	0.00	-	-	-	-	-	-	-	-	5.59E-10	2.41E-09	-	-
HAUL	-	-	-	-	-	-	-	-	0.63	0.86	0.63	0.86	0.06	0.09	-	-	-	-
FUG	-	-	-	-	14.13	61.90	-	-	-	-	-	-	-	-	5.92E-01	2.59E+00	-	-
C-1001	1.82	7.97	2.43	10.62	3.08	13.50	0.25	1.07	0.21	0.90	0.21	0.90	0.21	0.90	1.17E-04	5.14E-04	-	-
C-1002	1.82	7.97	2.43	10.62	3.08	13.50	0.25	1.07	0.21	0.90	0.21	0.90	0.21	0.90	1.17E-04	5.14E-04	-	-
C-1003	1.82	7.97	2.43	10.62	3.08	13.50	0.25	1.07	0.21	0.90	0.21	0.90	0.21	0.90	1.17E-04	5.14E-04	-	-
G-1001	3.92	17.15	3.15	13.81	0.18	0.81	0.66	2.87	0.36	1.59	0.36	1.59	0.36	1.59	3.13E-04	1.37E-03	-	-
G-1002	3.92	17.15	3.15	13.81	0.18	0.81	0.66	2.87	0.36	1.59	0.36	1.59	0.36	1.59	3.13E-04	1.37E-03	-	-
Totals	45.58	199.65	46.53	203.81	54.61	239.20	8.70	38.12	9.59	40.10	9.59	40.10	9.02	39.32	0.60	2.63	0.00	0.00

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

Table 2-E: Requested Allowable Emissions (Scenario 2)

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 ₂ S		Lead	
	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr
C-1200	1.65	7.24	1.82	7.97	1.83	8.02	0.22	0.98	0.19	0.82	0.19	0.82	0.19	0.82	1.07E-04	4.68E-04	-	-
C-1210	1.65	7.24	1.82	7.97	1.83	8.02	0.22	0.98	0.19	0.82	0.19	0.82	0.19	0.82	1.07E-04	4.68E-04	-	-
C-1220	1.65	7.24	1.82	7.97	1.83	8.02	0.22	0.98	0.19	0.82	0.19	0.82	0.19	0.82	1.07E-04	4.68E-04	-	-
C-1230	1.65	7.24	1.82	7.97	1.83	8.02	0.22	0.98	0.19	0.82	0.19	0.82	0.19	0.82	1.07E-04	4.68E-04	-	-
H-1600	0.28	1.22	0.28	1.24	0.13	0.59	0.08	0.36	0.11	0.48	0.11	0.48	0.11	0.48	3.98E-05	1.74E-04	-	-
H-1620	1.48	6.50	1.51	6.60	0.71	3.11	0.44	1.94	0.58	2.53	0.58	2.53	0.58	2.53	2.11E-04	9.25E-04	-	-
H-2600	1.08	4.74	1.10	4.81	0.52	2.27	0.32	1.41	0.42	1.84	0.42	1.84	0.42	1.84	1.54E-04	6.75E-04	-	-
H-2620	1.48	6.50	1.51	6.60	0.71	3.11	0.44	1.94	0.58	2.53	0.58	2.53	0.58	2.53	2.11E-04	9.25E-04	-	-
H-3620	1.48	6.50	1.51	6.60	0.71	3.11	0.44	1.94	0.58	2.53	0.58	2.53	0.58	2.53	2.11E-04	9.25E-04	-	-
H-4620	3.29	14.40	3.34	14.62	1.57	6.90	0.98	4.29	1.28	5.60	1.28	5.60	1.28	5.60	4.68E-04	2.05E-03	-	-
H-5620	3.45	15.10	3.50	15.33	1.65	7.23	1.03	4.50	1.34	5.88	1.34	5.88	1.34	5.88	4.91E-04	2.15E-03	-	-
H-6620	3.45	15.10	3.50	15.33	1.65	7.23	1.03	4.50	1.34	5.88	1.34	5.88	1.34	5.88	4.91E-04	2.15E-03	-	-
E-1566	0.15	0.64	0.12	0.54	0.01	0.04	0.02	0.08	0.01	0.05	0.01	0.05	0.01	0.05	8.56E-06	3.75E-05	-	-
E-2566	0.15	0.64	0.12	0.54	0.01	0.04	0.02	0.08	0.01	0.05	0.01	0.05	0.01	0.05	8.56E-06	3.75E-05	-	-
E-3566	0.15	0.64	0.12	0.54	0.01	0.04	0.02	0.08	0.01	0.05	0.01	0.05	0.01	0.05	8.56E-06	3.75E-05	-	-
E-4566	0.29	1.29	0.25	1.08	0.02	0.07	0.04	0.16	0.02	0.10	0.02	0.10	0.02	0.10	1.71E-05	7.50E-05	-	-
H-1781	2.16	9.45	1.81	7.94	0.12	0.52	0.26	1.15	0.16	0.72	0.16	0.72	0.16	0.72	1.26E-04	5.50E-04	-	-
H-2781	2.16	9.45	1.81	7.94	0.12	0.52	0.26	1.15	0.16	0.72	0.16	0.72	0.16	0.72	1.26E-04	5.50E-04	-	-
H-1741	0.88	3.86	0.74	3.25	0.05	0.21	0.11	0.47	0.07	0.29	0.07	0.29	0.07	0.29	5.14E-05	2.25E-04	-	-
H-2741	0.88	3.86	0.74	3.25	0.05	0.21	0.11	0.47	0.07	0.29	0.07	0.29	0.07	0.29	5.14E-05	2.25E-04	-	-
FL-1850	0.29	1.26	0.57	2.51	0.01	0.04	0.02	0.10	-	-	-	-	-	-	5.95E-04	2.60E-03	-	-
FL-1950	0.29	1.27	0.58	2.54	0.01	0.04	0.02	0.11	-	-	-	-	-	-	6.00E-04	2.63E-03	-	-
FL-2050	0.55	2.42	1.10	4.82	0.02	0.07	0.05	0.20	-	-	-	-	-	-	1.14E-03	5.00E-03	-	-
FL-1967	0.19	0.85	0.16	0.71	1.85	8.12	0.00	0.02	0.01	0.06	0.01	0.06	0.01	0.06	5.83E-05	2.55E-04	-	-
FL-2967	0.19	0.85	0.16	0.71	1.85	8.12	0.00	0.02	0.01	0.06	0.01	0.06	0.01	0.06	5.83E-05	2.55E-04	-	-
FL-3967	0.19	0.85	0.16	0.71	1.85	8.12	0.00	0.02	0.01	0.06	0.01	0.06	0.01	0.06	5.83E-05	2.55E-04	-	-
FL-4967	0.33	1.43	0.27	1.20	3.15	13.79	0.01	0.03	0.02	0.11	0.02	0.11	0.02	0.11	8.10E-05	3.55E-04	-	-
FL-5967	0.33	1.43	0.27	1.20	3.15	13.79	0.01	0.03	0.02	0.11	0.02	0.11	0.02	0.11	8.10E-05	3.55E-04	-	-
FL-6967	0.33	1.43	0.27	1.20	3.15	13.79	0.01	0.03	0.02	0.11	0.02	0.11	0.02	0.11	8.10E-05	3.55E-04	-	-
FL-7967	0.18	0.79	0.15	0.66	0.43	1.90	0.04	0.17	0.01	0.05	0.01	0.05	0.01	0.05	4.46E-04	1.95E-03	-	-
DEHY-1	-	-	-	-	0.00	0.00	-	-	-	-	-	-	-	-	2.31E-05	1.01E-04	-	-
DEHY-2	-	-	-	-	0.00	0.00	-	-	-	-	-	-	-	-	2.31E-05	1.01E-04	-	-

DEHY-3	-	-	-	-	0.00	0.00	-	-	-	-	-	-	-	-	2.31E-05	1.01E-04	-	-
DEHY-4	-	-	-	-	0.00	0.00	-	-	-	-	-	-	-	-	3.46E-05	1.52E-04	-	-
DEHY-5	-	-	-	-	0.00	0.00	-	-	-	-	-	-	-	-	3.46E-05	1.52E-04	-	-
DEHY-6	-	-	-	-	0.00	0.00	-	-	-	-	-	-	-	-	3.46E-05	1.52E-04	-	-
TK-1900	-	-	-	-	0.00	0.00	-	-	-	-	-	-	-	-	0.00	0.00	-	-
TK-1901	-	-	-	-	0.00	0.00	-	-	-	-	-	-	-	-	0.00	0.00	-	-
TK-1970	-	-	-	-	0.00	0.00	-	-	-	-	-	-	-	-	0.00	0.00	-	-
TK-1971	-	-	-	-	0.00	0.00	-	-	-	-	-	-	-	-	0.00	0.00	-	-
TK-1980	-	-	-	-	0.00	0.00	-	-	-	-	-	-	-	-	0.00	0.00	-	-
TK-1981	-	-	-	-	0.00	0.00	-	-	-	-	-	-	-	-	0.00	0.00	-	-
TK-2010	-	-	-	-	0.00	0.00	-	-	-	-	-	-	-	-	0.00	0.00	-	-
TK-2020	-	-	-	-	0.00	0.00	-	-	-	-	-	-	-	-	0.00	0.00	-	-
TK-2030	-	-	-	-	0.00	0.00	-	-	-	-	-	-	-	-	0.00	0.00	-	-
TK-2040	-	-	-	-	0.00	0.00	-	-	-	-	-	-	-	-	0.00	0.00	-	-
TK-2050	-	-	-	-	0.00	0.00	-	-	-	-	-	-	-	-	0.00	0.00	-	-
TK-2060	-	-	-	-	0.00	0.00	-	-	-	-	-	-	-	-	0.00	0.00	-	-
TK-2070	-	-	-	-	0.00	0.00	-	-	-	-	-	-	-	-	0.00	0.00	-	-
TK-2080	-	-	-	-	0.00	0.00	-	-	-	-	-	-	-	-	0.00	0.00	-	-
COND-LOAD 1-3	-	-	-	-	0.00	0.02	-	-	-	-	-	-	-	-	1.57E-04	6.88E-04	-	-
COND-LOAD 4-6	-	-	-	-	0.02	0.09	-	-	-	-	-	-	-	-	4.00E-04	1.75E-03	-	-
NGL-LOAD	-	-	-	-	0.00	0.00	-	-	-	-	-	-	-	-	5.59E-10	2.41E-09	-	-
HAUL	-	-	-	-	-	-	-	-	0.63	0.86	0.63	0.86	0.06	0.09	-	-	-	-
FUG	-	-	-	-	14.13	61.90	-	-	-	-	-	-	-	-	5.92E-01	2.59E+00	-	-
G-1001	3.92	17.15	3.15	13.81	0.18	0.81	0.66	2.87	0.36	1.59	0.36	1.59	0.36	1.59	3.13E-04	1.37E-03	-	-
G-1002	3.92	17.15	3.15	13.81	0.18	0.81	0.66	2.87	0.36	1.59	0.36	1.59	0.36	1.59	3.13E-04	1.37E-03	-	-
C-2001	3.68	16.10	1.84	8.05	4.45	19.50	0.27	1.18	0.23	0.99	0.23	0.99	0.23	0.99	1.29E-04	5.64E-04	-	-
C-2002	3.68	16.10	1.84	8.05	4.45	19.50	0.27	1.18	0.23	0.99	0.23	0.99	0.23	0.99	1.29E-04	5.64E-04	-	-
Totals	47.48	207.95	42.93	188.04	54.27	237.71	8.51	37.26	9.42	39.38	9.42	39.38	8.86	38.60	0.60	2.63	0.00	0.00

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

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

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

All applications for facilities that have emissions during routine or predictable startup, shutdown or scheduled maintenance (SSM)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 ₂ S		Lead	
	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr
FL-1850 BD	6.10	3.83	12.18	7.66	59.24	8.60	2,604.86	73.37	-	-	-	-	-	-	28.24	0.80	-	-
FL-1950 BD	34.53	1.90	68.94	3.80	219.27	4.77	2,567.71	81.66	-	-	-	-	-	-	27.84	0.89	-	-
FL-2050 BD	204.34	2.50	407.94	5.00	7.03	0.09	0.09	0.0011	-	-	-	-	-	-	9.45E-04	1.16E-05	-	-
SSM	-	-	-	-	-	10.00	-	-	-	-	-	-	-	-	-	1.00	-	-
DEHY-1	-	-	-	-	0.94	4.10	-	-	-	-	-	-	-	-	-	-	-	-
DEHY-2	-	-	-	-	0.94	4.10	-	-	-	-	-	-	-	-	-	-	-	-
DEHY-3	-	-	-	-	0.94	4.10	-	-	-	-	-	-	-	-	-	-	-	-
DEHY-4	-	-	-	-	1.59	6.97	-	-	-	-	-	-	-	-	-	-	-	-
DEHY-5	-	-	-	-	1.59	6.97	-	-	-	-	-	-	-	-	-	-	-	-
DEHY-6	-	-	-	-	1.59	6.97	-	-	-	-	-	-	-	-	-	-	-	-
Totals	244.97	8.24	489.06	16.46	293.12	56.65	5,172.66	155.03	-	-	-	-	-	-	56.08	2.68	-	-

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 ₂ S or ☐ Lead	
		lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr
Totals:																	

Table 2-H: Stack Exit Conditions

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

Stack Number	Serving Unit Number(s) from Table 2-A	Orientation (H=Horizontal V=Vertical)	Rain Caps (Yes or No)	Height Above Ground (ft)	Temp. (F)	Flow Rate		Moisture by Volume (%)	Velocity (ft/sec)	Inside Diameter (ft)
						(acfs)	(dscfs)			
C-1200	C-1200	V	No	31.5	833.0	476.3			151.6	2.0
C-1210	C-1210	V	No	31.5	833.0	476.3			151.6	2.0
C-1220	C-1220	V	No	31.5	833.0	476.3			151.6	2.0
C-1230	C-1230	V	No	31.5	833.0	476.3			151.6	2.0
H-1600	H-1600	V	No	20.0	493.0	54.9			39.5	1.33
H-1620	H-1620	V	No	29.0	426.0	270.7			38.3	3.0
H-2600	H-2600	V	No	25.5	490.0	216.5			44.1	2.5
H-2620	H-2620	V	No	29.0	426.0	270.7			38.3	3.0
H-3620	H-3620	V	No	29.0	426.0	270.7			38.3	3.0
H-4620	H-4620	V	No	41.0	487.0	664.8			52.9	4.0
H-5620	H-5620	V	No	41.0	472.0	731.4			58.2	4.0
H-6620	H-6620	V	No	41.0	472.0	731.4			58.2	4.0
E-1566	E-1566	V	No	27.0	600.0	28.1			15.9	1.5
E-2566	E-2566	V	No	27.0	600.0	28.1			15.9	1.5
E-3566	E-3566	V	No	27.0	600.0	28.1			15.9	1.5
E-4566	E-4566	V	No	25.0	600.0	50.0			15.9	2.0
H-1781	H-1781	V	No	24.0	467.0	168.4			39.5	2.33
H-2781	H-2781	V	No	24.0	467.0	168.4			39.5	2.33
H-1741	H-1741	V	No	20.0	442.0	68.5			49.3	1.33
H-2741	H-2741	V	No	20.0	442.0	68.5			49.3	1.33

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)			
FL-1850 and FL-1850 BD	FL-1850 and FL-1850 BD	V	No	110.0	1831.73	71358.5			65.62	37.21
FL-1950 and FL-1950 BD	FL-1950 and FL-1950 BD	V	No	110.0	1831.73	71358.5			65.62	37.21
FL-2050 and FL-2050 BD	FL-2050 and FL-2050 BD	V	No	199.0	1831.73	142701.3			65.62	52.62
FL-1967	FL-1967	V	No	30.0	1831.7	824.6			65.6	4.0
FL-2967	FL-2967	V	No	30.0	1831.7	824.6			65.6	4.0
FL-3967	FL-3967	V	No	30.0	1831.7	824.6			65.6	4.0
FL-4967	FL-4967	V	No	30.0	1831.7	824.6			65.6	4.0
FL-5967	FL-5967	V	No	30.0	1831.7	824.6			65.6	4.0
FL-6967	FL-6967	V	No	30.0	1831.7	824.6			65.6	4.0
FL-7967	FL-7967	V	No	40.0	1831.7	2899.0			65.6	7.5
DEHY-1	DEHY-1	V	No	15.0	210	2.8			57.0	0.25
DEHY-2	DEHY-2	V	No	15.0	210	2.8			57.0	0.25
DEHY-3	DEHY-3	V	No	15.0	210	2.8			57.0	0.25
DEHY-4	DEHY-4	V	No	18.0	210	5.5			27.9	0.50
DEHY-5	DEHY-5	V	No	18.0	210	5.5			27.9	0.50
DEHY-6	DEHY-6	V	No	18.0	210	5.5			27.9	0.50
C-1001	C-1001	V	No	34.0	779.0	288.9			163.5	1.5
C-1002	C-1002	V	No	34.0	779.0	288.9			163.5	1.5
C-1003	C-1003	V	No	34.0	779.0	288.9			163.5	1.5
G-1001	G-1001	V	No	26.3	966.0	1585.7			49.6	6.4
G-1002	G-1002	V	No	26.3	966.0	1585.7			49.6	6.4
C-2001	C-2001	V	No	50.0	846.0	368.8			75.1	2.5
C-2002	C-2002	V	No	50.0	846.0	368.8			75.1	2.5

Table 2-I: Stack Exit and Fugitive Emission Rates for HAPs and TAPs (Scenario 1)

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		Acetaldehyde HAP or TAP		Acrolein HAP or TAP		Toluene HAP or TAP		Benzene HAP or TAP		n-Hexane HAP or TAP		HAP or TAP		HAP or TAP	
		lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr
C-1200	C-1200	0.54	2.35	0.19	0.82	0.16	0.69	0.10	0.42	0.00764	0.03	0.00824	0.04	0.02	0.09101				
C-1210	C-1210	0.54	2.35	0.19	0.82	0.16	0.69	0.10	0.42	0.00764	0.03	0.00824	0.04	0.02	0.09101				
C-1220	C-1220	0.54	2.35	0.19	0.82	0.16	0.69	0.10	0.42	0.00764	0.03	0.00824	0.04	0.02	0.09101				
C-1230	C-1230	0.54	2.35	0.19	0.82	0.16	0.69	0.10	0.42	0.00764	0.03	0.00824	0.04	0.02	0.09101				
H-1600	H-1600	0.01	0.06	0.00	0.00	-	-	-	-	2.3E-05	0.00	1.4E-05	0.00	0.01	0.05387				
H-1620	H-1620	0.07	0.30	0.00	0.01	-	-	-	-	0.00012	0.00	7.6E-05	0.00	0.07	0.28599				
H-2600	H-2600	0.05	0.22	0.00	0.01	-	-	-	-	0.00009	0.00	5.6E-05	0.00	0.05	0.20869				
H-2620	H-2620	0.07	0.30	0.00	0.01	-	-	-	-	0.00012	0.00	7.6E-05	0.00	0.07	0.28599				
H-3620	H-3620	0.07	0.30	0.00	0.01	-	-	-	-	0.00012	0.00	7.6E-05	0.00	0.07	0.28599				
H-4620	H-4620	0.15	0.66	0.01	0.03	-	-	-	-	0.00027	0.00	0.00017	0.00	0.14	0.63381				
H-5620	H-5620	0.16	0.69	0.01	0.03	-	-	-	-	0.00029	0.00	0.00018	0.00	0.15	0.66473				
H-6620	H-6620	0.16	0.69	0.01	0.03	-	-	-	-	0.00029	0.00	0.00018	0.00	0.15	0.66473				
E-1566	E-1566	0.00	0.01	0.00	0.00	-	-	-	-	5E-06	0.00	3.1E-06	0.00	0.00	0.01159				
E-2566	E-2566	0.00	0.01	0.00	0.00	-	-	-	-	5E-06	0.00	3.1E-06	0.00	0.00	0.01159				
E-3566	E-3566	0.00	0.01	0.00	0.00	-	-	-	-	5E-06	0.00	3.1E-06	0.00	0.00	0.01159				
E-4566	E-4566	0.01	0.02	0.00	0.00	-	-	-	-	0.00001	0.00	6.2E-06	0.00	0.01	0.02319				
H-1781	H-1781	0.04	0.18	0.00	0.01	-	-	-	-	7.3E-05	0.00	4.5E-05	0.00	0.04	0.17005				
H-2781	H-2781	0.04	0.18	0.00	0.01	-	-	-	-	7.3E-05	0.00	4.5E-05	0.00	0.04	0.17005				
H-1741	H-1741	0.02	0.07	0.00	0.00	-	-	-	-	0.00003	0.00	1.9E-05	0.00	0.02	0.06956				
H-2741	H-2741	0.02	0.07	0.00	0.00	-	-	-	-	0.00003	0.00	1.9E-05	0.00	0.02	0.06956				
FL-1850	FL-1850	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
FL-1850 BD	FL-1850 BD	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
FL-1950	FL-1950	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
FL-1950 BD	FL-1950 BD	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
FL-2050	FL-2050	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
FL-2050 BD	FL-2050 BD	-	-	-	-	-	-	-	-	-	-	-	-	-	-				

Stack No.	Unit No.(s)	Total HAPs		Formaldehyde HAP or TAP		Acetaldehyde HAP or TAP		Acrolein HAP or TAP		Toluene HAP or TAP		Benzene HAP or TAP		n-Hexane HAP or TAP		HAP or TAP		HAP or TAP	
		lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr
FL-1967	FL-1967	0.75	3.30	-	-	-	-	-	-	-	-	0.2465	1.08	-	-				
FL-2967	FL-2967	0.75	3.30	-	-	-	-	-	-	-	-	0.2465	1.08	-	-				
FL-3967	FL-3967	0.75	3.30	-	-	-	-	-	-	-	-	0.2465	1.08	-	-				
FL-4967	FL-4967	1.28	5.60	-	-	-	-	-	-	-	-	0.41289	1.81	-	-				
FL-5967	FL-5967	1.28	5.60	-	-	-	-	-	-	-	-	0.41289	1.81	-	-				
FL-6967	FL-6967	1.28	5.60	-	-	-	-	-	-	-	-	0.41289	1.81	-	-				
FL-7967	FL-7967	0.08	0.37	-	-	-	-	-	-	-	-	0.00341	0.01	-	-				
DEHY-1	DEHY-1	0.38	1.66	-	-	-	-	-	-	0.09738	0.43	0.1245	0.55	0.15	0.64118				
DEHY-2	DEHY-2	0.38	1.66	-	-	-	-	-	-	0.09738	0.43	0.1245	0.55	0.15	0.64118				
DEHY-3	DEHY-3	0.38	1.66	-	-	-	-	-	-	0.09738	0.43	0.1245	0.55	0.15	0.64118				
DEHY-4	DEHY-4	0.65	2.83	-	-	-	-	-	-	0.16589	0.73	0.20853	0.91	0.25	1.10397				
DEHY-5	DEHY-5	0.65	2.83	-	-	-	-	-	-	0.16589	0.73	0.20853	0.91	0.25	1.10397				
DEHY-6	DEHY-6	0.65	2.83	-	-	-	-	-	-	0.16589	0.73	0.20853	0.91	0.25	1.10397				
TK-1900	TK-1900	0.00	0.00	-	-	-	-	-	-	0	0.00	0	0.00	0.00	0				
TK-1901	TK-1901	0.00	0.00	-	-	-	-	-	-	0	0.00	0	0.00	0.00	0				
TK-1970	TK-1970	0.00	0.00	-	-	-	-	-	-	0	0.00	0	0.00	0.00	0				
TK-1971	TK-1971	0.00	0.00	-	-	-	-	-	-	0	0.00	0	0.00	0.00	0				
TK-1980	TK-1980	0.00	0.00	-	-	-	-	-	-	0	0.00	0	0.00	0.00	0				
TK-1981	TK-1981	0.00	0.00	-	-	-	-	-	-	0	0.00	0	0.00	0.00	0				
TK-2010	TK-2010	0.00	0.00	-	-	-	-	-	-	0	0.00	0	0.00	0.00	0				
TK-2020	TK-2020	0.00	0.00	-	-	-	-	-	-	0	0.00	0	0.00	0.00	0				
TK-2030	TK-2030	0.00	0.00	-	-	-	-	-	-	0	0.00	0	0.00	0.00	0				
TK-2040	TK-2040	0.00	0.00	-	-	-	-	-	-	0	0.00	0	0.00	0.00	0				
TK-2050	TK-2050	0.00	0.00	-	-	-	-	-	-	0	0.00	0	0.00	0.00	0				
TK-2060	TK-2060	0.00	0.00	-	-	-	-	-	-	0	0.00	0	0.00	0.00	0				
TK-2070	TK-2070	0.00	0.00	-	-	-	-	-	-	0	0.00	0	0.00	0.00	0				
TK-2080	TK-2080	0.00	0.00	-	-	-	-	-	-	0	0.00	0	0.00	0.00	0				
COND-LOAD 1-3	COND-LOAD 1-3	0.00	0.00	-	-	-	-	-	-	2.4E-05	0.00	3.5E-05	0.00	0.00	0.00324				
COND-LOAD 4-6	COND-LOAD 4-6	0.00	0.02	-	-	-	-	-	-	0.00012	0.00	0.00017	0.00	0.00	0.01606				
NGL-LOAD	NGL-LOAD	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-				
HAUL	HAUL	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
FUG	FUG	2.44	10.69	-	-	-	-	-	-	-	-	-	-	-	-				
SSM	SSM	-	1.00	-	-	-	-	-	-	-	-	-	-	-	-				
C-1001	C-1001	0.87	3.81	0.49	2.12	0.17	0.75	0.11	0.46	0.00838	0.04	0.01	0.04	0.02	0.10				
C-1002	C-1002	0.87	3.81	0.49	2.12	0.17	0.75	0.11	0.46	0.01	0.04	0.01	0.04	0.02	0.10				
C-1003	C-1003	0.87	3.81	0.49	2.12	0.17	0.75	0.11	0.46	0.01	0.04	0.01	0.04	0.02	0.10				
G-1001	G-1001	0.05	0.24	0.04	0.17	0.00	0.01	0.00	0.00	0.00713	0.03	0.00066	0.00	0.00	0				
G-1002	G-1002	0.05	0.24	0.04	0.17	0.00	0.01	0.00	0.00	0.01	0.03	0.00066	0.00	0.00	0				
Totals:		17.43	77.35	2.32	10.15	1.15	5.02	0.70	3.08	0.86	3.77	3.04	13.33	2.18	9.54				

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

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		Acetaldehyde HAP or TAP		Acrolein HAP or TAP		Toluene HAP or TAP		Benzene HAP or TAP		n-Hexane HAP or TAP		HAP or TAP		HAP or TAP	
		lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr
C-1200	C-1200	0.54	2.35	0.19	0.82	0.16	0.69	0.10	0.42	0.00764	0.03	0.00824	0.04	0.02	0.09101				
C-1210	C-1210	0.54	2.35	0.19	0.82	0.16	0.69	0.10	0.42	0.00764	0.03	0.00824	0.04	0.02	0.09101				
C-1220	C-1220	0.54	2.35	0.19	0.82	0.16	0.69	0.10	0.42	0.00764	0.03	0.00824	0.04	0.02	0.09101				
C-1230	C-1230	0.54	2.35	0.19	0.82	0.16	0.69	0.10	0.42	0.00764	0.03	0.00824	0.04	0.02	0.09101				
H-1600	H-1600	0.01	0.06	0.00	0.00	-	-	-	-	2.3E-05	0.00	1.4E-05	0.00	0.01	0.05387				
H-1620	H-1620	0.07	0.30	0.00	0.01	-	-	-	-	0.00012	0.00	7.6E-05	0.00	0.07	0.28599				
H-2600	H-2600	0.05	0.22	0.00	0.01	-	-	-	-	0.00009	0.00	5.6E-05	0.00	0.05	0.20869				
H-2620	H-2620	0.07	0.30	0.00	0.01	-	-	-	-	0.00012	0.00	7.6E-05	0.00	0.07	0.28599				
H-3620	H-3620	0.07	0.30	0.00	0.01	-	-	-	-	0.00012	0.00	7.6E-05	0.00	0.07	0.28599				
H-4620	H-4620	0.15	0.66	0.01	0.03	-	-	-	-	0.00027	0.00	0.00017	0.00	0.14	0.63381				
H-5620	H-5620	0.16	0.69	0.01	0.03	-	-	-	-	0.00029	0.00	0.00018	0.00	0.15	0.66473				
H-6620	H-6620	0.16	0.69	0.01	0.03	-	-	-	-	0.00029	0.00	0.00018	0.00	0.15	0.66473				
E-1566	E-1566	0.00	0.01	0.00	0.00	-	-	-	-	5E-06	0.00	3.1E-06	0.00	0.00	0.01159				
E-2566	E-2566	0.00	0.01	0.00	0.00	-	-	-	-	5E-06	0.00	3.1E-06	0.00	0.00	0.01159				
E-3566	E-3566	0.00	0.01	0.00	0.00	-	-	-	-	5E-06	0.00	3.1E-06	0.00	0.00	0.01159				
E-4566	E-4566	0.01	0.02	0.00	0.00	-	-	-	-	0.00001	0.00	6.2E-06	0.00	0.01	0.02319				
H-1781	H-1781	0.04	0.18	0.00	0.01	-	-	-	-	7.3E-05	0.00	4.5E-05	0.00	0.04	0.17005				
H-2781	H-2781	0.04	0.18	0.00	0.01	-	-	-	-	7.3E-05	0.00	4.5E-05	0.00	0.04	0.17005				
H-1741	H-1741	0.02	0.07	0.00	0.00	-	-	-	-	0.00003	0.00	1.9E-05	0.00	0.02	0.06956				
H-2741	H-2741	0.02	0.07	0.00	0.00	-	-	-	-	0.00003	0.00	1.9E-05	0.00	0.02	0.06956				
FL-1850	FL-1850	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
FL-1850 BD	FL-1850 BD	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
FL-1950	FL-1950	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
FL-1950 BD	FL-1950 BD	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
FL-2050	FL-2050	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
FL-2050 BD	FL-2050 BD	-	-	-	-	-	-	-	-	-	-	-	-	-	-				

FL-1967	FL-1967	0.75	3.30	-	-	-	-	-	-	-	-	0.2465	1.08	-	-				
FL-2967	FL-2967	0.75	3.30	-	-	-	-	-	-	-	-	0.2465	1.08	-	-				
FL-3967	FL-3967	0.75	3.30	-	-	-	-	-	-	-	-	0.2465	1.08	-	-				
FL-4967	FL-4967	1.28	5.60	-	-	-	-	-	-	-	-	0.41289	1.81	-	-				
FL-5967	FL-5967	1.28	5.60	-	-	-	-	-	-	-	-	0.41289	1.81	-	-				
FL-6967	FL-6967	1.28	5.60	-	-	-	-	-	-	-	-	0.41289	1.81	-	-				
FL-7967	FL-7967	0.08	0.37	-	-	-	-	-	-	-	-	0.00341	0.01	-	-				
DEHY-1	DEHY-1	0.38	1.66	-	-	-	-	-	-	0.09738	0.43	0.1245	0.55	0.15	0.64118				
DEHY-2	DEHY-2	0.38	1.66	-	-	-	-	-	-	0.09738	0.43	0.1245	0.55	0.15	0.64118				
DEHY-3	DEHY-3	0.38	1.66	-	-	-	-	-	-	0.09738	0.43	0.1245	0.55	0.15	0.64118				
DEHY-4	DEHY-4	0.65	2.83	-	-	-	-	-	-	0.16589	0.73	0.20853	0.91	0.25	1.10397				
DEHY-5	DEHY-5	0.65	2.83	-	-	-	-	-	-	0.16589	0.73	0.20853	0.91	0.25	1.10397				
DEHY-6	DEHY-6	0.65	2.83	-	-	-	-	-	-	0.16589	0.73	0.20853	0.91	0.25	1.10397				
TK-1900	TK-1900	0.00	0.00	-	-	-	-	-	-	0	0.00	0	0.00	0.00	0				
TK-1901	TK-1901	0.00	0.00	-	-	-	-	-	-	0	0.00	0	0.00	0.00	0				
TK-1970	TK-1970	0.00	0.00	-	-	-	-	-	-	0	0.00	0	0.00	0.00	0				
TK-1971	TK-1971	0.00	0.00	-	-	-	-	-	-	0	0.00	0	0.00	0.00	0				
TK-1980	TK-1980	0.00	0.00	-	-	-	-	-	-	0	0.00	0	0.00	0.00	0				
TK-1981	TK-1981	0.00	0.00	-	-	-	-	-	-	0	0.00	0	0.00	0.00	0				
TK-2010	TK-2010	0.00	0.00	-	-	-	-	-	-	0	0.00	0	0.00	0.00	0				
TK-2020	TK-2020	0.00	0.00	-	-	-	-	-	-	0	0.00	0	0.00	0.00	0				
TK-2030	TK-2030	0.00	0.00	-	-	-	-	-	-	0	0.00	0	0.00	0.00	0				
TK-2040	TK-2040	0.00	0.00	-	-	-	-	-	-	0	0.00	0	0.00	0.00	0				
TK-2050	TK-2050	0.00	0.00	-	-	-	-	-	-	0	0.00	0	0.00	0.00	0				
TK-2060	TK-2060	0.00	0.00	-	-	-	-	-	-	0	0.00	0	0.00	0.00	0				
TK-2070	TK-2070	0.00	0.00	-	-	-	-	-	-	0	0.00	0	0.00	0.00	0				
TK-2080	TK-2080	0.00	0.00	-	-	-	-	-	-	0	0.00	0	0.00	0.00	0				
COND-LOAD 1-3	COND-LOAD 1-3	0.00	0.00	-	-	-	-	-	-	2.4E-05	0.00	3.5E-05	0.00	0.00	0.00324				
COND-LOAD 4-6	COND-LOAD 4-6	0.00	0.02	-	-	-	-	-	-	0.00012	0.00	0.00017	0.00	0.00	0.01606				
NGL-LOAD	NGL-LOAD	0.00	0.00	-	-	-	-	-	-	-	-	-	-	-	-				
HAUL	HAUL	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
FUG	FUG	2.44	10.69	-	-	-	-	-	-	-	-	-	-	-	-				
SSM	SSM	-	1.00	-	-	-	-	-	-	-	-	-	-	-	-				
G-1001	G-1001	0.05	0.24	0.04	0.17	0.00	0.01	0.00	0.00	0.00713	0.03	0.00066	0.00	0.00	0				
G-1002	G-1002	0.05	0.24	0.04	0.17	0.00	0.01	0.00	0.00	0.01	0.03	0.00066	0.00	0.00	0				
C-2001	C-2001	1.01	4.42	0.59	2.58	0.19	0.83	0.12	0.51	0.01	0.04	0.00992	0.04	0.03	0.10961				
C-2002	C-2002	1.01	4.42	0.59	2.58	0.19	0.83	0.12	0.51	0.01	0.04	0.00992	0.04	0.03	0.10961				
Totals:		16.84	74.77	2.04	8.93	1.01	4.41	0.62	2.70	0.85	3.74	3.04	13.30	2.16	9.46				

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 (Btu/scf)	Hourly Usage (scf/hr)	Annual Usage (MMscf/yr)	% Sulfur	% Ash
C-1200	Natural Gas	Fuel Gas	1,251	14,961.37	131.06	5 grains S/100 scf	0
C-1210	Natural Gas	Fuel Gas	1,251	14,961.37	131.06	5 grains S/100 scf	0
C-1220	Natural Gas	Fuel Gas	1,251	14,961.37	131.06	5 grains S/100 scf	0
C-1230	Natural Gas	Fuel Gas	1,251	14,961.37	131.06	5 grains S/100 scf	0
H-1600	Natural Gas	Fuel Gas	1,251	5,570.55	48.80	5 grains S/100 scf	0
H-1620	Natural Gas	Fuel Gas	1,251	29,571.09	259.04	5 grains S/100 scf	0
H-2600	Natural Gas	Fuel Gas	1,251	21,578.90	189.03	5 grains S/100 scf	0
H-2620	Natural Gas	Fuel Gas	1,251	29,571.09	259.04	5 grains S/100 scf	0
H-3620	Natural Gas	Fuel Gas	1,251	29,571.09	259.04	5 grains S/100 scf	0
H-4620	Natural Gas	Fuel Gas	1,251	65,535.93	574.09	5 grains S/100 scf	0
H-5620	Natural Gas	Fuel Gas	1,251	68,732.80	602.10	5 grains S/100 scf	0
H-6620	Natural Gas	Fuel Gas	1,251	68,732.80	602.10	5 grains S/100 scf	0
E-1566	Natural Gas	Fuel Gas	1,251	1,198.83	10.50	5 grains S/100 scf	0
E-2566	Natural Gas	Fuel Gas	1,251	1,198.83	10.50	5 grains S/100 scf	0
E-3566	Natural Gas	Fuel Gas	1,251	1,198.83	10.50	5 grains S/100 scf	0
E-4566	Natural Gas	Fuel Gas	1,251	2,397.66	21.00	5 grains S/100 scf	0
H-1781	Natural Gas	Fuel Gas	1,251	17,582.81	154.03	5 grains S/100 scf	0
H-2781	Natural Gas	Fuel Gas	1,251	17,582.81	154.03	5 grains S/100 scf	0
H-1741	Natural Gas	Fuel Gas	1,251	7,192.97	63.01	5 grains S/100 scf	0
H-2741	Natural Gas	Fuel Gas	1,251	7,192.97	63.01	5 grains S/100 scf	0

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 (Btu/scf)	Hourly Usage (scf/hr)	Annual Usage (MMscf/yr)	% Sulfur	% Ash
FL-1850	Natural Gas	Fuel Gas	1,251	1,665.00	14.59	5 grains S/100 scf	0
FL-1850 BD	Process Gas	Multiple Process Gas Streams	Varies	28,861.00	Varies	Varies	0
FL-1950	Natural Gas	Fuel Gas	1,251	1,680.00	14.72	5 grains S/100 scf	0
FL-1950 BD	Process Gas	Multiple Process Gas Streams	Varies	104,729.17	Varies	Varies	0
FL-2050	Natural Gas	Fuel Gas	1,251	3,195.00	27.99	5 grains S/100 scf	0
FL-2050 BD	Process Gas	Cryogenic Process Gas	Varies	1,597,020.83	Varies	Varies	0
FL-1967	Natural Gas and Process Gas	Fuel Gas and Dehy Regenerator Gas	Varies	955.15	8.37	Varies	0
FL-2967	Natural Gas and Process Gas	Fuel Gas and Dehy Regenerator Gas	Varies	955.15	8.37	Varies	0
FL-3967	Natural Gas and Process Gas	Fuel Gas and Dehy Regenerator Gas	Varies	955.15	8.37	Varies	0
FL-4967	Natural Gas and Process Gas	Fuel Gas and Dehy Regenerator Gas	Varies	1,603.54	14.05	Varies	0
FL-5967	Natural Gas and Process Gas	Fuel Gas and Dehy Regenerator Gas	Varies	1603.54	14.05	Varies	0
FL-6967	Natural Gas and Process Gas	Fuel Gas and Dehy Regenerator Gas	Varies	1603.54	14.05	Varies	0
C-1001	Natural Gas	Fuel Gas	1,251	16,420.15	143.84	5 grains S/100 scf	0
C-1002	Natural Gas	Fuel Gas	1,251	16,420.15	143.84	5 grains S/100 scf	0
C-1003	Natural Gas	Fuel Gas	1,251	16,420.15	143.84	5 grains S/100 scf	0
G-1001	Natural Gas	Fuel Gas	1,251	43,861.26	384.22	5 grains S/100 scf	0
G-1002	Natural Gas	Fuel Gas	1,251	43,861.26	384.22	5 grains S/100 scf	0
C-2001	Natural Gas	Fuel Gas	1,251	18,018.06	157.84	5 grains S/100 scf	0
C-2002	Natural Gas	Fuel Gas	1,251	18,018.06	157.84	5 grains S/100 scf	0

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)
TK-1900	40400311	Condensate	Condensate	5.41	68.30	68.48	5.68	79.21	6.99
TK-1901	40400311	Condensate	Condensate	5.41	68.30	68.48	5.68	79.21	6.99
TK-1970	40400315	Sour Water	Sour Water	5.97	34.97	68.48	11.03	79.21	12.88
TK-1971	40400315	Sour Water	Sour Water	5.97	34.97	68.48	11.03	79.21	12.88
TK-1980	40400313	Slop	Slop	0.02	32.03	79.91	3.20	79.91	3.20
TK-1981	40400313	Slop	Slop	0.02	32.03	79.91	3.20	79.91	3.20
TK-2010	40400313	Slop	Slop	0.02	32.03	79.91	3.20	79.91	3.20
TK-2020	40400313	Slop	Slop	0.02	32.03	79.91	3.20	79.91	3.20
TK-2030	40400315	Sour Water	Sour Water	5.97	34.37	68.48	11.04	79.21	12.88
TK-2040	40400315	Sour Water	Sour Water	5.97	34.37	68.48	11.04	79.21	12.88
TK-2050	40400311	Condensate	Condensate	5.41	68.44	68.48	5.67	79.21	6.98
TK-2060	40400311	Condensate	Condensate	5.41	68.44	68.48	5.67	79.21	6.98
TK-2070	40400311	Condensate	Condensate	5.41	68.44	68.48	5.67	79.21	6.98
TK-2080	40400311	Condensate	Condensate	5.41	68.44	68.48	5.67	79.21	6.98

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)	(M³)			Roof	Shell			
TK-1900	2021	Condensate	N/A	FX	400	64	3.66	1.83	MG	MG	Good	10,635,944	633
TK-1901	2021	Condensate	N/A	FX	400	64	3.66	1.83	MG	MG	Good	10,635,944	633
TK-1970	2021	Sour Water	N/A	FX	400	64	3.66	1.83	MG	MG	Good	4,287,868	255
TK-1971	2021	Sour Water	N/A	FX	400	64	3.66	1.83	MG	MG	Good	4,287,868	255
TK-1980	2021	Slop	N/A	FX	400	64	3.66	1.83	MG	MG	Good	1,868,226	111
TK-1981	2021	Slop	N/A	FX	400	64	3.66	1.83	MG	MG	Good	1,868,226	111
TK-2010	2024	Slop	N/A	FX	400	64	3.66	1.83	MG	MG	Good	1,868,226	111
TK-2020	2024	Slop	N/A	FX	400	64	3.66	1.83	MG	MG	Good	1,868,226	111
TK-2030	2024	Sour Water	N/A	FX	400	64	3.66	1.83	MG	MG	Good	10,901,443	649
TK-2040	2024	Sour Water	N/A	FX	400	64	3.66	1.83	MG	MG	Good	10,901,443	649
TK-2050	2024	Condensate	N/A	FX	400	64	3.66	1.83	MG	MG	Good	26,104,168	1554
TK-2060	2024	Condensate	N/A	FX	400	64	3.66	1.83	MG	MG	Good	26,104,168	1554
TK-2070	2024	Condensate	N/A	FX	400	64	3.66	1.83	MG	MG	Good	26,104,168	1554
TK-2080	2024	Condensate	N/A	FX	400	64	3.66	1.83	MG	MG	Good	26,104,168	1554

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 M³ = 42.0 gal

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

Material Processed				Material Produced			
Description	Chemical Composition	Phase (Gas, Liquid, or Solid)	Quantity (specify units)	Description	Chemical Composition	Phase	Quantity (specify units)
Natural Gas	Sour Natural Gas	Gas	990 MMscfd	Natural Gas	Sweet Natural Gas	Gas	990 MMscfd
				Condensate	VOCs	Liquid	2,992,585 bbl/yr
				Sour Water	CO2, H2S, VOCs	Liquid	723,301 bbl/yr

Table 2-N: CEM Equipment

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

Stack No.	Pollutant(s)	Manufacturer	Model No.	Serial No.	Sample Frequency	Averaging Time	Range	Sensitivity	Accuracy
Not applicable as there is no CEM equipment at this site.									

Table 2-O: Parametric Emissions Measurement Equipment

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

Unit No.	Parameter/Pollutant Measured	Location of Measurement	Unit of Measure	Acceptable Range	Frequency of Maintenance	Nature of Maintenance	Method of Recording	Averaging Time
Not applicable as there is no PEM equipment at this site.								

Table 2-P: Greenhouse Gas Emissions (Scenario 1)

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 ₂ O ton/yr	CH ₄ ton/yr	SF ₆ ton/yr	PFC/HFC ton/yr ²						Total GHG Mass Basis ton/yr ⁴	Total CO ₂ e ton/yr ⁵
Unit No.	GWPs ¹	1	265	28	23,500	footnote 3							
C-1200	mass GHG	GHG emissions are included in the attached emissions calculations. CO2e emissions are listed here.											
	CO ₂ e												9608.46
C-1210	mass GHG												
	CO ₂ e												9608.46
C-1220	mass GHG												
	CO ₂ e												9608.46
C-1230	mass GHG												
	CO ₂ e												9608.46
H-1600	mass GHG												
	CO ₂ e												3574.82
H-1620	mass GHG												
	CO ₂ e												18976.79
H-2600	mass GHG												
	CO ₂ e												13847.93
H-2620	mass GHG												
	CO ₂ e												18976.79
H-3620	mass GHG												
	CO ₂ e												18976.79
H-4620	mass GHG												
	CO ₂ e												42056.66
H-5620	mass GHG												
	CO ₂ e												44108.21
H-6620	mass GHG												
	CO ₂ e												44108.21
E-1566	mass GHG												
	CO ₂ e												769.33
E-2566	mass GHG												
	CO ₂ e												769.33
E-3566	mass GHG												
	CO ₂ e												769.33
E-4566	mass GHG												
	CO ₂ e												1538.66

H-1781	mass GHG												
	CO ₂ e												11283.49
H-2781	mass GHG												
	CO ₂ e												11283.49
H-1741	mass GHG												
	CO ₂ e												4615.98
H-2741	mass GHG												
	CO ₂ e												4615.98
FL-1850	mass GHG												
	CO ₂ e												1068.49
FL-1850 BD	mass GHG												
	CO ₂ e												3254.05
FL-1950	mass GHG												
	CO ₂ e												1078.11
FL-1950 BD	mass GHG												
	CO ₂ e												1615.95
FL-2050	mass GHG												
	CO ₂ e												2050.34
FL-2050 BD	mass GHG												
	CO ₂ e												2124.54
FL-1967	mass GHG												
	CO ₂ e												990.94
FL-2967	mass GHG												
	CO ₂ e												990.94
FL-3967	mass GHG												
	CO ₂ e												990.94
FL-4967	mass GHG												
	CO ₂ e												1682.92
FL-5967	mass GHG												
	CO ₂ e												1682.92
FL-6967	mass GHG												
	CO ₂ e												1682.92
FL-7967	mass GHG												
	CO ₂ e												858.44
DEHY-1	mass GHG												
	CO ₂ e												6.21
DEHY-2	mass GHG												
	CO ₂ e												6.21
DEHY-3	mass GHG												
	CO ₂ e												6.21
DEHY-4	mass GHG												
	CO ₂ e												10.76
DEHY-5	mass GHG												
	CO ₂ e												10.76
DEHY-6	mass GHG												
	CO ₂ e												10.76
TK-1900	mass GHG												
	CO ₂ e												0.00

TK-1901	mass GHG												
	CO2e												0.00
TK-1970	mass GHG												
	CO2e												0.00
TK-1971	mass GHG												
	CO2e												0.00
TK-1980	mass GHG												
	CO2e												0.00
TK-1981	mass GHG												
	CO2e												0.00
TK-2010	mass GHG												
	CO2e												0.00
TK-2020	mass GHG												
	CO2e												0.00
TK-2030	mass GHG												
	CO2e												0.00
TK-2040	mass GHG												
	CO2e												0.00
TK-2050	mass GHG												
	CO2e												0.00
TK-2060	mass GHG												
	CO2e												0.00
TK-2070	mass GHG												
	CO2e												0.00
TK-2080	mass GHG												
	CO2e												0.00
COND-LOAD 1-3	mass GHG												
	CO2e												0.00
COND-LOAD 4-6	mass GHG												
	CO2e												0.00
NGL-LOAD	mass GHG												
	CO2e												-
HAUL	mass GHG												
	CO2e												-
FUG	mass GHG												
	CO2e												1786.03
SSM	mass GHG												
	CO2e												-
C-1001	mass GHG												
	CO2e												10537.37
C-1002	mass GHG												
	CO2e												10537.37
C-1003	mass GHG												
	CO2e												10537.37
G-1001	mass GHG												
	CO2e												28147.28
G-1002	mass GHG												
	CO2e												28147.28
	mass GHG												
	CO2e												
	mass GHG												
	CO2e												
	mass GHG												
	CO2e												
	mass GHG												
	CO2e												
Total	mass GHG												
	CO2e												388,520.73

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 CO2e means Carbon Dioxide Equivalent and is calculated by multiplying the TPY mass emissions of the green house gas by its GWP.

Table 2-P: Greenhouse Gas Emissions (Scenario 2)

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.

[illegible]

[illegible]

NGL-LOAD	mass GHG												
	CO ₂ e												-
HAUL	mass GHG												
	CO ₂ e												-
FUG	mass GHG												
	CO ₂ e												1786.03
SSM	mass GHG												
	CO ₂ e												-
G-1001	mass GHG												
	CO ₂ e												28147.28
G-1002	mass GHG												
	CO ₂ e												28147.28
C-2001	mass GHG												
	CO ₂ e												11562.81
C-2002	mass GHG												
	CO ₂ e												11562.81
	mass GHG												
	CO ₂ e												
	mass GHG												
	CO ₂ e												
	mass GHG												
	CO ₂ e												
Total	mass GHG												
	CO ₂ e												380,034.24

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 **CO₂e** 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.

Enterprise Delaware Basin Treating LLC (Enterprise) is submitting this Significant Permit Revision Application pursuant to 20.2.72.219 D(1)(a) NMAC for a significant permit revision for the Dark Horse Facility (Dark Horse) currently operating in Lea County, New Mexico. The facility is currently permitted under NSR Permit Number 9058M1R3 issued on October 22, 2025.

With this application Enterprise is proposing two scenarios which are based on compressor engine availability. Only one scenario will be implemented; i.e., it will either be scenario 1 or scenario 2. The two scenarios are:

Scenario 1:

Adding up to three (3) Caterpillar 3608 compressor engines, two (2) Solar SMT60 portable generator turbines, and increasing fugitive components counts associated with the new equipment. The two generator turbines will be used to generate electricity for Train 4 until reliable utility power is available.

Scenario 2:

Adding up to two (2) Caterpillar 3612 compressor engines, two (2) Solar SMT60 portable generator turbines, and increasing fugitive components counts associated with the new equipment. The two generator turbines will be used to generate electricity for Train 4 until reliable utility power is available.

In addition for both scenarios, Enterprise is proposing to route Train 4 SSM emissions to authorized Unit FL-1950 BD, instead of the currently permitted FL-1850 BD. These two flares are identical; therefore, the control efficiency will be the same. Please see the attached emissions calculations for more information. For both SSM scenarios, Enterprise is also proposing to increase the permitted acid gas flaring H₂S content based on observed actual compositions.

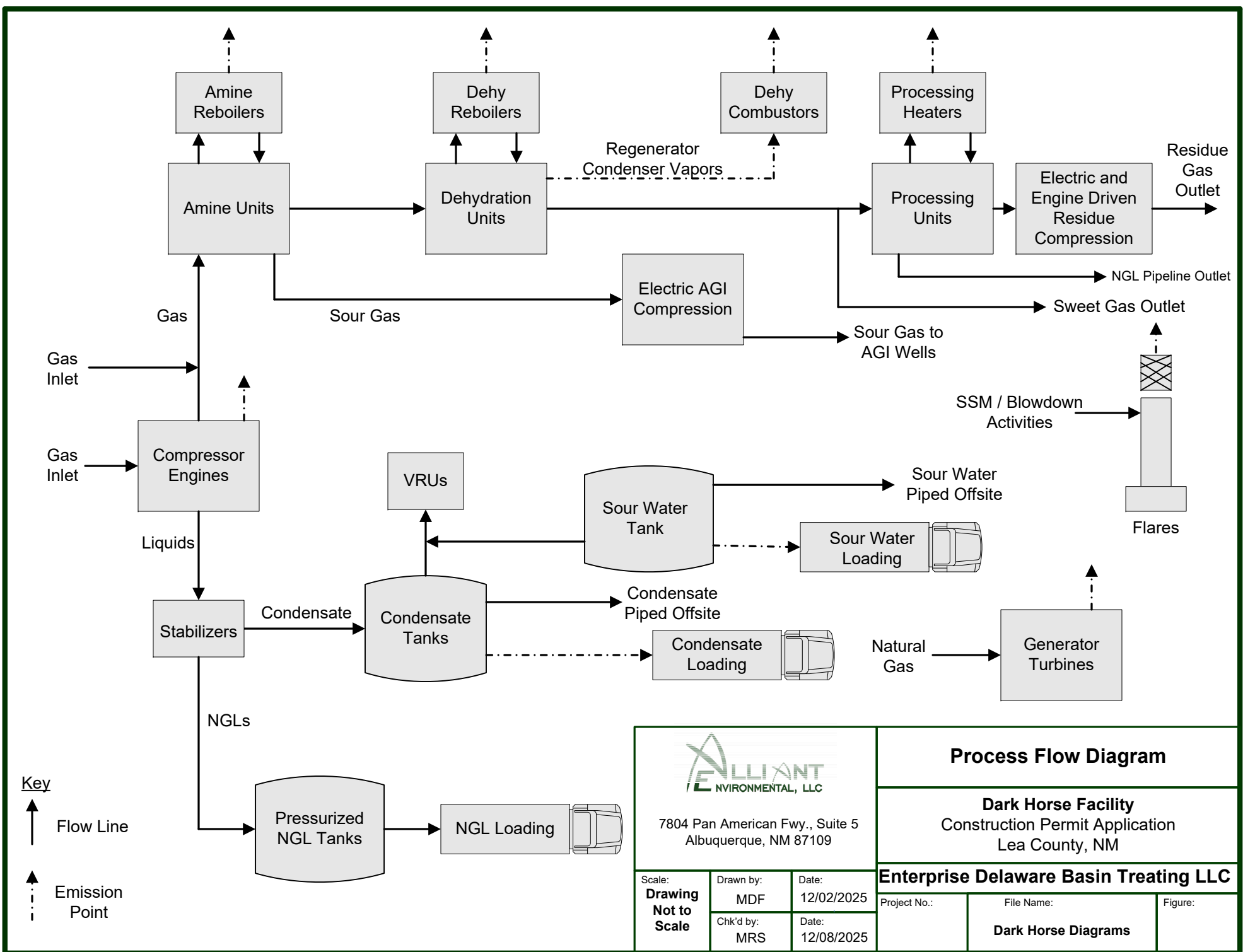
No other changes to equipment or emission rates are proposed and operation shall remain as is described in the current permit.

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 of the Dark Horse Facility is attached.

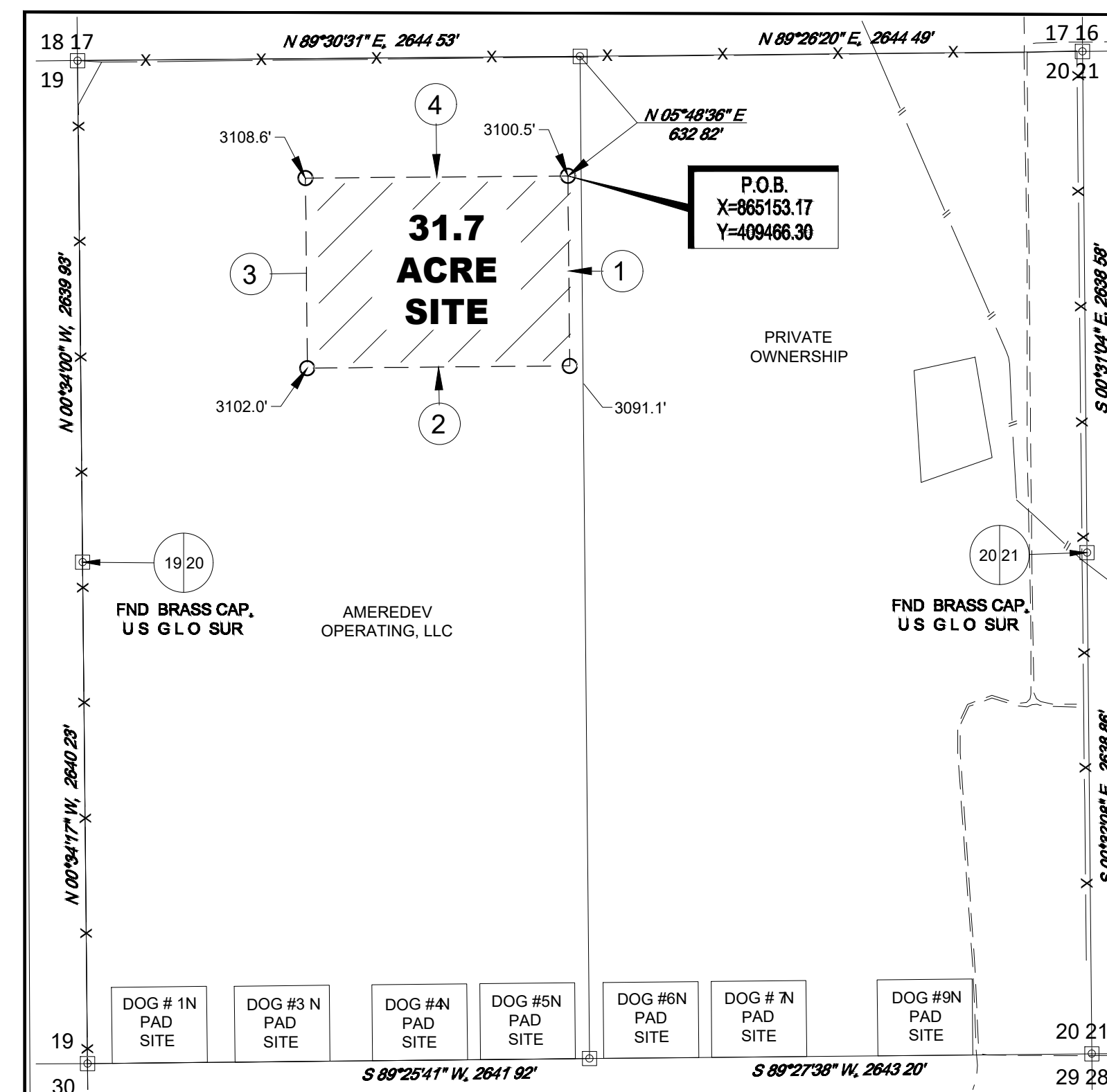
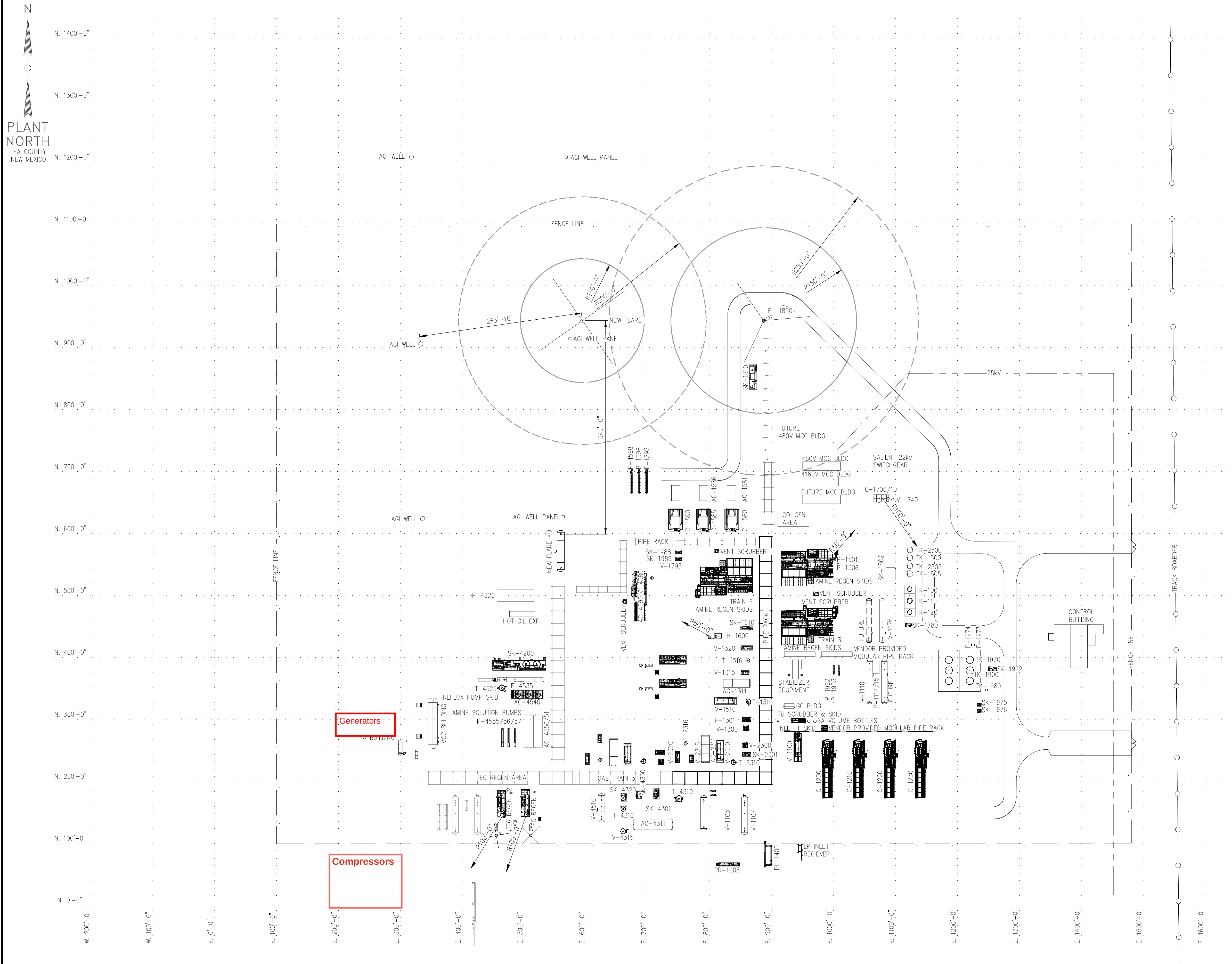


Section 5

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 of the Dark Horse Facility is attached.



SURVEY INFORMATION



AERIAL VIEW

NOTES:

REFERENCE DRAWINGS		REVISIONS					
			ISSUED FOR REVIEW – NEW FLARE LOCATION	CB	09/23/25	JM	09/23/25
			ISSUED FOR REVIEW – NEW AG WELL ADDED	CB	08/12/25	JM	08/12/25
			ISSUED FOR REVIEW – NEW FLARE LOCATION	CB	08/06/25	JM	08/06/25
			ISSUED FOR REVIEW	JCP	02/05/25	JM	02/05/25
			ISSUED FOR REVIEW – TRAIN 4 EQUIPMENT LAYOUT	JCP	08/08/24	JM	08/08/24
			ISSUED FOR REFERENCE	JCP	06/05/24	JM	06/05/24
DWG. NO.	TITLE	NO.	DESCRIPTION	BY	DATE	APPR.	DATE

DARK HORSE TREATING FACILITY



KAHUNA
11400 Westmoor Cir. Ste. 325
Westminster, CO 80021
• 303.451.7374

PLOT PLAN

SITE INFORMATION

GENERAL ARRANGEMENT

COUNTY: LEA COUNTY	DRAWN BY: C. BARNES	APPROVED: J. CIPOLLA
STATE: NEW MEXICO		
Proj. No.: 4083.0740.00	DWG. No.: DHTF-PP-2000B	SHEET No. 1 OF 1
SCALE: 1"=80'-0"		80

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.

Emissions calculations for the new compressor engines (Units C-1001 through C-1003), the new generator turbines (G-1001 through G-1002), updated fugitive emissions, and Units FL-1850 BD and FL-1950 BD are being added or revised with this application. Previously submitted emissions calculations for all other equipment included in the NSR Permit have not changed with this application and will remain as previously represented.

Compressor Engines:

Emissions for the compressor engines were calculated using engine and catalyst manufacturer data for NO_x, CO, VOC, and formaldehyde. PM and HAP emissions were calculated using AP-42 emissions factors. SO₂ emissions were calculated assuming the natural gas sulfur content of 5 gr/100 scf.

Generator Turbines:

Emissions for the generator turbines were calculated using Solar turbine manufacturer data for NO_x, CO, and VOC. PM and HAP emissions were calculated using AP-42 emissions factors. And SO₂ emissions were calculated assuming the natural gas sulfur content of 5 gr/100 scf.

For Units G-1001 through G-1002 (Solar SMT60), the Solar specification sheets show 25 ppmv. The actual units to be placed at this site will be rated at 15 ppmv. Therefore, the NO_x emission factor was ratioed to 15 ppmv at 15% O₂ to comply with Part 50.

Heaters:

NO_x, CO, VOC, and PM emissions were estimated using manufacturer guaranteed emissions factors. Hazardous air pollutant emissions were calculated using AP-42 factors for external natural gas combustion sources in Tables 1.4-1, 1.4-2 and 1.4-3. As a conservative measure, it was assumed that PM(Total) = PM₁₀ and PM (condensable) = PM_{2.5}. SO₂ emissions were estimated assuming 5 grains of sulfur per 100 scf for natural gas. Greenhouse gas emissions were estimated using methodology from 40 CFR Part 98 and emission factors from Tables C-1 and C-2 of Part 98.

Reboilers:

NO_x, CO, VOC, PM and hazardous emissions were calculated using AP-42 factors for external natural gas combustion sources in Tables 1.4-1, 1.4-2 and 1.4-3. As a conservative measure, it was assumed that PM(Total) = PM₁₀ and PM (condensable) = PM_{2.5}. SO₂ emissions were estimated assuming 5 grains of sulfur per 100 scf for natural gas. Greenhouse gas emissions were estimated using methodology from 40 CFR Part 98 and emission factors from Tables C-1 and C-2 of Part 98.

Glycol Dehydrators:

All emissions from these units were calculated using the ProMax simulation program. The glycol flash tank emissions will be routed back to the facility inlet and therefore, no emissions are expected. The regenerator emissions will be routed to a condenser and then controlled by a combustor. As a worst-case scenario, it is assumed the combustor will be out of operation 1% of the time, and those emissions will vent through a dehydrator vent stack. The remaining 99% of the time, the dehydrator regenerator emissions will be controlled by it's associated combustor at 98% destruction removal efficiency (DRE) and those emissions are represented under the combustor used for control. Emissions during SSM events are accounted for in flare blowdown emissions.

Amine Units:

All emissions from these units are calculated using ProMax. The amine flash tank emissions are routed to a gas line. The regenerator emissions from the amine units are routed to an acid gas injection well. There are no controlled emissions associated with the amine units. Emissions during SSM events are accounted for in flare blowdown (BD) emissions. Greenhouse gas emissions were estimated using methodology from 40 CFR Part 98 and emission factors from Tables C-1 and C-2 of Part 98.

Flares:

The plant flares are used for flaring during startup, shutdown, maintenance conditions. The only steady state conditions associated with these flares are from the pilot and sweep gas streams. SSM from the plant flares are due to various maintenance activities throughout the facility. These maintenance activities include but are not limited to compressor catalyst changes, blowdowns for associated maintenance, and emissions during VRU downtime.

The basis of the flaring calculations are the expected composition and maximum expected volumes of the gas. The SO₂ composition is based on a 98% molar conversion of H₂S to SO₂. NO_x and CO emissions for both scenarios are calculated using AP-42 Table 13.5-1 emission factors. VOC emissions are calculated from the VOC volume fraction of the gas to the flare based on the ProMax results for the associated gas stream, the specific volume of the VOC fraction of the gas, and a 98% destruction efficiency. The ProMax results can be found in Section 7. Emissions of greenhouse gases are calculated using methodology from 40 CFR Subpart 98.233(n).

Dehydrator Combustors:

NO_x, CO, and PM emissions were calculated using AP-42 factors for external natural gas combustion sources in Tables 1.4-1 and 1.4-2. HAP, VOC and H₂S emissions were calculated using the dehydrator condenser regenerator streams from ProMax with an estimated 98% capture efficiency and 98% control efficiency. A 99% capture efficiency was assumed as the combustors are expected to be down a maximum 1% of the time. Greenhouse gas emissions were estimated using methodology from 40 CFR Part 98 and emission factors from Tables C-1 and C-2 of Part 98.

Storage Tanks:

Uncontrolled tank emissions were calculated using ProMax. Controlled emissions will be captured by two (2) vapor recovery units (VRU) operated in parallel (automatic redundancy system ensures no VRU downtime). If there is any VRU downtime (both VRUs down) due to maintenance, tank emissions for tanks from train 1-3 will be routed to flare 1850 (FL-1850-BD) and tank emissions for tanks will be routed to an enclosed combustion device.

Loading Emissions:

Loading emissions were calculated using ProMax. Controlled emissions will be captured by vapor recovery units (VRU) operated in parallel. During VRU downtime, loading emissions will be routed to an enclosed combustion device. Same as for the storage tanks above.

Fugitive Emissions:

Fugitive emissions were estimated using emission factors from Table 2-4 of EPA Protocol for Equipment Leak Emission Estimates, November 1995, EPA-453/R-95-017. Component counts were estimated based on the current site and the expected expansion. The percent VOC and HAPs used in the calculations are based on the ProMax results for the gas inlet and liquids streams.

Haul Road Emissions:

Unpaved haul road emissions were estimated based on Equations 1a and 2 of AP-42 Section 13.2.2 (11/2006). Particle size multipliers and constants for these equations are found in AP-42 Table 13.2.2-2, Industrial Roads. Silt content is taken from AP-42 Table 13.2.2-1 and annual wet days is from AP-42 Figure 13.2.2-1.

Startup, Shutdown and Maintenance (SSM):

Emissions from various equipment blowdowns during SSM activities will be routed to and controlled by one of the three flares included in the application and represented under Units FL-1980 BD, FL-1950 BD and FL-2050 BD. For the maximum short term emission rate (lb/hr), the most conservative and highest emission rates that are possible to be flared/emitted were added. Note, not all blowdown events will or can occur at the same time. With this revision application, Enterprise is routing the Train 4 SSM emissions to authorized Unit FL-1950 BD, instead of the currently permitted FL-1850 BD. These two flares are identical; therefore, the control efficiency will be the same.

Dark Horse Facility

Emission Calculation Inputs

Site-Wide			
Description	Value	Unit	Notes
Operating Period	Continuous		
Site Elevation	3,100	ft	
Cumulative Total Operating Hours	8,760	hr	
Gas Throughput (Trains 1-3, Each)	110	MMSCFD	ProMax Amine Treating Units Pstreams T1-3
Condensate Throughput (Trains 1-3, Each)	694	bbl/day	
Gas Throughput (Trains 4-6, Each)	220	MMSCFD	
Condensate Throughput (Trains 4-6, Each)	1,703	bbl/day	
Total Site Gas Throughput	990	MMSCFD	
Total Site Condensate Throughput	8,199	bbl/day	

Fuel Gas			
Parameter	Value	Unit	Notes
Fuel Heat Value	1,251	Btu/scf	ProMax Makeup Fuel
Fuel H ₂ S Content	0.25	gr H ₂ S / 100 scf	Conservative Estimate
Fuel Sulfur Content	5.0	gr S / 100 scf	Conservative Estimate

Condensate Storage Tanks			
Parameter	Value	Unit	Notes
Number of Tanks	6	units	Facility Design
Volume	400	bbl	Facility Design
Gas Capture Efficiency	100%	%	Facility Design

Other Storage Tanks			
Parameter	Value	Unit	Notes
Sour Water Storage Tank	4	units	Facility Design
Sour Water Tank Volume	400	bbl	Facility Design
Slop Tank	4	units	Facility Design
Slop Tank Volume	400	bbl	Facility Design
Gas Capture Efficiency	100%	%	Facility Design

Truck Loadout			
Parameter	Value	Unit	Notes
Condensate and Water per Year	3,715,885	bbl/yr	Annual Limit
NGL Volume per Year	749,017	bbl/yr	Annual Limit
Loadout Rate	100	bbl/hr	Facility Design
			Loading emissions controlled by VRU, FL-1858-BD and FL-7967
Capture Efficiency	100%	%	

Flares and Vapor Combustors			
Parameter	Value	Unit	Notes
FL-1850 Pilot Flowrate	165	scf/hr	Manufacturer Specification
FL-1850 DRE	98%	%	Manufacturer Specification
FL-1850 Sweep Gas Flowrate	1500	scf/hr	Manufacturer Specification
FL-1950 Pilot Flowrate	180	Scf/hr	Manufacturer Specification
FL-1950 DRE	98%	%	Manufacturer Specification
FL-1950 Sweep Gas Flowrate	1500	scf/hr	Manufacturer Specification
FL-2050 Pilot Flowrate	195	Scf/hr	Manufacturer Specification
FL-2050 DRE	98%	%	Manufacturer Specification
FL-2050 Sweep Gas Flowrate	3000	scf/hr	Manufacturer Specification
Max Annual FL-1850 and FL-1950 Acid Gas Flaring Duration	9.5	hr	Facility Design
Max Hourly FL-1850 and FL-1950 Acid Gas Flaring Duration	0.25	hr	Facility Design
Max Annual FL-2050 Flaring Duration	365	hr	Assumed
Max Hourly FL-2050 Flaring Duration	0.25	hr	Assumed
Dehy Combustors' Pilot Flowrate	35	scf/hr	Design
Dehy Combustors' DRE	98%	%	Assumed
Dehy Combustors' Capture Efficiency	99%		Assumed
Tank Loading Combustor' Pilot Flowrate	130	scf/hr	Design

TEG and Amine Units			
Parameter	Value	Unit	Notes
Number of TEG Dehys	6	units	Design
Number of Amine Units	6	units	Design

Heaters			
Parameter	Design Heat Rate	Unit	Notes
H-1600	6.97	MMBTU/hr	Stabilizer Hot Oil Heater
H-1620	37	MMBTU/hr	Amine Hot Oil Heater
H-2600	27	MMBTU/hr	Stabilizer Hot Oil Heater
H-2620	37	MMBTU/hr	Amine Hot Oil Heater
H-3620	37	MMBTU/hr	Amine Hot Oil Heater
H-4620	82	MMBTU/hr	Amine Hot Oil Heater
H-5620	86	MMBTU/hr	Utility Hot Oil Heater
H-6620	86	MMBTU/hr	Utility Hot Oil Heater
E-1566	1.5	MMBTU/hr	TEG Reboiler (Direct Fired Heater)
E-2566	1.5	MMBTU/hr	TEG Reboiler (Direct Fired Heater)
E-3566	1.5	MMBTU/hr	TEG Reboiler (Direct Fired Heater)
E-4566	3.0	MMBTU/hr	TEG Reboiler (Direct Fired Heater)
H-1781	22	MMBTU/hr	Cryo Trim Heater
H-2781	22	MMBTU/hr	Cryo Trim Heater
H-1741	9	MMBTU/hr	Cryo Regen Heater
H-2741	9	MMBTU/hr	Cryo Regen Heater

Dark Horse Facility
Emission Summary

Maximum Uncontrolled Emissions																
Unit	Description	NO _x		CO		VOC		SO ₂		PM ₁₀		PM _{2.5}		H ₂ S		CO ₂ e
		lb/hr	tpy	lb/hr	tpy	lb/hr	tpy	lb/hr	tpy	lb/hr	tpy	lb/hr	tpy	lb/hr	tpy	tpy
C-1200	LP Inlet Compressor	1.65	7.24	13.78	60.35	2.53	11.07	0.22	0.98	0.19	0.82	0.19	0.82	1.07E-04	4.68E-04	9608.46
C-1210	LP Inlet Compressor	1.65	7.24	13.78	60.35	2.53	11.07	0.22	0.98	0.19	0.82	0.19	0.82	1.07E-04	4.68E-04	9608.46
C-1220	LP Inlet Compressor	1.65	7.24	13.78	60.35	2.53	11.07	0.22	0.98	0.19	0.82	0.19	0.82	1.07E-04	4.68E-04	9608.46
C-1230	LP Inlet Compressor	1.65	7.24	13.78	60.35	2.53	11.07	0.22	0.98	0.19	0.82	0.19	0.82	1.07E-04	4.68E-04	9608.46
H-1600	Stabilizer Hot Oil Heater	0.28	1.22	0.28	1.24	0.134	0.59	0.08	0.36	0.109	0.48	0.109	0.48	3.98E-05	1.74E-04	3574.82
H-1620	Amine Hot Oil Heater	1.48	6.50	1.51	6.60	0.71	3.11	0.44	1.94	0.58	2.53	0.58	2.53	2.11E-04	0.0009	18976.79
H-2600	Stabilizer Hot Oil Heater	1.08	4.74	1.10	4.81	0.52	2.27	0.32	1.41	0.42	1.84	0.42	1.84	1.54E-04	0.0007	13847.93
H-2620	Amine Hot Oil Heater	1.48	6.50	1.51	6.60	0.71	3.11	0.44	1.94	0.58	2.53	0.58	2.53	2.11E-04	0.0009	18976.79
H-3620	Amine Hot Oil Heater	1.48	6.50	1.51	6.60	0.71	3.11	0.44	1.94	0.58	2.53	0.58	2.53	2.11E-04	0.0009	18976.79
H-4620	Amine Hot Oil Heater	3.29	14.40	3.34	14.62	1.57	6.90	0.98	4.29	1.28	5.60	1.28	5.60	4.68E-04	0.0021	42056.66
H-5620	Utility Hot Oil Heater	3.45	15.10	3.50	15.33	1.65	7.23	1.03	4.50	1.34	5.88	1.34	5.88	4.91E-04	0.0022	44108.21
H-6620	Utility Hot Oil Heater	3.45	15.10	3.50	15.33	1.65	7.23	1.03	4.50	1.34	5.88	1.34	5.88	4.91E-04	0.0022	44108.21
E-1566	TEG Reboiler (Direct Fired Heater)	0.15	0.64	0.12	0.54	0.008	0.035	0.018	0.08	0.011	0.049	0.011	0.049	8.56E-06	3.75E-05	769.33
E-2566	TEG Reboiler (Direct Fired Heater)	0.15	0.64	0.12	0.54	0.008	0.035	0.018	0.08	0.011	0.049	0.011	0.049	8.56E-06	3.75E-05	769.33
E-3566	TEG Reboiler (Direct Fired Heater)	0.15	0.64	0.12	0.54	0.008	0.035	0.018	0.08	0.011	0.049	0.011	0.049	8.56E-06	3.75E-05	769.33
E-4566	TEG Reboiler (Direct Fired Heater)	0.29	1.29	0.25	1.08	0.016	0.071	0.036	0.16	0.022	0.098	0.022	0.098	1.71E-05	7.50E-05	1538.66
H-1781	Cryo Trim Heater	2.16	9.45	1.81	7.94	0.119	0.520	0.263	1.15	0.164	0.718	0.164	0.718	1.26E-04	5.50E-04	11283.49
H-2781	Cryo Trim Heater	2.16	9.45	1.81	7.94	0.119	0.520	0.263	1.15	0.164	0.718	0.164	0.718	1.26E-04	5.50E-04	11283.49
H-1741	Cryo Regen Heater	0.88	3.86	0.74	3.25	0.049	0.213	0.107	0.47	0.067	0.294	0.067	0.294	5.14E-05	2.25E-04	4615.98
H-2741	Cryo Regen Heater	0.88	3.86	0.74	3.25	0.049	0.213	0.107	0.47	0.067	0.294	0.067	0.294	5.14E-05	2.25E-04	4615.98
FL-1850	Plant Flare	0.29	1.26	0.57	2.51	0.01	0.04	0.02	0.10	-	-	-	-	5.95E-04	2.60E-03	-
FL-1850 BD	FL-1850 Facility Blowdown	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
FL-1950	Train 4, 5, and 6 Process Flare	0.29	1.27	0.58	2.54	0.01	0.04	0.02	0.11	-	-	-	-	6.00E-04	2.63E-03	1078.11
FL-1950 BD	FL-1950 Blowdown	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
FL-2050	Cryogenic Process Flare	0.55	2.42	1.10	4.82	0.02	0.07	0.046	0.20	-	-	-	-	1.14E-03	5.00E-03	2050.34
FL-2050 BD	FL-2050 Blowdown	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
FL-1967	Dehy Regen Combustor	0.004	0.02	0.004	0.02	-	-	0.0005	0.002	0.0003	0.001	0.0003	0.001	0.00001	5.475E-05	-
FL-2967	Dehy Regen Combustor	0.004	0.02	0.004	0.02	-	-	0.0005	0.002	0.0003	0.001	0.0003	0.001	0.00001	0.00005	-
FL-3967	Dehy Regen Combustor	0.004	0.02	0.004	0.02	-	-	0.0005	0.002	0.0003	0.001	0.0003	0.001	0.00001	0.00005	-
FL-4967	Dehy Regen Combustor	0.004	0.02	0.004	0.02	-	-	0.0005	0.002	0.0003	0.001	0.0003	0.001	1.25E-05	5.48E-05	-
FL-5967	Dehy Regen Combustor	0.004	0.02	0.004	0.02	-	-	0.0005	0.002	0.0003	0.001	0.0003	0.001	0.0000	0.000	-
FL-6967	Dehy Regen Combustor	0.004	0.02	0.004	0.02	-	-	0.0005	0.002	0.0003	0.001	0.0003	0.001	0.0000	0.000	-
FL-7967	Tank Loading Combustor	0.02	0.07	0.01	0.06	-	-	0.0019	0.008	-	-	-	-	0.00005	0.005	858.44
DEHY-1	TEG Dehydrator	-	-	-	-	223.30	978.05	-	-	-	-	-	-	0.003	0.014	6,696.24
DEHY-2	TEG Dehydrator	-	-	-	-	223.30	978.05	-	-	-	-	-	-	0.0031	0.014	6,696.24
DEHY-3	TEG Dehydrator	-	-	-	-	223.30	978.05	-	-	-	-	-	-	0.0031	0.014	6,696.24
DEHY-4	TEG Dehydrator	-	-	-	-	368.20	1,612.72	-	-	-	-	-	-	0.005	0.021	11,528.99
DEHY-5	TEG Dehydrator	-	-	-	-	368.20	1,612.72	-	-	-	-	-	-	0.0047	0.021	11,528.99
DEHY-6	TEG Dehydrator	-	-	-	-	368.20	1,612.72	-	-	-	-	-	-	0.0047	0.021	11,528.99
TK-1900	Stabilized Condensate Storage Tank	-	-	-	-	2.49	10.91	-	-	-	-	-	-	2.78E-08	1.22E-07	4.11E-13
TK-1901	Stabilized Condensate Storage Tank	-	-	-	-	2.49	10.91	-	-	-	-	-	-	2.78E-08	1.22E-07	4.11E-13
TK-1970	Sour Water Storage Tank	-	-	-	-	0.05	0.20	-	-	-	-	-	-	2.78E-08	1.22E-07	4.11E-13
TK-1971	Sour Water Storage Tank	-	-	-	-	0.05	0.20	-	-	-	-	-	-	2.78E-08	1.22E-07	4.11E-13
TK-1980	Slop Tank	-	-	-	-	0.01	0.03	-	-	-	-	-	-	0.28	1.23	0.55
TK-1981	Slop Tank	-	-	-	-	0.01	0.03	-	-	-	-	-	-	0.28	1.23	0.55
TK-2010	Slop Tank	-	-	-	-	0.01	0.03	-	-	-	-	-	-	0.28	1.23	0.55
TK-2020	Slop Tank	-	-	-	-	0.01	0.03	-	-	-	-	-	-	0.28	1.23	0.55
TK-2030	Sour Water Storage Tank	-	-	-	-	0.12	0.52	-	-	-	-	-	-	2.21	9.69	20.37
TK-2040	Sour Water Storage Tank	-	-	-	-	0.12	0.52	-	-	-	-	-	-	2.21	9.69	20.37
TK-2050	Stabilized Condensate Storage Tank	-	-	-	-	5.17	22.63	-	-	-	-	-	-	4.78E-08	2.09E-07	0.00
TK-2060	Stabilized Condensate Storage Tank	-	-	-	-	5.17	22.63	-	-	-	-	-	-	4.78E-08	2.09E-07	0.00
TK-2070	Stabilized Condensate Storage Tank	-	-	-	-	5.17	22.63	-	-	-	-	-	-	4.78E-08	2.09E-07	0.00
TK-2080	Stabilized Condensate Storage Tank	-	-	-	-	5.17	22.63	-	-	-	-	-	-	4.78E-08	2.09E-07	0.00
COND-LOAD 1-3	Condensate and Sour Water Loadout	-	-	-	-	0.21	0.92	-	-	-	-	-	-	0.01	0.03	0.07
COND-LOAD 4-6	Condensate and Sour Water Loadout	-	-	-	-	1.03	4.51	-	-	-	-	-	-	0.02	0.09	0.19
NGL-LOAD	Pressurized NGL Loadout	-	-	-	-	7.66E-04	3.31E-03	-	-	-	-	-	-	5.59E-10	2.41E-09	-
HAUL	Condensate, Water and NGL Truck Haul	-	-	-	-	-	-	-	-	0.63	0.86	0.06	0.09	-	-	-
FUG	Fugitive Emissions	-	-	-	-	14.13	61.90	-	-	-	-	-	-	0.59	2.59	1786.03
SSM	Startup, Shutdown, Maintenance	-	-	-	-	-	10.00	-	-	-	-	-	-	-	1.00	-
C-1001	Compressor Engine (Scenario 1)	1.82	7.97	14.37	62.93	3.81	16.69	0.25	1.07	0.21	0.90	0.21	0.90	1.17E-04	5.14E-04	10537.37
C-1002	Compressor Engine (Scenario 1)	1.82	7.97	14.37	62.93	3.81	16.69	0.25	1.07	0.21	0.90	0.21	0.90	1.17E-04	5.14E-04	10537.37
C-1003	Compressor Engine (Scenario 1)	1.82	7.97	14.37	62.93	3.81	16.69	0.25	1.07	0.21	0.90	0.21	0.90	1.17E-04	5.14E-04	10537.37
G-1001	Generator Turbine	3.92	17.15	3.15	13.81	0.22	0.98	0.66	2.87	0.36	1.59	0.36	1.59	3.13E-04	1.37E-03	28147.28
G-1002	Generator Turbine	3.92	17.15	3.15	13.81	0.22	0.98	0.66	2.87	0.36	1.59	0.36	1.59	3.13E-04	1.37E-03	28147.28
C-2001	Compressor Engine (Scenario 2)	5.15	22.54	18.38	80.51	6.07	26.59	0.27	1.18	0.23	0.99	0.23	0.99	1.29E-04	5.64E-04	11562.81
C-2002	Compressor Engine (Scenario 2)	5.15	22.54	18.38	80.51	6.07	26.59	0.27	1.18	0.23	0.99	0.23	0.99	1.29E-04	5.64E-04	11562.81
Totals		54.18	237.30	165.54	725.06	1,858.07	8,148.34	9.17	40.18	9.91	41.52	9.34	40.74	6.19	28.14	450,229.71

Maximum Controlled Emissions

Unit	Description	NO _x		CO		VOC		SO ₂		PM ₁₀		PM _{2.5}		H ₂ S		CO ₂ e
		lb/hr	tpy	lb/hr	tpy	lb/hr	tpy	lb/hr	tpy	lb/hr	tpy	lb/hr	tpy	lb/hr	tpy	tpy
C-1200	LP Inlet Compressor	1.65	7.24	1.82	7.97	1.83	8.02	0.22	0.98	0.19	0.82	0.19	0.82	1.07E-04	4.68E-04	9608.46
C-1210	LP Inlet Compressor	1.65	7.24	1.82	7.97	1.83	8.02	0.22	0.98	0.19	0.82	0.19	0.82	1.07E-04	4.68E-04	9608.46
C-1220	LP Inlet Compressor	1.65	7.24	1.82	7.97	1.83	8.02	0.22	0.98	0.19	0.82	0.19	0.82	1.07E-04	4.68E-04	9608.46
C-1230	LP Inlet Compressor	1.65	7.24	1.82	7.97	1.83	8.02	0.22	0.98	0.19	0.82	0.19	0.82	1.07E-04	4.68E-04	9608.46
H-1600	Stabilizer Hot Oil Heater	0.28	1.22	0.28	1.24	0.13	0.59	0.08	0.36	0.109	0.48	0.109	0.48	3.98E-05	1.74E-04	3574.82
H-1620	Amine Hot Oil Heater	1.48	6.50	1.51	6.60	0.71	3.11	0.44	1.94	0.58	2.53	0.58	2.53	2.11E-04	0.0009	18976.79
H-2600	Stabilizer Hot Oil Heater	1.08	4.74	1.10	4.81	0.52	2.27	0.32	1.41	0.42	1.84	0.42	1.84	1.54E-04	0.0007	13847.93
H-2620	Amine Hot Oil Heater	1.48	6.50	1.51	6.60	0.71	3.11	0.44	1.94	0.58	2.53	0.58	2.53	2.11E-04	0.0009	18976.79
H-3620	Amine Hot Oil Heater	1.48	6.50	1.51	6.60	0.71	3.11	0.44	1.94	0.58	2.53	0.58	2.53	2.11E-04	0.0009	18976.79
H-4620	Amine Hot Oil Heater	3.29	14.40	3.34	14.62	1.57	6.90	0.98	4.29	1.28	5.60	1.28	5.60	4.68E-04	0.0021	42056.66
H-5620	Utility Hot Oil Heater	3.45	15.10	3.50	15.33	1.65	7.23	1.03	4.50	1.34	5.88	1.34	5.88	4.91E-04	0.0022	44108.21
H-6620	Utility Hot Oil Heater	3.45	15.10	3.50	15.33	1.65	7.23	1.03	4.50	1.34	5.88	1.34	5.88	4.91E-04	0.0022	44108.21
E-1566	TEG Reboiler (Direct Fired Heater)	0.15	0.64	0.12	0.54	0.008	0.035	0.018	0.08	0.011	0.049	0.011	0.049	8.56E-06	3.75E-05	769.33
E-2566	TEG Reboiler (Direct Fired Heater)	0.15	0.64	0.12	0.54	0.008	0.035	0.018	0.08	0.011	0.049	0.011	0.049	8.56E-06	3.75E-05	769.33
E-3566	TEG Reboiler (Direct Fired Heater)	0.15	0.64	0.12	0.54	0.008	0.035	0.018	0.08	0.011	0.049	0.011	0.049	8.56E-06	3.75E-05	769.33
E-4566	TEG Reboiler (Direct Fired Heater)	0.29	1.29	0.25	1.08	0.016	0.071	0.036	0.16	0.022	0.098	0.022	0.098	1.71E-05	7.50E-05	1538.66
H-1781	Cryo Trim Heater	2.16	9.45	1.81	7.94	0.119	0.520	0.263	1.15	0.164	0.718	0.164	0.718	1.26E-04	5.50E-04	11283.49
H-2781	Cryo Trim Heater	2.16	9.45	1.81	7.94	0.119	0.520	0.263	1.15	0.164	0.718	0.164	0.718	1.26E-04	5.50E-04	11283.49
H-1741	Cryo Regen Heater	0.88	3.86	0.74	3.25	0.049	0.213	0.107	0.47	0.067	0.294	0.067	0.294	5.14E-05	2.25E-04	4615.98
H-2741	Cryo Regen Heater	0.88	3.86	0.74	3.25	0.049	0.213	0.107	0.47	0.067	0.294	0.067	0.294	5.14E-05	2.25E-04	4615.98
FL-1850	Plant Flare	0.29	1.26	0.57	2.51	0.01	0.04	0.02	0.10	-	-	-	-	0.001	0.003	1068.49
FL-1850 BD	FL-1850 Facility Blowdown	6.10	3.83	12.18	7.66	59.24	8.60	2,604.86	73.37	-	-	-	-	28.24	0.80	3,254.05
FL-1950	Train 4, 5, and 6 Process Flare	0.29	1.27	0.58	2.54	0.01	0.04	0.02	0.11	-	-	-	-	0.001	0.003	1078.11
FL-1950 BD	FL-1950 Blowdown	34.53	1.90	68.94	3.80	219.27	4.77	2,567.71	81.66	-	-	-	-	27.84	0.89	1615.95
FL-2050	Cryogenic Process Flare	0.55	2.42	1.10	4.82	0.02	0.07	0.05	0.20	-	-	-	-	0.0011	0.00	2,050.34
FL-2050 BD	FL-2050 Blowdown	204.34	2.50	407.94	5.00	7.03	0.09	0.09	0.0011	-	-	-	-	9.45E-04	1.16E-05	2,124.54
FL-1967	Dehy Regen Combustor	0.19	0.85	0.16	0.71	1.85	8.12	0.005	0.02	0.01	0.06	0.01	0.06	5.83E-05	2.55E-04	990.94
FL-2967	Dehy Regen Combustor	0.19	0.85	0.16	0.71	1.85	8.12	0.005	0.02	0.01	0.06	0.01	0.06	5.83E-05	2.55E-04	990.94
FL-3967	Dehy Regen Combustor	0.19	0.85	0.16	0.71	1.85	8.12	0.005	0.02	0.01	0.06	0.01	0.06	5.83E-05	2.55E-04	990.94
FL-4967	Dehy Regen Combustor	0.33	1.43	0.27	1.20	3.15	13.79	0.007	0.03	0.02	0.11	0.02	0.11	8.10E-05	3.55E-04	1,682.92
FL-5967	Dehy Regen Combustor	0.33	1.43	0.27	1.20	3.15	13.79	0.007	0.03	0.02	0.11	0.02	0.11	8.10E-05	3.55E-04	1,682.92
FL-6967	Dehy Regen Combustor	0.33	1.43	0.27	1.20	3.15	13.79	0.007	0.03	0.02	0.11	0.02	0.11	8.10E-05	3.55E-04	1,682.92
FL-7967	Tank Loading Combustor	0.18	0.79	0.15	0.66	0.43	1.90	0.039	0.17	0.01	0.05	0.01	0.05	4.46E-04	1.95E-03	858.44
DEHY-1	TEG Dehydrator	-	-	-	-	0.94	4.10	-	-	-	-	-	-	2.31E-05	1.01E-04	6.21
DEHY-2	TEG Dehydrator	-	-	-	-	0.94	4.10	-	-	-	-	-	-	2.31E-05	1.01E-04	6.21
DEHY-3	TEG Dehydrator	-	-	-	-	0.94	4.10	-	-	-	-	-	-	2.31E-05	1.01E-04	6.21
DEHY-4	TEG Dehydrator	-	-	-	-	1.59	6.97	-	-	-	-	-	-	3.46E-05	1.52E-04	10.76
DEHY-5	TEG Dehydrator	-	-	-	-	1.59	6.97	-	-	-	-	-	-	3.46E-05	1.52E-04	10.76
DEHY-6	TEG Dehydrator	-	-	-	-	1.59	6.97	-	-	-	-	-	-	3.46E-05	1.52E-04	10.76
TK-1900	Stabilized Condensate Storage Tank	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TK-1901	Stabilized Condensate Storage Tank	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TK-1970	Sour Water Storage Tank	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TK-1971	Sour Water Storage Tank	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TK-1980	Slop Tank	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TK-1981	Slop Tank	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TK-2010	Slop Tank	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TK-2020	Slop Tank	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TK-2030	Sour Water Storage Tank	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TK-2040	Sour Water Storage Tank	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TK-2050	Stabilized Condensate Storage Tank	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TK-2060	Stabilized Condensate Storage Tank	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TK-2070	Stabilized Condensate Storage Tank	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TK-2080	Stabilized Condensate Storage Tank	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
COND-LOAD 1-3	Condensate and Sour Water Loadout	-	-	-	-	0.004	0.02	-	-	-	-	-	-	0.0002	0.001	0.001
COND-LOAD 4-6	Condensate and Sour Water Loadout	-	-	-	-	0.02	0.09	-	-	-	-	-	-	0.0004	0.002	0.003
NGL-LOAD	Pressurized NGL Loadout	-	-	-	-	7.66E-04	3.31E-03	-	-	-	-	-	-	5.59E-10	2.41E-09	-
HAUL	Condensate, Water and NGL Truck Haul	-	-	-	-	-	-	-	-	0.63	0.86	0.063	0.09	-	-	-
FUG	Fugitive Emissions	-	-	-	-	14.13	61.90	-	-	-	-	-	-	0.59	2.59	1786.03
SSM	Startup, Shutdown, Maintenance	-	-	-	-	-	10.00	-	-	-	-	-	-	-	1.00	-
C-1001	Compressor Engine (Scenario 1)	1.82	7.97	2.43	10.62	3.08	13.50	0.25	1.07	0.21	0.90	0.21	0.90	1.17E-04	5.14E-04	10537.37
C-1002	Compressor Engine (Scenario 1)	1.82	7.97	2.43	10.62	3.08	13.50	0.25	1.07	0.21	0.90	0.21	0.90	1.17E-04	5.14E-04	10537.37
C-1003	Compressor Engine (Scenario 1)	1.82	7.97	2.43	10.62	3.08	13.50	0.25	1.07	0.21	0.90	0.21	0.90	1.17E-04	5.14E-04	10537.37
G-1001	Generator Turbine	3.92	17.15	3.15	13.81	0.18	0.81	0.66	2.87	0.36	1.59	0.36	1.59	3.13E-04	1.37E-03	28147.28
G-1002	Generator Turbine	3.92	17.15	3.15	13.81	0.18	0.81	0.66	2.87	0.36	1.59	0.36	1.59	3.13E-04	1.37E-03	28147.28
C-2001	Compressor Engine (Scenario 2)	3.68	16.10	1.84	8.05	4.45	19.50	0.27	1.18	0.23	0.99	0.23	0.99	1.29E-04	5.64E-04	11562.81
C-2002	Compressor Engine (Scenario 2)	3.68	16.10	1.84	8.05	4.45	19.50	0.27	1.18	0.23	0.99	0.23	0.99	1.29E-04	5.64E-04	11562.81
Totals Scenario 1		290.55	207.89	535.59	220.26	347.73	295.86	5,181.36	193.15	9.59	40.10	9.02	39.32	56.68	5.31	388,520.73
Total excluding Fugitives (Scenario 1)		290.55	207.89	535.59	220.26	333.60	233.95	5,181.36	193.15	9.59	40.10	9.02	39.32	56.09	2.72	386,734.71
Totals Scenario 2		292.45	216.20	531.99	204.50	347.39	294.37	5,181.16	192.29	9.42	39.38	8.86	38.60	56.68	5.31	380,034.24
Total excluding Fugitives (Scenario 2)		292.45	216.20	531.99	204.50	333.26	232.46	5,181.16	192.29	9.42	39.38	8.86	38.60	56.09	2.72	378,248.21

Notes:

For Units FL-1850 BD, FL-1950 BD and FL-2050 BD, the hourly emissions rate is based on the maximum hourly rate between all blowdown activities. As only one activity should occur at a time, this would be the worst-case scenario for emissions. The annual emissions rate is a sum of all of the blowdown activities that are expected to occur over the entire year.

Maximum Uncontrolled HAP Emissions

Unit	Description	HCHO		Acetaldehyde		Acrolein		Methanol		Toluene		Ethylbenzene		Xylenes		Benzene		n-Hexane		Total HAPs	
		lb/hr	tpy	lb/hr	tpy	lb/hr	tpy	lb/hr	tpy	lb/hr	tpy	lb/hr	tpy	lb/hr	tpy	lb/hr	tpy	lb/hr	tpy	lb/hr	tpy
C-1200	LP Inlet Compressor	0.88	3.86	0.16	0.69	0.096	0.42	0.047	0.20	0.0076	0.033	7.43E-04	0.0033	0.0034	0.015	0.0082	0.036	0.021	0.091	1.23	5.40
C-1210	LP Inlet Compressor	0.88	3.86	0.16	0.69	0.096	0.42	0.047	0.20	0.0076	0.033	7.43E-04	0.0033	0.0034	0.015	0.0082	0.036	0.021	0.091	1.23	5.40
C-1220	LP Inlet Compressor	0.88	3.86	0.16	0.69	0.096	0.42	0.047	0.20	0.0076	0.033	7.43E-04	0.0033	0.0034	0.015	0.0082	0.036	0.021	0.091	1.23	5.40
C-1230	LP Inlet Compressor	0.88	3.86	0.16	0.69	0.096	0.42	0.047	0.20	0.0076	0.033	7.43E-04	0.0033	0.0034	0.015	0.0082	0.036	0.021	0.091	1.23	5.40
H-1600	Stabilizer Hot Oil Heater	5.13E-04	0.0022	-	-	-	-	-	-	2.32E-05	1.02E-04	-	-	-	-	1.44E-05	6.29E-05	0.012	0.054	0.013	0.056
H-1620	Amine Hot Oil Heater	0.0027	0.012	-	-	-	-	-	-	1.23E-04	5.40E-04	-	-	-	-	7.62E-05	3.34E-04	0.065	0.29	0.068	0.30
H-2600	Stabilizer Hot Oil Heater	0.0020	0.009	-	-	-	-	-	-	9.00E-05	3.94E-04	-	-	-	-	5.56E-05	2.43E-04	0.048	0.21	0.050	0.22
H-2620	Amine Hot Oil Heater	0.0027	0.012	-	-	-	-	-	-	1.23E-04	5.40E-04	-	-	-	-	7.62E-05	3.34E-04	0.065	0.29	0.068	0.30
H-3620	Amine Hot Oil Heater	0.0027	0.012	-	-	-	-	-	-	1.23E-04	5.40E-04	-	-	-	-	7.62E-05	3.34E-04	0.065	0.29	0.068	0.30
H-4620	Amine Hot Oil Heater	0.0060	0.026	-	-	-	-	-	-	2.73E-04	1.20E-03	-	-	-	-	1.69E-04	7.39E-04	0.145	0.63	0.151	0.66
H-5620	Utility Hot Oil Heater	0.0063	0.028	-	-	-	-	-	-	2.87E-04	1.26E-03	-	-	-	-	1.77E-04	7.76E-04	0.152	0.66	0.159	0.69
H-6620	Utility Hot Oil Heater	0.0063	0.028	-	-	-	-	-	-	2.87E-04	1.26E-03	-	-	-	-	1.77E-04	7.76E-04	0.152	0.66	0.159	0.69
E-1566	TEG Reboiler (Direct Fired Heater)	1.10E-04	4.83E-04	-	-	-	-	-	-	5.00E-06	2.19E-05	-	-	-	-	3.09E-06	1.35E-05	0.0026	0.012	0.0028	0.012
E-2566	TEG Reboiler (Direct Fired Heater)	1.10E-04	4.83E-04	-	-	-	-	-	-	5.00E-06	2.19E-05	-	-	-	-	3.09E-06	1.35E-05	0.0026	0.012	0.0028	0.012
E-3566	TEG Reboiler (Direct Fired Heater)	1.10E-04	4.83E-04	-	-	-	-	-	-	5.00E-06	2.19E-05	-	-	-	-	3.09E-06	1.35E-05	0.0026	0.012	0.0028	0.012
E-4566	TEG Reboiler (Direct Fired Heater)	2.21E-04	9.66E-04	-	-	-	-	-	-	1.00E-05	4.38E-05	-	-	-	-	6.18E-06	2.71E-05	0.0053	0.023	0.0055	0.024
H-1781	Cryo Trim Heater	1.62E-03	7.09E-03	-	-	-	-	-	-	7.33E-05	3.21E-04	-	-	-	-	4.53E-05	1.98E-04	0.0388	0.170	0.0406	0.178
H-2781	Cryo Trim Heater	1.62E-03	7.09E-03	-	-	-	-	-	-	7.33E-05	3.21E-04	-	-	-	-	4.53E-05	1.98E-04	0.0388	0.170	0.0406	0.178
H-1741	Cryo Regen Heater	6.62E-04	2.90E-03	-	-	-	-	-	-	3.00E-05	1.31E-04	-	-	-	-	1.85E-05	8.12E-05	0.0159	0.070	0.0166	0.073
H-2741	Cryo Regen Heater	6.62E-04	2.90E-03	-	-	-	-	-	-	3.00E-05	1.31E-04	-	-	-	-	1.85E-05	8.12E-05	0.0159	0.070	0.0166	0.073
FL-1850	Plant Flare	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
FL-1850 BD	FL-1850 Facility Blowdown	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
FL-1950	Train 4, 5, and 6 Process Flare	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
FL-1950 BD	FL-1950 Blowdown	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
FL-2050	Cryogenic Process Flare	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
FL-2050 BD	FL-2050 Blowdown	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
FL-1967	Dehy Regen Combustor	-	-	-	-	-	-	-	-	-	-	-	-	-	-	12.33	53.98	-	-	37.63	164.80
FL-2967	Dehy Regen Combustor	-	-	-	-	-	-	-	-	-	-	-	-	-	-	12.33	53.98	-	-	37.63	164.80
FL-3967	Dehy Regen Combustor	-	-	-	-	-	-	-	-	-	-	-	-	-	-	12.33	53.98	-	-	37.63	164.80
FL-4967	Dehy Regen Combustor	-	-	-	-	-	-	-	-	-	-	-	-	-	-	20.64	90.42	-	-	63.95	280.08
FL-5967	Dehy Regen Combustor	-	-	-	-	-	-	-	-	-	-	-	-	-	-	20.64	90.42	-	-	63.95	280.08
FL-6967	Dehy Regen Combustor	-	-	-	-	-	-	-	-	-	-	-	-	-	-	20.64	90.42	-	-	63.95	280.08
FL-7967	Tank Loading Combustor	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.17	0.75	-	-	4.18	18.29
DEHY-1	TEG Dehydrator	-	-	-	-	-	-	-	-	34.05	149.14	2.32	10.16	7.36	32.24	23.35	102.29	26.35	115.42	93.44	409.25
DEHY-2	TEG Dehydrator	-	-	-	-	-	-	-	-	34.05	149.14	2.32	10.16	7.36	32.24	23.35	102.29	26.35	115.42	93.44	409.25
DEHY-3	TEG Dehydrator	-	-	-	-	-	-	-	-	34.05	149.14	2.32	10.16	7.36	32.24	23.35	102.29	26.35	115.42	93.44	409.25
DEHY-4	TEG Dehydrator	-	-	-	-	-	-	-	-	54.53	238.84	3.46	15.17	11.28	49.43	37.69	165.07	43.87	192.13	150.83	660.64
DEHY-5	TEG Dehydrator	-	-	-	-	-	-	-	-	54.53	238.84	3.46	15.17	11.28	49.43	37.69	165.07	43.87	192.13	150.83	660.64
DEHY-6	TEG Dehydrator	-	-	-	-	-	-	-	-	54.53	238.84	3.46	15.17	11.28	49.43	37.69	165.07	43.87	192.13	150.83	660.64
TK-1900	Stabilized Condensate Storage Tank	-	-	-	-	-	-	-	-	0.01	0.06	4.59E-04	0.002	0.001	0.006	0.02	0.09	0.44	1.93	0.48	2.08
TK-1901	Stabilized Condensate Storage Tank	-	-	-	-	-	-	-	-	0.01	0.06	4.59E-04	0.002	0.001	0.006	0.02	0.09	0.44	1.93	0.48	2.08
TK-1970	Sour Water Storage Tank	-	-	-	-	-	-	-	-	0.01	0.05	3.90E-04	0.002	0.001	0.003	0.02	0.08	0.0002	0.001	0.03	0.13
TK-1971	Sour Water Storage Tank	-	-	-	-	-	-	-	-	0.01	0.05	3.90E-04	0.002	0.001	0.003	0.02	0.08	0.0002	0.001	0.03	0.13
TK-1980	Slop Tank	-	-	-	-	-	-	-	-	0.002	0.01	6.60E-05	0.000	1.81E-04	0.0008	0.004	0.02	1.84E-06	8.08E-06	0.01	0.03
TK-1981	Slop Tank	-	-	-	-	-	-	-	-	0.002	0.01	0.000	0.000	0.000	0.001	0.004	0.02	1.84E-06	8.08E-06	0.01	0.03
TK-2010	Slop Tank	-	-	-	-	-	-	-	-	0.002	0.01	0.000	0.000	0.000	0.001	0.004	0.02	1.84E-06	8.08E-06	0.01	0.03
TK-2020	Slop Tank	-	-	-	-	-	-	-	-	0.002	0.01	0.000	0.000	0.000	0.001	0.004	0.02	1.84E-06	8.08E-06	0.01	0.03
TK-2030	Sour Water Storage Tank	-	-	-	-	-	-	-	-	0.03	0.11	0.001	0.004	0.002	0.007	0.04	0.19	0.0005	0.002	0.07	0.32
TK-2040	Sour Water Storage Tank	-	-	-	-	-	-	-	-	0.03	0.110	0.001	0.004	0.002	0.007	0.044	0.192	0.000	0.002	0.072	0.32
TK-2050	Stabilized Condensate Storage Tank	-	-	-	-	-	-	-	-	0.028	0.123	0.001	0.004	0.003	0.013	0.041	0.181	0.921	4.035	0.994	4.36
TK-2060	Stabilized Condensate Storage Tank	-	-	-	-	-	-	-	-	0.028	0.123	0.001	0.004	0.003	0.013	0.041	0.181	0.921	4.035	0.994	4.36
TK-2070	Stabilized Condensate Storage Tank	-	-	-	-	-	-	-	-	0.028	0.123	0.001	0.004	0.003	0.013	0.041	0.181	0.921	4.035	0.994	4.36
TK-2080	Stabilized Condensate Storage Tank	-	-	-	-	-	-	-	-	0.028	0.123	0.001	0.004	0.003	0.013	0.041	0.181	0.921	4.035	0.994	4.36
COND-LOAD 1-3	Condensate and Sour Water Loadout	-	-	-	-	-	-	-	-	0.001	0.01	0.0000	0.000	0.000	0.001	0.00	0.01	0.04	0.16	0.04	0.18
COND-LOAD 4-6	Condensate and Sour Water Loadout	-	-	-	-	-	-	-	-	0.01	0.03	0.0002	0.001	0.001	0.003	0.01	0.04	0.18	0.80	0.20	0.87
NGL-LOAD	Pressurized NGL Loadout	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.4E-04	6.0E-04
HAUL	Condensate, Water and NGL Truck Haul	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
FUG	Fugitive Emissions	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.44	10.69
SSM	Startup, Shutdown, Maintenance	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.00
C-1001	Compressor Engine (Scenario 1)	0.73	3.19	0.17	0.75	0.11	0.46	0.05	0.22	0.008	0.037	0.001	0.004	0.004	0.017	0.01	0.04	0.02	0.10	1.11	4.87
C-1002	Compressor Engine (Scenario 1)	0.73	3.19	0.17	0.75	0.11	0.46	0.05	0.22	0.008	0.037	0.001	0.004	0.004	0.017	0.01	0.04	0.02	0.10	1.11	4.87
C-1003	Compressor Engine (Scenario 1)	0.73	3.19	0.17	0.75	0.11	0.46	0.05	0.22	0.008	0.037	0.001	0.004	0.004	0.017	0.01	0.04	0.02	0.10	1.11	4.87
G-1001	Generator Turbine	0.04	0.17	0.002	0.01	0.0004	0.01	-	-	0.007	0.031	0.002	0.008	0.004	0.015	0.001	0.003	0.0000	0.0000	0.05	0.24
G-1002	Generator Turbine	0.04	0.17	0.002	0.01	0.0004	0.01	-	-	0.007	0.031	0.002	0.008	0.004	0.015	0.001	0.003	0.0000	0.0000	0.05	0.24
C-2001	Compressor Engine (Scenario 2)	2.21	9.66	0.188	0.83	0.1159	0.51	0.0564	0.247	0.009	0.040	0.001	0.004	0.004	0.018	0.010	0.043	0.0250	0.1096	2.63	11.51
C-2002	Compressor Engine (Scenario 2)	2.21	9.66	0.188	0.83	0.1159	0.51	0.0564	0.247	0.009	0.040	0.001	0.004	0.004	0.018	0.010	0.043	0.0250	0.1096	2.63	11.51
Totals		10.23	44.82	1																	

Maximum Controlled HAP Emissions

Unit	Description	HCHO		Acetaldehyde		Acrolein		Methanol		Toluene		Ethylbenzene		Xylenes		Benzene		n-Hexane		Total HAPs	
		lb/hr	tpy	lb/hr	tpy	lb/hr	tpy	lb/hr	tpy	lb/hr	tpy	lb/hr	tpy	lb/hr	tpy	lb/hr	tpy	lb/hr	tpy	lb/hr	tpy
C-1200	LP Inlet Compressor	0.19	0.82	0.16	0.69	0.10	0.42	0.05	0.20	0.008	0.03	7.43E-04	0.003	0.003	0.02	0.008	0.04	0.02	0.091	0.54	2.35
C-1210	LP Inlet Compressor	0.19	0.82	0.16	0.69	0.10	0.42	0.05	0.20	0.008	0.03	7.43E-04	0.003	0.003	0.02	0.008	0.04	0.02	0.091	0.54	2.35
C-1220	LP Inlet Compressor	0.19	0.82	0.16	0.69	0.10	0.42	0.05	0.20	0.008	0.03	7.43E-04	0.003	0.003	0.02	0.008	0.04	0.02	0.091	0.54	2.35
C-1230	LP Inlet Compressor	0.19	0.82	0.16	0.69	0.10	0.42	0.05	0.20	0.008	0.03	7.43E-04	0.003	0.003	0.02	0.008	0.04	0.02	0.091	0.54	2.35
H-1600	Stabilizer Hot Oil Heater	5.13E-04	0.0022	-	-	-	-	-	-	2.32E-05	1.02E-04	-	-	-	-	1.44E-05	6.29E-05	0.01	0.05	0.01	0.06
H-1620	Amine Hot Oil Heater	0.0027	0.012	-	-	-	-	-	-	1.23E-04	5.40E-04	-	-	-	-	7.62E-05	3.34E-04	0.07	0.29	0.07	0.30
H-2600	Stabilizer Hot Oil Heater	0.0020	0.009	-	-	-	-	-	-	9.00E-05	3.94E-04	-	-	-	-	5.56E-05	2.43E-04	0.05	0.21	0.05	0.22
H-2620	Amine Hot Oil Heater	0.0027	0.012	-	-	-	-	-	-	1.23E-04	5.40E-04	-	-	-	-	7.62E-05	3.34E-04	0.07	0.29	0.07	0.30
H-3620	Amine Hot Oil Heater	0.0027	0.012	-	-	-	-	-	-	1.23E-04	5.40E-04	-	-	-	-	7.62E-05	3.34E-04	0.07	0.29	0.07	0.30
H-4620	Amine Hot Oil Heater	0.0060	0.026	-	-	-	-	-	-	2.73E-04	1.20E-03	-	-	-	-	1.69E-04	7.39E-04	0.14	0.63	0.15	0.66
H-5620	Utility Hot Oil Heater	0.0063	0.028	-	-	-	-	-	-	2.87E-04	1.26E-03	-	-	-	-	1.77E-04	7.76E-04	0.15	0.66	0.16	0.69
H-6620	Utility Hot Oil Heater	0.0063	0.028	-	-	-	-	-	-	2.87E-04	1.26E-03	-	-	-	-	1.77E-04	7.76E-04	0.15	0.66	0.16	0.69
E-1566	TEG Reboiler (Direct Fired Heater)	1.10E-04	4.83E-04	-	-	-	-	-	-	5.00E-06	2.19E-05	-	-	-	-	3.09E-06	1.35E-05	0.003	0.01	0.003	0.01
E-2566	TEG Reboiler (Direct Fired Heater)	1.10E-04	4.83E-04	-	-	-	-	-	-	5.00E-06	2.19E-05	-	-	-	-	3.09E-06	1.35E-05	0.003	0.01	0.003	0.01
E-3566	TEG Reboiler (Direct Fired Heater)	1.10E-04	4.83E-04	-	-	-	-	-	-	5.00E-06	2.19E-05	-	-	-	-	3.09E-06	1.35E-05	0.003	0.01	0.003	0.01
E-4566	TEG Reboiler (Direct Fired Heater)	2.21E-04	9.66E-04	-	-	-	-	-	-	1.00E-05	4.38E-05	-	-	-	-	6.18E-06	2.71E-05	0.005	0.02	0.01	0.02
H-1781	Cryo Trim Heater	1.62E-03	7.09E-03	-	-	-	-	-	-	7.33E-05	3.21E-04	-	-	-	-	4.53E-05	1.98E-04	0.039	0.17	0.04	0.18
H-2781	Cryo Trim Heater	1.62E-03	7.09E-03	-	-	-	-	-	-	7.33E-05	3.21E-04	-	-	-	-	4.53E-05	1.98E-04	0.039	0.17	0.04	0.18
H-1741	Cryo Regen Heater	6.62E-04	2.90E-03	-	-	-	-	-	-	3.00E-05	1.31E-04	-	-	-	-	1.85E-05	8.12E-05	0.016	0.07	0.02	0.07
H-2741	Cryo Regen Heater	6.62E-04	2.90E-03	-	-	-	-	-	-	3.00E-05	1.31E-04	-	-	-	-	1.85E-05	8.12E-05	0.016	0.07	0.02	0.07
FL-1850	Plant Flare	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
FL-1850 BD	FL-1850 Facility Blowdown	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
FL-1950	Train 4, 5, and 6 Process Flare	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
FL-1950 BD	FL-1950 Blowdown	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
FL-2050	Cryogenic Process Flare	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
FL-2050 BD	FL-2050 Blowdown	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
FL-1967	Dehy Regen Combustor	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.25	1.08	-	-	0.75	3.30
FL-2967	Dehy Regen Combustor	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.25	1.08	-	-	0.75	3.30
FL-3967	Dehy Regen Combustor	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.25	1.08	-	-	0.75	3.30
FL-4967	Dehy Regen Combustor	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.41	1.81	-	-	1.28	5.60
FL-5967	Dehy Regen Combustor	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.41	1.81	-	-	1.28	5.60
FL-6967	Dehy Regen Combustor	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.41	1.81	-	-	1.28	5.60
FL-7967	Tank Loading Combustor	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.0034	0.015	-	-	0.08	0.37
DEHY-1	TEG Dehydrator	-	-	-	-	-	-	-	-	0.10	0.43	0.00	0.01	0.01	0.04	0.12	0.55	0.15	0.64	0.38	1.66
DEHY-2	TEG Dehydrator	-	-	-	-	-	-	-	-	0.10	0.43	0.00	0.01	0.01	0.04	0.12	0.55	0.15	0.64	0.38	1.66
DEHY-3	TEG Dehydrator	-	-	-	-	-	-	-	-	0.10	0.43	0.00	0.01	0.01	0.04	0.12	0.55	0.15	0.64	0.38	1.66
DEHY-4	TEG Dehydrator	-	-	-	-	-	-	-	-	0.17	0.73	0.00	0.02	0.01	0.06	0.21	0.91	0.25	1.10	0.65	2.83
DEHY-5	TEG Dehydrator	-	-	-	-	-	-	-	-	0.17	0.73	0.00	0.02	0.01	0.06	0.21	0.91	0.25	1.10	0.65	2.83
DEHY-6	TEG Dehydrator	-	-	-	-	-	-	-	-	0.17	0.73	0.00	0.02	0.01	0.06	0.21	0.91	0.25	1.10	0.65	2.83
TK-1900	Stabilized Condensate Storage Tank	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TK-1901	Stabilized Condensate Storage Tank	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TK-1970	Sour Water Storage Tank	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TK-1971	Sour Water Storage Tank	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TK-1980	Slop Tank	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TK-1981	Slop Tank	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TK-2010	Slop Tank	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TK-2020	Slop Tank	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TK-2030	Sour Water Storage Tank	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TK-2040	Sour Water Storage Tank	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TK-2050	Stabilized Condensate Storage Tank	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TK-2060	Stabilized Condensate Storage Tank	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TK-2070	Stabilized Condensate Storage Tank	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TK-2080	Stabilized Condensate Storage Tank	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
COND-LOAD 1-3	Condensate and Sour Water Loadout	-	-	-	-	-	-	-	-	0.00002	0.00011	0.00000	0.00000	0.00000	0.00001	0.00004	0.0002	0.001	0.003	0.001	0.004
COND-LOAD 4-6	Condensate and Sour Water Loadout	-	-	-	-	-	-	-	-	0.0001	0.0005	0.00000	0.00002	0.00001	0.0001	0.0002	0.001	0.004	0.02	0.004	0.02
NGL-LOAD	Pressurized NGL Loadout	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.4E-04	6.0E-04
HAUL	Condensate, Water and NGL Truck Haul	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
FUG	Fugitive Emissions	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.44	10.69
SSM	Startup, Shutdown, Maintenance	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.00
C-1001	Compressor Engine (Scenario 1)	0.49	2.12	0.17	0.75	0.11	0.46	0.05	0.22	0.008	0.04	0.001	0.004	0.004	0.017	0.01	0.04	0.02	0.10	0.87	3.81
C-1002	Compressor Engine (Scenario 1)	0.49	2.12	0.17	0.75	0.11	0.46	0.05	0.22	0.01	0.04	0.001	0.004	0.004	0.017	0.01	0.04	0.02	0.10	0.87	3.81
C-1003	Compressor Engine (Scenario 1)	0.49	2.12	0.17	0.75	0.11	0.46	0.05	0.22	0.01	0.04	0.001	0.004	0.004	0.017	0.01	0.04	0.02	0.10	0.87	3.81
G-1001	Generator Turbine	0.04	0.17	0.002	0.01	0.0004	0.002	-	-	0.007	0.03	0.002	0.008	0.004	0.015	0.001	0.003	0.0000	0.0000	0.05	0.24
G-1002	Generator Turbine	0.04	0.17	0.002	0.01	0.0004	0.002	-	-	0.01	0.03	0.002	0.008	0.004	0.015	0.001	0.003	0.0000	0.0000	0.05	0.24
C-2001	Compressor Engine (Scenario 2)	0.59	2.58	0.188	0.83	0.1159	0.508	0.06	0.00	0.01	0.04	0.001	0.004	0.004	0.018	0.010	0.043	0.0250	0.1096	1.01	4.42
C-2002	Compressor Engine (Scenario 2)	0.59	2.58	0.188	0.83	0.1159	0.508	0.06	0.00	0.01	0.04	0.001	0.004	0.004	0.018	0.010	0.043	0.0250	0.1096	1.01	4.42
Totals Scenario 1		3.49	15.30	1.52	6.67	0.93	4.09	0.45	1.49	0.88	3.85	0.03	0.14	0.11	0.49	3.06	13.42	2.23	9.76	19.45	86.19
Totals Scenario 2		2.04	8.93	1.01	4.41	0.62	2.70	0.30	0.82	0.85	3.74	0.03	0.13	0.10	0.44	3.04	13.30	2.16	9.46	16.84	74.77

Dark Horse Facility

Inlet Compressor Engines

Unit: C-1200 through C-1230
Description: Four (4) CAT G3608 A4 4SLB Inlet Gas Compressor Engines with Oxidation Catalyst

Engine Power ¹ :	2500	hp	Mfg. Data - 100% Load
Fuel Consumption:	7488	Btu/hp-hr	Mfg. Data - 100% Load
Fuel Type:	NG		Mfg. Data
Fuel Heating Value:	1,251	Btu/scf	ProMax Makeup Fuel
Operating Hours:	8,760	hours	Continuous
Fuel Usage:	14961.37	scf/hr	Calculated
Annual Fuel Usage:	131.06	MMScf/yr	Calculated

Uncontrolled Emission Calculations

NO _x	CO	VOC ²	SO ₂ ³	PM ^{4,5}	H ₂ S ⁶	HCHO ⁷	Acetaldehyde ⁷	Acrolein ⁷	Methanol ⁷	Toluene ⁷	Ethylbenzene ⁷	Xylenes ⁷	Benzene ⁷	n-Hexane ⁷	1,3-Butadiene ⁷	2,2,4-TMP ⁷	HAPs ⁷	
0.30	2.50	0.27	5		0.25	0.16												g/hp-hr
			0.011	0.010	5.71E-06		8.36E-03	5.14E-03	2.50E-03	4.08E-04	3.97E-05	1.84E-04	4.40E-04	1.11E-03	2.67E-04	2.50E-04		gr/100 scf
1.65	13.78	2.53	0.22	0.19	1.07E-04	0.88	0.16	0.096	0.047	0.0076	0.00074	0.0034	0.0082	0.021	0.0050	0.0047	1.23	lb/MMBtu
7.24	60.35	11.07	0.98	0.82	4.68E-04	3.86	0.69	0.42	0.20	0.033	0.0033	0.015	0.036	0.091	0.022	0.020	5.40	lb/hr ⁸
																		tpy ⁹

Controlled Emission Calculations

NO _x	CO	VOC	SO ₂	PM	H ₂ S	HCHO	Acetaldehyde	Acrolein	Methanol	Toluene	Ethylbenzene	Xylenes	Benzene	n-Hexane	1,3-Butadiene	2,2,4-TMP	HAPs ¹⁰	
	86.8%					78.8%												Control efficiency ¹¹
0.30	0.33	0.27				0.034												g/hp-hr
1.65	1.82	1.83	0.22	0.19	1.07E-04	0.19	0.16	0.096	0.047	0.0076	0.00074	0.0034	0.0082	0.021	0.0050	0.0047	0.54	lb/hr ¹²
7.24	7.97	8.02	0.98	0.82	4.68E-04	0.82	0.69	0.42	0.20	0.033	0.0033	0.015	0.036	0.091	0.022	0.020	2.35	tpy ⁹

Greenhouse Gas Calculations¹³

CO ₂	N ₂ O	CH ₄	CO ₂ e	
53.1	0.0001	0.001		kg/MMBtu
1	265	28		GWP ¹⁴
2191.46	0.0041	0.041	2193.71	lb/hr ¹⁵
9598.607	0.018	0.18	9608.46	tpy ⁹

Footnotes

- ¹ No derate being requested
For uncontrolled and controlled emissions, emission factors are taken from catalyst data. VOC emissions factors do not include HCHO or acetaldehyde. These emissions are added to VOC calculated emissions;
- ² therefore, VOC emissions represent Total VOC.
- ³ Assumes natural gas sulfur content of 5 gr/100 scf
SO₂ EF (lb/MMBtu) =[(5 gr S/100 scf * 1 lb/7000 gr * 64 lb/lbmol SO₂/32 lb/lbmol S) / HHV (Btu/scf)] * 10⁶ Btu/MMBtu
Assume 100% conversion of combusted H₂S into SO₂ and 98% Combustion Efficiency. Additional SO₂ emissions from the combustion of H₂S:
SO₂ (lb/hr) from H₂S = 98%*[(0.25 gr H₂S/100 scf * 1 lb/7000 gr * 64 lb/lbmol SO₂/34 lb/lbmol H₂S) / HHV (Btu/scf)] * (Btu/hp-hr * hp)
- ⁴ Emission Factors from AP-42 Table 3.2-2 (4SLB)
- ⁵ PM includes Condensable + Filterable; assume PM₁₀ = PM_{2.5}
- ⁶ Assumes a conservative natural gas H₂S content of 0.25 gr/100 scf and 98% conversion to SO₂.
H₂S EF (lb/MMBtu) =2%*[(0.25 gr H₂S/100 scf * 1 lb/7000 gr) / HHV (Btu/scf)] * 10⁶ Btu/MMbtu
- ⁷ Uncontrolled HAP emissions based on AP-42 Table 3.2-2 (4SLB)
- ⁸ NO_x, CO, and VOC lb/hr Emission Rate = EF * 1 lb/453.592 g * hp
PM & HAP lb/hr Emission Rate = EF * Fuel Consumption (Btu/hp-hr) * hp * 1 MMBtu/10⁶ Btu
- ⁹ tpy = lb/hr * hours of operation * 1 ton/2000 lb
- ¹⁰ Controlled HAP emissions (lb/hr) = Uncontrolled Total HAPs (lb/hr) - Uncontrolled HCHO (lb/hr) + Controlled HCHO (lb/hr)
- ¹¹ Catalysts are guaranteed by manufacturer to be at least as efficient as claimed.
- ¹² lb/hr (controlled) = lb/hr (uncontrolled) * (1 - Control Efficiency)
- ¹³ CO₂ emission factor from manufacturer's data. All other greenhouse gas emission factors are from 40 CFR 98 Subpart C
- ¹⁴ 40 CFR 98 Subpart A, Table A-1
- ¹⁵ CO₂, N₂O, and CH₄ lb/hr = EF (kg/MMBtu) * 2.20462 lb/kg * Fuel consumption (Btu/hp-hr) * Engine hp * 1 MMBtu/10⁶ Btu
CO₂e lb/hr = CO₂ lb/hr + (CH₄ lb/hr * GWP) + (N₂O lb/hr * GWP)

Dark Horse Facility
Compressor Engines

Unit: C-1001 through C-1003
Description: Three (3) CAT G3608 4SLB Gas Compressor Engines with Oxidation Catalyst

Engine Power ¹ :	2750	hp	Mfg. Data - 100% Load
Fuel Consumption:	7471	Btu/hp-hr	Mfg. Data - 100% Load
Fuel Type:	NG		Mfg. Data
Fuel Heating Value:	1,251	Btu/scf	ProMax Makeup Fuel
Operating Hours:	8,760	hours	Continuous
Fuel Usage:	16420.15	scf/hr	Calculated
Annual Fuel Usage:	143.84	MMScf/yr	Calculated

Uncontrolled Emission Calculations

NO _x	CO	VOC ²	SO ₂ ³	PM ^{4,5}	H ₂ S ⁶	HCHO ⁷	Acetaldehyde ⁷	Acrolein ⁷	Methanol ⁷	Toluene ⁷	Ethylbenzene ⁷	Xylenes ⁷	Benzene ⁷	n-Hexane ⁷	1,3-Butadiene ⁷	2,2,4-TMP ⁷	HAPs ⁷	
0.30	2.37	0.48				0.12												g/hp-hr
			5		0.25													gr/100 scf
			0.011	0.010	5.71E-06		8.36E-03	5.14E-03	2.50E-03	4.08E-04	3.97E-05	1.84E-04	4.40E-04	1.11E-03	2.67E-04	2.50E-04		lb/MMBtu
1.82	14.37	3.81	0.25	0.21	1.17E-04	0.73	0.17	0.106	0.051	0.0084	0.00082	0.0038	0.0090	0.023	0.0055	0.0051	1.11	lb/hr ⁸
7.97	62.93	16.69	1.07	0.90	5.14E-04	3.19	0.75	0.46	0.22	0.037	0.0036	0.017	0.040	0.100	0.024	0.022	4.87	tpy ⁹

Controlled Emission Calculations

NO _x	CO	VOC	SO ₂	PM	H ₂ S	HCHO	Acetaldehyde	Acrolein	Methanol	Toluene	Ethylbenzene	Xylenes	Benzene	n-Hexane	1,3-Butadiene	2,2,4-TMP	HAPs ¹⁰	
	83.1%	16.7%				33.3%												Control efficiency ¹¹
0.30	0.40	0.40				0.080												g/hp-hr
1.82	2.43	3.08	0.25	0.21	1.17E-04	0.49	0.17	0.106	0.051	0.0084	0.00082	0.0038	0.0090	0.023	0.0055	0.0051	0.87	lb/hr ¹²
7.97	10.62	13.50	1.07	0.90	5.14E-04	2.12	0.75	0.46	0.22	0.037	0.0036	0.017	0.040	0.100	0.024	0.022	3.81	tpy ⁹

Greenhouse Gas Calculations¹³

CO ₂	N ₂ O	CH ₄	CO ₂ e	
53.1	0.0001	0.001		kg/MMBtu
1	265	28		GWP ¹⁴
2,403.32	0.00	0.05	2,405.79	lb/hr ¹⁵
10,526.56	0.02	0.20	10,537.37	tpy ⁹

Footnotes

- ¹ No derate being requested
For uncontrolled emissions, emission factors are taken from Caterpillar data and for controlled emissions, emission factors are taken from catalyst data. VOC emissions factors do not include HCHO or acetaldehyde.
- ² These emissions are added to VOC calculated emissions; therefore, VOC emissions represent Total VOC.
- ³ Assumes natural gas sulfur content of 5 gr/100 scf
SO₂ EF (lb/MMBtu) =[(5 gr S/100 scf * 1 lb/7000 gr * 64 lb/lbmol SO₂/32 lb/lbmol S) / HHV (Btu/scf)] * 10⁶ Btu/MMBtu
Assume 100% conversion of combusted H₂S into SO₂ and 98% Combustion Efficiency. Additional SO₂ emissions from the combustion of H₂S:
SO₂ (lb/hr) from H₂S = 98%*[(0.25 gr H₂S/100 scf * 1 lb/7000 gr * 64 lb/lbmol SO₂/34 lb/lbmol H₂S) / HHV (Btu/scf)] * (Btu/hp-hr * hp)
- ⁴ Emission Factors from AP-42 Table 3.2-2 (4SLB)
- ⁵ PM includes Condensable + Filterable; assume PM₁₀ = PM_{2.5}
- ⁶ Assumes a conservative natural gas H₂S content of 0.25 gr/100 scf and 98% conversion to SO₂.
H₂S EF (lb/MMBtu) =2%*[(0.25 gr H₂S/100 scf * 1 lb/7000 gr) / HHV (Btu/scf)] * 10⁶ Btu/MMbtu
- ⁷ Uncontrolled HAP emissions based on AP-42 Table 3.2-2 (4SLB)
- ⁸ NO_x, CO, and VOC lb/hr Emission Rate = EF * 1 lb/453.592 g * hp

PM & HAP lb/hr Emission Rate = EF * Fuel Consumption (Btu/hp-hr) * hp * 1 MMBtu/10⁶ Btu
- ⁹ tpy = lb/hr * hours of operation * 1 ton/2000 lb
- ¹⁰ Controlled HAP emissions (lb/hr) = Uncontrolled Total HAPs (lb/hr) - Uncontrolled HCHO (lb/hr) + Controlled HCHO (lb/hr)
- ¹¹ Catalysts are guaranteed by manufacturer to be at least as efficient as claimed.
- ¹² lb/hr (controlled) = lb/hr (uncontrolled) * (1 - Control Efficiency)
- ¹³ CO₂ emission factor from manufacturer's data. All other greenhouse gas emission factors are from 40 CFR 98 Subpart C
- ¹⁴ 40 CFR 98 Subpart A, Table A-1
- ¹⁵ CO₂, N₂O, and CH₄ lb/hr = EF (kg/MMBtu) * 2.20462 lb/kg * Fuel consumption (Btu/hp-hr) * Engine hp * 1 MMBtu/10⁶ Btu
CO₂e lb/hr = CO₂ lb/hr + (CH₄ lb/hr * GWP) + (N₂O lb/hr * GWP)

Dark Horse Facility
Compressor Engines

Unit: C-2001 through C-2002
Description: Two (2) CAT G3612 4SLB Gas Compressor Engines with Oxidation Catalyst

Engine Power ¹ :	3335	hp	Mfg. Data - 100% Load (DM5312-00)
Fuel Consumption:	6760	Btu/hp-hr	Mfg. Data - 100% Load (DM5312-00)
Fuel Type:	NG		Mfg. Data
Fuel Heating Value:	1,251	Btu/scf	ProMax Makeup Fuel
Operating Hours:	8,760	hours	Continuous
Fuel Usage:	18018.06	scf/hr	Calculated
Annual Fuel Usage:	157.84	MMScf/yr	Calculated

Uncontrolled Emission Calculations

NO _x	CO	VOC ²	SO ₂ ³	PM ^{4,5}	H ₂ S ⁶	HCHO	Acetaldehyde ⁷	Acrolein ⁷	Methanol ⁷	Toluene ⁷	Ethylbenzene ⁷	Xylenes ⁷	Benzene ⁷	n-Hexane ⁷	1,3-Butadiene ⁷	2,2,4-TMP ⁷	HAPs ⁷	
0.70	2.50	0.50				0.3												g/hp-hr
			5		0.25													gr/100 scf
			0.011	0.010	5.71E-06		8.36E-03	5.14E-03	2.50E-03	4.08E-04	3.97E-05	1.84E-04	4.40E-04	1.11E-03	2.67E-04	2.50E-04		lb/MMBtu
5.15	18.38	6.07	0.27	0.23	1.29E-04	2.21	0.19	0.116	0.056	0.0092	0.00090	0.0041	0.0099	0.025	0.0060	0.0056	2.63	lb/hr ⁸
22.54	80.51	26.59	1.18	0.99	5.64E-04	9.66	0.83	0.51	0.25	0.040	0.0039	0.018	0.043	0.110	0.026	0.025	11.51	tpy ⁹

Controlled Emission Calculations

NO _x	CO	VOC	SO ₂	PM	H ₂ S	HCHO	Acetaldehyde	Acrolein	Methanol	Toluene	Ethylbenzene	Xylenes	Benzene	n-Hexane	1,3-Butadiene	2,2,4-TMP	HAPs ¹⁰	
	90.0%	0.0%				73.3%												Control efficiency ¹¹
0.50	0.25	0.50				0.08												g/hp-hr
3.68	1.84	4.45	0.27	0.23	1.29E-04	0.59	0.19	0.116	0.056	0.0092	0.00090	0.0041	0.0099	0.025	0.0060	0.0056	1.01	lb/hr ¹²
16.10	8.05	19.50	1.18	0.99	5.64E-04	2.58	0.83	0.51	0.25	0.040	0.0039	0.018	0.043	0.110	0.026	0.025	4.42	tpy ⁹

Greenhouse Gas Calculations¹³

CO ₂	N ₂ O	CH ₄	CO ₂ e	
53.1	0.0001	0.001		kg/MMBtu
1	265	28		GWP ¹⁴
2,637.20	0.00	0.05	2,639.91	lb/hr ¹⁵
11,550.95	0.02	0.22	11,562.81	tpy ⁹

Footnotes

- ¹ No derate being requested
- For uncontrolled emissions, emission factors are taken from Caterpillar data and for controlled emissions, emission factors are taken from catalyst data. VOC emissions factors do not include HCHO or acetaldehyde. These
- ² emissions are added to VOC calculated emissions; therefore, VOC emissions represent Total VOC.
- ³ Assumes natural gas sulfur content of 5 gr/100 scf
SO₂ EF (lb/MMBtu) =[(5 gr S/100 scf * 1 lb/7000 gr * 64 lb/lbmol SO₂/32 lb/lbmol S) / HHV (Btu/scf)] * 10⁶ Btu/MMBtu
Assume 100% conversion of combusted H₂S into SO₂ and 98% Combustion Efficiency. Additional SO₂ emissions from the combustion of H₂S:
SO₂ (lb/hr) from H₂S = 98%*[(0.25 gr H₂S/100 scf * 1 lb/7000 gr * 64 lb/lbmol SO₂/34 lb/lbmol H₂S) / HHV (Btu/scf)] * (Btu/hp-hr * hp)
- ⁴ Emission Factors from AP-42 Table 3.2-2 (4SLB)
- ⁵ PM includes Condensable + Filterable; assume PM₁₀ = PM_{2.5}
- ⁶ Assumes a conservative natural gas H₂S content of 0.25 gr/100 scf and 98% conversion to SO₂.
H₂S EF (lb/MMBtu) =2%*[(0.25 gr H₂S/100 scf * 1 lb/7000 gr) / HHV (Btu/scf)] * 10⁶ Btu/MMbtu
- ⁷ Uncontrolled HAP emissions based on AP-42 Table 3.2-2 (4SLB). Formaldehyde based on catalyst specification sheet.
- ⁸ NO_x, CO, and VOC lb/hr Emission Rate = EF * 1 lb/453.592 g * hp

PM & HAP lb/hr Emission Rate = EF * Fuel Consumption (Btu/hp-hr) * hp * 1 MMBtu/10⁶ Btu
- ⁹ tpy = lb/hr * hours of operation * 1 ton/2000 lb
- ¹⁰ Controlled HAP emissions (lb/hr) = Uncontrolled Total HAPs (lb/hr) - Uncontrolled HCHO (lb/hr) + Controlled HCHO (lb/hr)
- ¹¹ Catalysts are guaranteed by manufacturer to be at least as efficient as claimed.
- ¹² lb/hr (controlled) = lb/hr (uncontrolled) * (1 - Control Efficiency)
- ¹³ CO₂ emission factor from manufacturer's data. All other greenhouse gas emission factors are from 40 CFR 98 Subpart C
- ¹⁴ 40 CFR 98 Subpart A, Table A-1
- ¹⁵ CO₂, N₂O, and CH₄ lb/hr = EF (kg/MMBtu) * 2.20462 lb/kg * Fuel consumption (Btu/hp-hr) * Engine hp * 1 MMBtu/10⁶ Btu
CO₂e lb/hr = CO₂ lb/hr + (CH₄ lb/hr * GWP) + (N₂O lb/hr * GWP)

Dark Horse Facility

Generator Turbine

Unit: G-1001 through G-1002
Description: Two (2) Solar SMT60 Generator Turbines

Engine Power:	4925	kW	Mfg. Data - 100% Load
Engine Power ¹ :	6605	hp	Calculated, based on Mfg. Data - 100% Load
Fuel Consumption:	8309.5	Btu/hp-hr	Calculated, based on Mfg. Data - 100% Load
Fuel Consumption:	11143	Btu/kW-hr	Mfg. Data - 100% Load
Fuel Type:	NG		Mfg. Data
Fuel Heating Value:	1,251	Btu/scf	ProMax Makeup Fuel
Operating Hours:	8,760	hours	Continuous
Fuel Usage:	43861.26	scf/hr	Calculated
Annual Fuel Usage:	384.22	MMScf/yr	Calculated

Uncontrolled Emission Calculations

NO _x	CO	VOC ²	SO ₂ ³	PM ^{4,5}	H ₂ S ⁶	HCHO ⁷	Acetaldehyde ⁷	Acrolein ⁷	Toluene ⁷	Ethylbenzene ⁷	Xylenes ⁷	Benzene ⁷	n-Hexane ⁷	1,3-Butadiene ⁷	HAPs ⁷	
0.80	0.64	0.037														lb/MW-hr
			5		0.25											gr/100 scf
			0.011	0.007	5.71E-06	7.10E-04	4.00E-05	6.40E-06	1.30E-04	3.20E-05	6.40E-05	1.20E-05	0.00E+00	4.30E-07		lb/MMBtu
3.92	3.15	0.22	0.66	0.36	3.13E-04	0.04	0.00	0.000	0.0071	0.00176	0.0035	0.0007	0.000	0.0000	0.05	lb/hr ⁸
17.15	13.81	0.98	2.87	1.59	1.37E-03	0.17	0.01	0.00	0.031	0.0077	0.015	0.003	0.000	0.000	0.24	tpy ⁹

Controlled Emission Calculations

NO _x	CO	VOC	SO ₂	PM	H ₂ S	HCHO	Acetaldehyde	Acrolein	Toluene	Ethylbenzene	Xylenes	Benzene	n-Hexane	1,3-Butadiene	HAPs ¹⁰	
0.80	0.64	0.037														Control efficiency ¹¹
3.92	3.15	0.18	0.66	0.36	3.13E-04	0.04	0.00	0.000	0.0071	0.00176	0.0035	0.0007	0.000	0.0000	0.05	lb/MW-hr
17.15	13.81	0.81	2.87	1.59	1.37E-03	0.17	0.01	0.00	0.031	0.0077	0.015	0.003	0.000	0.000	0.24	lb/hr ¹²
																tpy ⁹

Greenhouse Gas Calculations¹³

CO ₂	N ₂ O	CH ₄	CO ₂ e	
53.1	0.0001	0.001		kg/MMBtu
1	265	28		GWP ¹⁴
6,419.73	0.01	0.12	6426.32	lb/hr ¹⁵
28,118.40	0.05	0.53	28147.28	tpy ⁹

Footnotes

- ¹ No derate being requested
- For uncontrolled and controlled emissions, emission factors are taken from manufacturer data. VOC emissions factors do not include HCHO or acetaldehyde. These emissions are added to VOC calculated emissions; therefore,
- ² VOC emissions represent Total VOC. VOC emission factor is 10% of UHC rate provided by Solar since the fuel gas VOC content will be <10% VOC.
- ³ Assumes natural gas sulfur content of 5 gr/100 scf
SO₂ EF (lb/MMBtu) =[(5 gr S/100 scf * 1 lb/7000 gr * 64 lb/lbmol SO₂/32 lb/lbmol S) / HHV (Btu/scf)] * 10⁶ Btu/MMBtu
Assume 100% conversion of combusted H₂S into SO₂ and 98% Combustion Efficiency. Additional SO₂ emissions from the combustion of H₂S:
SO₂ (lb/hr) from H₂S = 98%*[(0.25 gr H₂S/100 scf * 1 lb/7000 gr * 64 lb/lbmol SO₂/34 lb/lbmol H₂S) / HHV (Btu/scf)] * (Btu/hp-hr * hp)
- ⁴ Emission Factors from AP-42 Table 3.1-2a
- ⁵ PM includes Condensable + Filterable; assume PM₁₀ = PM_{2.5}
- ⁶ Assumes a conservative natural gas H₂S content of 0.25 gr/100 scf and 98% conversion to SO₂.
H₂S EF (lb/MMBtu) =2%*[(0.25 gr H₂S/100 scf * 1 lb/7000 gr) / HHV (Btu/scf)] * 10⁶ Btu/MMbtu
- ⁷ Uncontrolled HAP emissions based on AP-42 Table 3.1-3
- ⁸ NO_x, CO, and VOC lb/hr Emission Rate = EF * 1 lb/453.592 g * hp. NO_x emission factor ratioed to 15ppm vd at 15% O2 as the actual units from Solar will comply with Part 50. A 25% safety factor is applied.
PM & HAP lb/hr Emission Rate = EF * Fuel Consumption (Btu/hp-hr) * hp * 1 MMBtu/10⁶ Btu
- ⁹ tpy = lb/hr * hours of operation * 1 ton/2000 lb
- ¹⁰ Controlled HAP emissions (lb/hr) = Uncontrolled Total HAPs (lb/hr) - Uncontrolled HCHO (lb/hr) + Controlled HCHO (lb/hr)
- ¹² lb/hr (controlled) = lb/hr (uncontrolled) * (1 - Control Efficiency)
- ¹³ All greenhouse gas emission factors are from 40 CFR 98 Subpart C
- ¹⁴ 40 CFR 98 Subpart A, Table A-1
- ¹⁵ CO₂, N₂O, and CH₄ lb/hr = EF (kg/MMBtu) * 2.20462 lb/kg * Fuel consumption (Btu/hp-hr) * Engine hp * 1 MMBtu/10⁶ Btu
CO₂e lb/hr = CO₂ lb/hr + (CH₄ lb/hr * GWP) + (N₂O lb/hr * GWP)

Dark Horse Facility
Plant Flare

Unit(s):	FL-1850
Description:	Plant Flare
Destruction Efficiency:	98%
Pilot Operating Hours:	8760

Fuel Data

	Flare Pilot	165	scf/hr	Design
	Flare Pilot	1,251	Btu/scf	ProMax Makeup Fuel
	Flare Pilot	0.21	MMBtu/hr	Calculated
	Sweep Gas Flow Rate	1,500	scf/hr	Design
	Sweep Gas Flow Rate	1,251	Btu/scf	ProMax Makeup Fuel
	Sweep Gas	1.88	MMBtu/hr	Calculated
	Total Flare Flowrate	1,665.0	scf/hr	
		0.0017	MMscf/hr	
		1,251	Btu/scf	ProMax Weighted Average
		2.1	MMBtu/hr	
		14.6	MMscf/yr	
		18,249.6	MMBtu/yr	

Emission Rates

Pilot, Acid, & Assist Gas						
	NOx	CO	VOC ⁴	H ₂ S ⁴	SO ₂ ⁵	Units
	0.138	0.2755		0.25	5	lb/MMBtu ⁶ gr/100 scf lb/MMscf
			5.5			TNRCC RG-109 Assumed for Fuel Gas AP-42 Chapter 1.4, Natural Gas Combustion
	0.03	0.06	0.001	5.89E-05	2.36E-03	lb/hr
	0.12	0.25	0.004	2.58E-04	1.03E-02	tpy
	0.26	0.52	0.01	5.36E-04	2.14E-02	lb/hr
	1.13	2.26	0.04	2.35E-03	9.39E-02	tpy
						Sweep Gas Emissions

	NOx	CO	VOC	H ₂ S	SO ₂	Units
Pilot & Sweep Gas	0.29	0.57	0.01	0.001	0.02	lb/hr
	1.26	2.51	0.036	0.003	0.10	tpy

Greenhouse Gas Calculations

CO ₂	N ₂ O	CH ₄	CO ₂ e
53.1	0.0001	0.001	kg/MMBtu ⁸
1	265	28	GWP ⁹
243.70	0.00	0.00	lb/hr ¹⁰
1067.39	0.00201	0.0201	tpy ⁷

¹ Component Molecular Weights from the following source: https://www.engineeringtoolbox.com/molecular-weight-gas-vapor-d_1156.html
Component Net Heating Values from the following source: <https://www.enggcyclopedia.com/2011/09/heating-values-natural-gas/>
³ Hourly and Annual Event gas emissions calculated as follows:
Hourly Emissions (lb/hr) = Hourly Gas Volume (scf/hr) * Component Mol Wt (lb/lb-mol) * Component Mole% / 379.4 ft³/lb mol
Annual Emissions (tpy) = Annual Gas Volume (scf/yr) * Component Mol Wt (lb/lb-mol) * Component Mole% / 379.4 ft³/lb mol / 2000 lb/ton
⁴ Assumed 98% combustion for H₂S, HAP and VOC. 98% DRE
⁵ Assumed 100% conversion of combusted H₂S to SO₂, SO₂= DRE * (64/34) * uncontrolled H₂S.
⁶ To be conservative the TNRCC RG-109 emission factors for high-Btu flares were used.
⁸ Greenhouse gas emission factors are from 40 CFR 98 Subpart C
⁹ 40 CFR 98 Subpart A, Table A-1
¹⁰ CO₂, N₂O and CH₄ lb/hr = EF (kg/MMBtu) * 2.20462lb/kg * Fuel consumption (MMBtu/hr)
CO₂e lb/hr = CO₂ lb/hr + (CH₄ lb/hr * GWP) + (N₂O lb/hr * GWP)

Dark Horse Facility
Equipment for Blowdowns to FL-1850

Emission Unit: FL-1850 BD
Source Description: Equipment for Blowdowns to FL-1850
Destruction Efficiency: 98%

Blowdown Activities Inputs

Equipment Tag	Equipment Type	Volume Standard (ft ³) ¹	Blowdown Pressure (psig) ¹	Molecular Weight (lb/lbmol) ²	Mass VOC Content (%) ²	Mass HAP Content (%) ²	Mass H ₂ S Content (%) ²	Blend Gas (scf/scf) ³	Blowdown Heating Value (BTU/ft ³)	Blowdown Duration (min) ¹	Blowdowns Per Year ¹	Promax Flow Sheet (Train I-III)	Promax Stream Number	Comments
PR-1100	LP Pig Receiver	851	35	23.42	28.29%	2.26%	2.50%	0.0	1,259.90	60	104	LP Inlet	LP Inlet	Blowdown to LP drain from 1250 to 50 psi prior to sending to
PR-1105	HP Pig Receiver	6761	1,250	22.30	28.29%	2.09%	2.50%	0.0	1,259.90	60	72	HP Inlet	Field Gathering	Blowdown to LP drain from 1250 to 50 psi prior to sending to
PL-1400	Grande Pig Launcher	9527	1,250	21.84	28.29%	2.17%	0.0001%	0.0	1,133.86	60	282	Dehy	12	Sweet purge for 1 hr @ 35 psi
C-1200	LP Compressor	9,422	1,250	23.42	28.29%	2.26%	2.50%	0.0	1,259.90	60	52	LP Inlet	LP Inlet	Sweet purge for 1 hr @ 35 psi
C-1210	LP Compressor	9,422	1,250	23.42	28.29%	2.26%	2.50%	0.0	1,259.90	60	52	LP Inlet	LP Inlet	Sweet purge for 1 hr @ 35 psi
C-1220	LP Compressor	9,422	1,250	23.42	28.29%	2.26%	2.50%	0.0	1,259.90	60	52	LP Inlet	LP Inlet	Sweet purge for 1 hr @ 35 psi
C-1230	LP Compressor	9,422	1,250	23.42	28.29%	2.26%	2.50%	0.0	1,259.90	60	52	LP Inlet	LP Inlet	Sweet purge for 1 hr @ 35 psi
F-1301	Amine Inlet Coalescing Filter	718	1,250	22.54	28.29%	2.06%	2.50%	0.0	1,259.90	60	12	Amine Treating	Sour Feed	Blow down then sweet fuel purge for 1hr at 35 psi
F-1515	Amine Pre-Filter	34.55751919	15	21.84	28.29%	2.17%	0.0001%	0.0	1,133.86	60	52	Dehy	12	Sweet fuel purge 0.5hr at 35psi
F-1516	Amine Charcoal Filter	294.5243113	15	21.84	28.29%	2.17%	0.0001%	0.0	1,133.86	60	2	Dehy	12	Sweet fuel purge 0.5hr at 35psi
F-1517	Amine Post-Filter	34.55751919	15	21.84	28.29%	2.17%	0.0001%	0.0	1,133.86	60	52	Dehy	12	Sweet fuel purge 0.5hr at 35psi
C-1580	AGI Compressor	12,535	1,250	39.12	0.67%	0.10%	29.30%	2507.0	349.15	60	12	Acid Gas Injection	AGI Suction	Blow down then sweet fuel purge for 4hr at 35 psi
C-1585	AGI Compressor	12,535	1,250	39.12	0.67%	0.10%	29.30%	2507.0	349.15	60	12	Acid Gas Injection	AGI Suction	Blow down then sweet fuel purge for 4hr at 35 psi
C-1590	AGI Compressor	12,535	1,250	39.12	0.67%	0.10%	29.30%	2507.0	349.15	60	12	Acid Gas Injection	AGI Suction	Blow down then sweet fuel purge for 4hr at 35 psi
C-1595	AGI Compressor	12,535	1,250	39.12	0.67%	0.10%	29.30%	2507.0	349.15	60	12	Acid Gas Injection	AGI Suction	Blow down then sweet fuel purge for 4hr at 35 psi
P-1595	AGI Pump	4,704	2,500	40.48	0.67%	0.10%	29.30%	940.8	359.44	60	24	Acid Gas Injection	AG2	Blow down then sweet fuel purge for 30min at 35 psi
P-1596	AGI Pump	4,704	2,500	40.48	0.67%	0.10%	29.30%	940.8	359.44	60	24	Acid Gas Injection	AG2	Blow down then sweet fuel purge for 30min at 35 psi
P-1599	AGI Pump	4,704	2,500	40.48	0.67%	0.10%	29.30%	940.8	359.44	60	24	Acid Gas Injection	AG2	Blow down then sweet fuel purge for 30min at 35 psi
P-1597	AGI H Pump	3,402	2,500	40.48	0.67%	0.10%	29.30%	680.4	359.44	60	24	Acid Gas Injection	AG2	Blow down then sweet fuel purge for 30min at 35 psi
P-1598	AGI H Pump	3,402	2,500	40.48	0.67%	0.10%	29.30%	680.4	359.44	60	24	Acid Gas Injection	AG2	Blow down then sweet fuel purge for 30min at 35 psi
F-2301	Amine Inlet Coalescing Filter	718	1,250	22.54	28.29%	2.06%	2.50%	0.0	1,259.90	60	12	Amine Treating	Sour Feed	Blow down then sweet fuel purge for 1hr at 35 psi
F-2515	Amine Pre-Filter	34.55751919	15	21.84	28.29%	2.17%	0.0001%	0.0	1,133.86	60	52	Dehy	12	Sweet fuel purge 0.5hr at 35psi
F-2516	Amine Charcoal Filter	294.5243113	15	21.84	28.29%	2.17%	0.0001%	0.0	1,133.86	60	2	Dehy	12	Sweet fuel purge 0.5hr at 35psi
F-2517	Amine Post-Filter	34.55751919	15	21.84	28.29%	2.17%	0.0001%	0.0	1,133.86	60	52	Dehy	12	Sweet fuel purge 0.5hr at 35psi
F-3301	Amine Inlet Coalescing Filter	718	1,250	22.54	28.29%	2.06%	2.50%	0.0	1,259.90	60	12	Amine Treating	Sour Feed	Blow down then sweet fuel purge for 1hr at 35 psi
F-3515	Amine Pre-Filter	34.55751919	15	21.84	28.29%	2.17%	0.0001%	0.0	1,133.86	60	52	Dehy	12	Sweet fuel purge 0.5hr at 35psi
F-3516	Amine Charcoal Filter	294.5243113	15	21.84	28.29%	2.17%	0.0001%	0.0	1,133.86	60	2	Dehy	12	Sweet fuel purge 0.5hr at 35psi
F-3517	Amine Post-Filter	34.55751919	15	21.84	28.29%	2.17%	0.0001%	0.0	1,133.86	60	52	Dehy	12	Sweet fuel purge 0.5hr at 35psi
F-4301	Amine Inlet Coalescing Filter	1122	1,250	22.54	28.29%	2.06%	2.50%	0.0	1,259.90	60	12	Amine Treating	Sour Feed	Blow down then sweet fuel purge for 1hr at 35 psi
F-4515	Amine Pre-Filter	69.11503838	15	21.84	28.29%	2.17%	0.0001%	0.0	1,133.86	60	52	Dehy	12	Sweet fuel purge 1hr at 35psi
F-4516	Amine Charcoal Filter	863.9379797	15	21.84	28.29%	2.17%	0.0001%	0.0	1,133.86	60	2	Dehy	12	Sweet fuel purge 1hr at 35psi
F-4517	Amine Post-Filter	69.11503838	15	21.84	28.29%	2.17%	0.0001%	0.0	1,133.86	60	52	Dehy	12	Sweet fuel purge 1hr at 35psi
F-XXXX	HP Liquid Condensate Filter	538.7	1,250	21.56	28.29%	5.53%	0.43%	0.0	2,417.14	60	12	HP Inlet	_18	Blow down then sweet fuel purge for 1hr at 35 psi
C-1200	LP Comp. - Packing Purge	105	15	21.66	28.29%	1.76%	2.50%	0.0	1,259.90	60	8,760	LP Inlet	Vent to VRU	Compressor packing purge volume
C-1210	LP Comp. - Packing Purge	105	15	21.66	28.29%	1.76%	2.50%	0.0	1,259.90	60	8,760	LP Inlet	Vent to VRU	Compressor packing purge volume
C-1220	LP Comp. - Packing Purge	105	15	21.66	28.29%	1.76%	2.50%	0.0	1,259.90	60	8,760	LP Inlet	Vent to VRU	Compressor packing purge volume
C-1230	LP Comp. - Packing Purge	105	15	21.66	28.29%	1.76%	2.50%	0.0	1,259.90	60	8,760	LP Inlet	Vent to VRU	Compressor packing purge volume
C-1580	AGI Comp. - Packing Purge	105	15	32.95	0.67%	0.09%	29.30%	0.0	398.91	60	876	Acid Gas Injection	Vent to VRU	Compressor packing purge volume
C-1585	AGI Comp. - Packing Purge	105	15	32.95	0.67%	0.09%	29.30%	0.0	398.91	60	876	Acid Gas Injection	Vent to VRU	Compressor packing purge volume
C-1590	AGI Comp. - Packing Purge	105	15	32.95	0.67%	0.09%	29.30%	0.0	398.91	60	876	Acid Gas Injection	Vent to VRU	Compressor packing purge volume
C-1595	AGI Comp. - Packing Purge	105	15	32.95	0.67%	0.09%	29.30%	0.0	398.91	60	876	Acid Gas Injection	Vent to VRU	Compressor packing purge volume
COND-LOAD Train 1-3	Condensate loading Train 1-3	24	15	68.30	100.00%	19.17%	0.0002%	0.0	3,794.73	60	18	Loading	FL-1850	Back-up if VRU's are down
COND-LOAD Train 1-3	Sour Water loading Train 1-3	126	15	36.83	6.07%	1.07%	33.32%	0.0	3,794.73	60	18	Loading	FL-1850	Back-up if VRU's are down
TK-1900 to TK-1971	TK-1900 to TK-1971 Condensate	24	15	68.30	100.00%	19.17%	0.0002%	0.0	1,133.86	60	18	Tanks	FL-1850	Back-up if VRU's are down
TK-1900 to TK-1971	TK-1900 to TK-1971 Sour Water	126	15	36.83	6.07%	1.07%	33.32%	0.0	1,133.86	60	18	Tanks	FL-1850	Back-up if VRU's are down
Misc.	0.5 Hour Purge	14,431	35	21.84	28.29%	2.17%	0.0001%	0.0	1,133.86	60	1,440	Dehy	12	Sweet fuel purge calculation (2x per maint activity)
Misc.	1.0 Hour Purge	28,861	35	21.84	28.29%	2.17%	0.0001%	0.0	1,133.86	60	632	Dehy	12	Sweet fuel purge calculation (2x per maint activity)
Misc.	Train 1 Amine Still	22,760.5	10	39.12	0.67%	0.10%	29.30%	4552.1	349.15	60	12	Amine Treating	Acid Gas	Represents Maximum Rate
Misc.	Train 2 Amine Still	22,760.5	10	39.12	0.67%	0.10%	29.30%	4552.1	349.15	60	12	Amine Treating	Acid Gas	Represents Maximum Rate
Misc.	Train 3 Amine Still	22,760.5	10	39.12	0.67%	0.10%	29.30%	4552.1	349.15	60	12	Amine Treating	Acid Gas	Represents Maximum Rate
Misc.	Amine Flash Bridle (1)	0.3	100	22.40	10.67%	0.65%	3.80%	0.0	932.67	60	52	Amine Treating	Flash Gas to Fuel	Assumes 3", 72" Average length
Misc.	Stabilizer OH to Flare	18,377.5	150	48.05	83.91%	8.44%	2.40%	0.0	2,406.04	60	12	Stabilizer	29	
Misc.	Train 1 Amine Flash to Flare	4,915.0	110	22.40	10.67%	0.65%	3.80%	0.0	932.67	60	12	Amine Treating	Flash Gas to Fuel	
Misc.	Train 2 Amine Flash to Flare	4,915.0	110	22.40	10.67%	0.65%	3.80%	0.0	932.67	60	12	Amine Treating	Flash Gas to Fuel	
Misc.	Train 3 Amine Flash to Flare	4,915.0	110	22.40	10.67%	0.65%	3.80%	0.0	932.67	60	12	Amine Treating	Flash Gas to Fuel	
Misc.	Train 1 TEG Flash to Flare	2,146.6	110	28.45	39.46%	3.92%	0.0004%	0.0	1,325.75	60	12	Dehy	Flash Gas to Fuel	
Misc.	Train 2 TEG Flash to Flare	2,146.6	110	28.45	39.46%	3.92%	0.0004%	0.0	1,325.75	60	12	Dehy	Flash Gas to Fuel	
Misc.	Train 3 TEG Flash to Flare	2,146.6	110	28.45	39.46%	3.92%	0.0004%	0.0	1,325.75	60	12	Dehy	Flash Gas to Fuel	
Misc.	NGL Flash to Flare	200	100	30.87	47.97%	3.43%	3.29%	0.0	1,465.73	60	12	HP Inlet	14	

VOC, HAP, and H₂S Emission Calculations

Equipment Tag	Equipment Type	Mass VOC (lb/blowdown) ⁴	Mass HAP (lb/blowdown) ⁴	Mass H ₂ S (lb/blowdown) ⁴	Uncontrolled ⁵						Controlled ⁶					
					VOC (lb/hr)	HAP (lb/hr)	H ₂ S (lb/hr)	VOC (tpy)	HAP (tpy)	H ₂ S (tpy)	VOC (lb/hr)	HAP (lb/hr)	H ₂ S (lb/hr)	VOC (tpy)	HAP (tpy)	H ₂ S (tpy)
PR-1100	LP Pig Receiver	15.08	1.20	1.33	15.08	1.20	1.33	0.78	0.06	0.07	0.30	0.02	0.03	0.02	0.00	0.001
PR-1105	HP Pig Receiver	114.06	8.43	10.08	114.06	8.43	10.08	4.11	0.30	0.36	2.28	0.17	0.20	0.08	0.01	0.007
PL-1400	Grande Pig Launcher	157.41	12.08	0.00	157.41	12.08	0.00	22.19	1.70	0.00	3.15	0.24	0.00	0.44	0.03	0.000
C-1200	LP Compressor	166.94	13.32	14.75	166.94	13.32	14.75	4.34	0.35	0.38	3.34	0.27	0.30	0.09	0.01	0.008
C-1210	LP Compressor	166.94	13.32	14.75	166.94	13.32	14.75	4.34	0.35	0.38	3.34	0.27	0.30	0.09	0.01	0.008
C-1220	LP Compressor	166.94	13.32	14.75	166.94	13.32	14.75	4.34	0.35	0.38	3.34	0.27	0.30	0.09	0.01	0.008
C-1230	LP Compressor	166.94	13.32	14.75	166.94	13.32	14.75	4.34	0.35	0.38	3.34	0.27	0.30	0.09	0.01	0.008
F-1301	Amine Inlet Coalescing Filter	12.25	0.89	1.08	12.25	0.89	1.08	0.07	0.01	0.01	0.24	0.02	0.02	0.00	0.00	0.000
F-1515	Amine Pre-Filter	0.57	0.04	0.00	0.57	0.04	0.00	0.01	0.00	0.00	0.01	0.00	0.000000	0.00	0.0000	0.0000000
F-1516	Amine Charcoal Filter	4.87	0.37	0.00	4.87	0.37	0.00	0.00	0.00	0.00	0.10	0.01	0.000000	0.00	0.0000	0.0000000
F-1517	Amine Post-Filter	0.57	0.04	0.00	0.57	0.04	0.00	0.01	0.00	0.00	0.01	0.00	0.000000	0.00	0.0000	0.0000000
C-1580	AGI Compressor	8.79	1.32	384.23	8.79	1.32	384.23	0.05	0.01	2.31	0.18	0.03	7.68	0.00	0.00	0.046
C-1585	AGI Compressor	8.79	1.32	384.23	8.79	1.32	384.23	0.05	0.01	2.31	0.18	0.03	7.68	0.00	0.00	0.046
C-1590	AGI Compressor	8.79	1.32	384.23	8.79	1.32	384.23	0.05	0.01	2.31	0.18	0.03	7.68	0.00	0.00	0.046
C-1595	AGI Compressor	8.79	1.32	384.23	8.79	1.32	384.23	0.05	0.01	2.31	0.18	0.03	7.68	0.00	0.00	0.046
P-1595	AGI Pump	3.41	0.53	149.21	3.41	0.53	149.21	0.04	0.01	1.79	0.07	0.01	2.98	0.00	0.00	0.04
P-1596	AGI Pump	3.41	0.53	149.21	3.41	0.53	149.21	0.04	0.01	1.79	0.07	0.01	2.98	0.00	0.00	0.04
P-1599	AGI Pump	3.41	0.53	149.21	3.41	0.53	149.21	0.04	0.01	1.79	0.07	0.01	2.98	0.00	0.00	0.04
P-1597	AGI H Pump	2.47	0.38	107.91	2.47	0.38	107.91	0.03	0.00	1.29	0.05	0.01	2.16	0.00	0.00	0.03
P-1598	AGI H Pump	2.47	0.38	107.91	2.47	0.38	107.91	0.03	0.00	1.29	0.05	0.01	2.16	0.00	0.00	0.03
F-2301	Amine Inlet Coalescing Filter	12.25	0.89	1.08	12.25	0.89	1.08	0.07	0.01	0.01	0.24	0.02	0.02	0.00	0.00	0.00
F-2515	Amine Pre-Filter	0.57	0.04	0.00	0.57	0.04	0.00	0.01	0.00	0.00	0.01	0.00	0.000000	0.00	0.0000	0.0000000
F-2516	Amine Charcoal Filter	4.87	0.37	0.00	4.87	0.37	0.00	0.00	0.00	0.00	0.0973	0.0075	0.00	0.000097	0.000007	0.00000
F-2517	Amine Post-Filter	0.57	0.04	0.00	0.57	0.04	0.00	0.01	0.00	0.00	0.0114	0.0009	0.00	0.000297	0.000023	0.00000
F-3301	Amine Inlet Coalescing Filter	12.25	0.89	1.08	12.25	0.89	1.08	0.07	0.01	0.01	0.24	0.02	0.02	0.00	0.00	0.00
F-3515	Amine Pre-Filter	0.57	0.04	0.00	0.57	0.04	0.00	0.01	0.00	0.00	0.01	0.00	0.00	0.00	0.000	0.00000000
F-3516	Amine Charcoal Filter	4.87	0.37	0.00	4.87	0.37	0.00	0.00	0.00	0.00	0.10	0.01	0.00	0.00	0.000	0.00000000
F-3517	Amine Post-Filter	0.57	0.04	0.00	0.57	0.04	0.00	0.01	0.00	0.00	0.01	0.00	0.00	0.00	0.000	0.00000000
F-4301	Amine Inlet Coalescing Filter	19.14	1.39	1.69	19.14	1.39	1.69	0.11	0.01	0.01	0.38	0.03	0.03	0.00	0.00	0.00
F-4515	Amine Pre-Filter	1.14	0.09	0.00	1.14	0.09	0.00	0.03	0.00	0.00	0.02	0.00	0.000000	0.00	0.000	0.0000000
F-4516	Amine Charcoal Filter	14.27	1.10	0.00	14.27	1.10	0.00	0.01	0.00	0.00	0.29	0.02	0.000000	0.00	0.000	0.0000000
F-4517	Amine Post-Filter	1.14	0.09	0.00	1.14	0.09	0.00	0.03	0.00	0.00	0.02	0.00	0.000000	0.00	0.000	0.0000000
F-XXXX	HP Liquid Condensate Filter	8.79	1.72	0.13	8.79	1.72	0.13	0.05	0.01	0.00	0.18	0.03	0.00	0.00	0.00	0.00
C-1200	LP Comp. - Packing Purge	1.72	0.11	0.15	1.72	0.11	0.15	7.54	0.47	0.67	0.03	0.00	0.00304	0.15	0.01	0.01
C-1210	LP Comp. - Packing Purge	1.72	0.11	0.15	1.72	0.11	0.15	7.54	0.47	0.67	0.03	0.00	0.00304	0.15	0.01	0.01
C-1220	LP Comp. - Packing Purge	1.72	0.11	0.15	1.72	0.11	0.15	7.54	0.47	0.67	0.03	0.00	0.00304	0.15	0.01	0.01
C-1230	LP Comp. - Packing Purge	1.72	0.11	0.15	1.72	0.11	0.15	7.54	0.47	0.67	0.03	0.00	0.00304	0.15	0.01	0.01
C-1580	AGI Comp. - Packing Purge	0.06	0.01	2.71	0.06	0.01	2.71	0.03	0.00	1.19	0.00	0.00	0.05423	0.00	0.00	0.02
C-1585	AGI Comp. - Packing Purge	0.06	0.01	2.71	0.06	0.01	2.71	0.03	0.00	1.19	0.00	0.00	0.05423	0.00	0.00	0.02
C-1590	AGI Comp. - Packing Purge	0.06	0.01	2.71	0.06	0.01	2.71	0.03	0.00	1.19	0.00	0.00	0.05423	0.00	0.00	0.02
C-1595	AGI Comp. - Packing Purge	0.06	0.01	2.71	0.06	0.01	2.71	0.03	0.00	1.19	0.00	0.00	0.05423	0.00	0.00	0.02
COND-LOAD Train 1-3	Condensate loading Train 1-3	4.45	0.85	0.00	4.45	0.85	0.00	0.04	0.01	0.00	0.09	0.02	0.000000	0.00	0.00	0.00
COND-LOAD Train 1-3	Sour Water loading Train 1-3	0.75	0.13	4.12	0.75	0.13	4.12	0.01	0.00	0.04	0.02	0.00	0.08249	0.00	0.00	0.00
TK-1900 to TK-1971	TK-1900 to TK-1971 Condensate	4.45	0.85	0.00	4.45	0.85	0.00	0.04	0.01	0.00	0.09	0.02	0.000000	0.00	0.00	0.00
TK-1900 to TK-1971	TK-1900 to TK-1971 Sour Water	0.75	0.13	4.12	0.75	0.13	4.12	0.01	0.00	0.04	0.02	0.00	0.08249	0.00	0.00	0.00
Misc.	0.5 Hour Purge	238.43	18.30	0.00	238.43	18.30	0.00	171.67	13.18	0.00	4.77	0.37	0.00001	3.43	0.26	0.00
Misc.	1.0 Hour Purge	476.84	36.60	0.00	476.84	36.60	0.00	150.68	11.57	0.00	9.54	0.73	0.00003	3.01	0.23	0.00
Misc.	Train 1 Amine Still	15.95	2.39	697.66	15.95	2.39	697.66	0.10	0.01	4.19	0.32	0.05	13.95	0.0019	0.000	0.08
Misc.	Train 2 Amine Still	15.95	2.39	697.66	15.95	2.39	697.66	0.10	0.01	4.19	0.32	0.05	13.95	0.0019	0.000	0.08
Misc.	Train 3 Amine Still	15.95	2.39	697.66	15.95	2.39	697.66	0.10	0.01	4.19	0.32	0.05	13.95	0.0019	0.000	0.08
Misc.	Amine Flash Bridle (1)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.0000	0.00000	0.00000	0.0000001		0.0000000
Misc.	Stabilizer OH to Flare	1981.72	199.43	56.65	1,981.72	199.43	56.65	11.89	1.20	0.34	39.63	3.99	1.13	0.24	0.02	0.01
Misc.	Train 1 Amine Flash to Flare	31.41	1.93	11.20	31.41	1.93	11.20	0.19	0.01	0.07	0.63	0.04	0.22	0.00	0.000	0.00
Misc.	Train 2 Amine Flash to Flare	31.41	1.93	11.20	31.41	1.93	11.20	0.19	0.01	0.07	0.63	0.04	0.22	0.00	0.000	0.00
Misc.	Train 3 Amine Flash to Flare	31.41	1.93	11.20	31.41	1.93	11.20	0.19	0.01	0.07	0.63	0.04	0.22	0.00	0.000	0.00
Misc.	Train 1 TEG Flash to Flare	64.46	6.40	0.00	64.46	6.40	0.00	0.39	0.04	0.00	1.29	0.13	0.0000	0.01	0.00	0.000000
Misc.	Train 2 TEG Flash to Flare	64.46	6.40	0.00	64.46	6.40	0.00	0.39	0.04	0.00	1.29	0.13	0.0000	0.01	0.00	0.000000
Misc.	Train 3 TEG Flash to Flare	64.46	6.40	0.00	64.46	6.40	0.00	0.39	0.04	0.00	1.29	0.13	0.0000	0.01	0.00	0.000000
Misc.	NGL Flash to Flare	2961.92	211.60	0.54	2,961.92	211.60	0.54	17.77	1.27	0.00	59.24	4.23	0.01	0.36	0.03	0.0001
Totals:					7,115.76	591.58	4,479.32	429.79	32.87	39.77	142.32	11.83	89.59	8.60	0.66	0.80

Emission Factors					
Pollutant	NOx	CO	CO ₂	N ₂ O	CH ₄
Factor (lb/MMBTU) ⁷	0.138	0.2755	-	-	-
Factor (kg/MMBTU) ⁸	-	-	53.06	0.0001	0.001
GWP ⁸	-	-	1	265	28

NOx, CO, SO₂ and GHG Emission Calculations

Equipment Tag	Equipment Type	Volume Standard (ft ³) ¹	Blowdown Heating Value (BTU/ft ³) ²	Hourly Emission Rate (lb/hr) ⁹						Annual Emission Rate (tpy) ¹⁰						
				NOx	CO	SO ₂	CO ₂	N ₂ O	CH ₄	NOx	CO	SO ₂	CO ₂	N ₂ O	CH ₄	CO ₂ e
PR-1100	LP Pig Receiver	851	1149.98	0.14	0.27	2.46	114.48	0.0002	0.0022	0.01	0.01	0.13	5.95	0.00001	0.00011	5.96
PR-1105	HP Pig Receiver	6761	1065.47	0.99	1.98	18.59	842.66	0.0016	0.0159	0.04	0.07	0.67	30.34	0.00006	0.00057	30.37
PL-1400	Grande Pig Launcher	9527	1133.86	1.49	2.98	0.00	1,263.62	0.0024	0.0238	0.21	0.42	0.00	178.17	0.00034	0.00336	178.35
C-1200	LP Compressor	9422	1149.98	1.50	2.99	27.21	1,267.46	0.0024	0.0239	0.04	0.08	0.71	32.95	0.00006	0.00062	32.99
C-1210	LP Compressor	9422	1149.98	1.50	2.99	27.21	1,267.46	0.0024	0.0239	0.04	0.08	0.71	32.95	0.00006	0.00062	32.99
C-1220	LP Compressor	9422	1149.98	1.50	2.99	27.21	1,267.46	0.0024	0.0239	0.04	0.08	0.71	32.95	0.00006	0.00062	32.99
C-1230	LP Compressor	9422	1149.98	1.50	2.99	27.21	1,267.46	0.0024	0.0239	0.04	0.08	0.71	32.95	0.00006	0.00062	32.99
F-1301	Amine Inlet Coalescing Filter	718	1098.93	0.11	0.22	2.00	92.30	0.0002	0.0017	0.0007	0.0013	0.01	0.55	0.00000	0.00001	0.55
F-1515	Amine Pre-Filter	35	1133.86	0.01	0.01	0.00	4.58	0.0000	0.0001	0.0001	0.0003	0.0000	0.12	0.00000	0.00000	0.12
F-1516	Amine Charcoal Filter	295	1133.86	0.05	0.09	0.00	39.06	0.0001	0.0007	0.0000	0.0001	0.0000	0.04	0.00000	0.00000	0.04
F-1517	Amine Post-Filter	35	1133.86	0.01	0.01	0.00	4.58	0.0000	0.0001	0.0001	0.0003	0.0000	0.12	0.00000	0.00000	0.12
C-1580	AGI Compressor	12535	192.21	0.33	0.66	708.79	281.84	0.0005	0.0053	0.0020	0.0040	4.25	1.69	0.00000	0.00003	1.69
C-1585	AGI Compressor	12535	192.21	0.33	0.66	708.79	281.84	0.0005	0.0053	0.0020	0.0040	4.25	1.69	0.00000	0.00003	1.69
C-1590	AGI Compressor	12535	192.21	0.33	0.66	708.79	281.84	0.0005	0.0053	0.0020	0.0040	4.25	1.69	0.00000	0.00003	1.69
C-1595	AGI Compressor	12535	192.21	0.33	0.66	708.79	281.84	0.0005	0.0053	0.0020	0.0040	4.25	1.69	0.00000	0.00003	1.69
P-1595	AGI Pump	4704	204.56	0.13	0.27	275.24	112.56	0.0002	0.0021	0.0016	0.0032	3.30	1.35	0.00000	0.00003	1.35
P-1596	AGI Pump	4704	204.56	0.13	0.27	275.24	112.56	0.0002	0.0021	0.0016	0.0032	3.30	1.35	0.00000	0.00003	1.35
P-1599	AGI Pump	4704	204.56	0.13	0.27	275.24	112.56	0.0002	0.0021	0.0016	0.0032	3.30	1.35	0.00000	0.00003	1.35
P-1597	AGI H Pump	3402	204.56	0.10	0.19	199.06	81.40	0.0002	0.0015	0.0012	0.0023	2.39	0.98	0.00000	0.00002	0.98
P-1598	AGI H Pump	3402	204.56	0.10	0.19	199.06	81.40	0.0002	0.0015	0.0012	0.0023	2.39	0.98	0.00000	0.00002	0.98
F-2301	Amine Inlet Coalescing Filter	718	1098.93	0.11	0.22	2.00	92.30	0.0002	0.0017	0.0007	0.0013	0.01	0.55	0.00000	0.00001	0.55
F-2515	Amine Pre-Filter	35	1133.86	0.01	0.01	0.00	4.58	0.0000	0.0001	0.0001	0.0003	0.00	0.12	0.00000	0.00000	0.12
F-2516	Amine Charcoal Filter	295	1133.86	0.05	0.09	0.00	39.06	0.0001	0.0007	0.0000	0.0001	0.00	0.04	0.00000	0.00000	0.04
F-2517	Amine Post-Filter	35	1133.86	0.01	0.01	0.00	4.58	0.0000	0.0001	0.0001	0.0003	0.00	0.12	0.00000	0.00000	0.12
F-3301	Amine Inlet Coalescing Filter	718	1098.93	0.11	0.22	2.00	92.30	0.0002	0.0017	0.0007	0.0013	0.01	0.55	0.00000	0.00001	0.55
F-3515	Amine Pre-Filter	35	1133.86	0.01	0.01	0.00	4.58	0.0000	0.0001	0.0001	0.0003	0.0000	0.12	0.00000	0.00000	0.12
F-3516	Amine Charcoal Filter	295	1133.86	0.05	0.09	0.00	39.06	0.0001	0.0007	0.0000	0.0001	0.0000	0.04	0.00000	0.00000	0.04
F-3517	Amine Post-Filter	35	1133.86	0.01	0.01	0.00	4.58	0.0000	0.0001	0.0001	0.0003	0.0000	0.12	0.00000	0.00000	0.12
F-4301	Amine Inlet Coalescing Filter	1122	1098.93	0.17	0.34	3.12	144.23	0.0003	0.0027	0.0010	0.0020	0.02	0.87	0.00000	0.00002	0.87
F-4515	Amine Pre-Filter	69	1133.86	0.01	0.02	0.00	9.17	0.0000	0.0002	0.0003	0.0006	0.0000	0.24	0.00000	0.00000	0.24
F-4516	Amine Charcoal Filter	864	1133.86	0.14	0.27	0.00	114.59	0.0002	0.0022	0.0001	0.0003	0.0000	0.11	0.00000	0.00000	0.11
F-4517	Amine Post-Filter	69	1133.86	0.01	0.02	0.00	9.17	0.0000	0.0002	0.0003	0.0006	0.0000	0.24	0.00000	0.00000	0.24
F-XXXX	HP Liquid Condensate Filter	539	2417.14	0.18	0.36	0.24	152.32	0.0003	0.0029	0.0011	0.0022	0.00	0.91	0.00000	0.00002	0.91
C-1200	LP Comp. - Packing Purge	105	1087.54	0.02	0.03	0.28	13.36	0.0000	0.0003	0.0690	0.1378	1.2289	58.51	0.00011	0.00110	58.57
C-1210	LP Comp. - Packing Purge	105	1087.54	0.02	0.03	0.28	13.36	0.0000	0.0003	0.0690	0.1378	1.2289	58.51	0.00011	0.00110	58.57
C-1220	LP Comp. - Packing Purge	105	1087.54	0.02	0.03	0.28	13.36	0.0000	0.0003	0.0690	0.1378	1.2289	58.51	0.00011	0.00110	58.57
C-1230	LP Comp. - Packing Purge	105	1087.54	0.02	0.03	0.28	13.36	0.0000	0.0003	0.0690	0.1378	1.2289	58.51	0.00011	0.00110	58.57
C-1580	AGI Comp. - Packing Purge	105	398.91	0.01	0.01	5.00	4.90	0.0000	0.0001	0.0025	0.0051	2.1907	2.15	0.00000	0.00004	2.15
C-1585	AGI Comp. - Packing Purge	105	398.91	0.01	0.01	5.00	4.90	0.0000	0.0001	0.0025	0.0051	2.1907	2.15	0.00000	0.00004	2.15
C-1590	AGI Comp. - Packing Purge	105	398.91	0.01	0.01	5.00	4.90	0.0000	0.0001	0.0025	0.0051	2.1907	2.15	0.00000	0.00004	2.15
C-1595	AGI Comp. - Packing Purge	105	398.91	0.01	0.01	5.00	4.90	0.0000	0.0001	0.0025	0.0051	2.1907	2.15	0.00000	0.00004	2.15
COND-LOAD Train 1-3	Condensate loading Train 1-3	24	3794.73	0.01	0.03	0.00	10.82	0.0000	0.0002	0.0001	0.0002	0.0000	0.10	0.00000	0.00000	0.10
COND-LOAD Train 1-3	Sour Water loading Train 1-3	126	509.00	0.01	0.02	7.61	7.48	0.0000	0.0001	0.0001	0.0002	0.0685	0.07	0.00000	0.00000	0.07
TK-1900 to TK-1971	TK-1900 to TK-1971 Condensate	24	3794.73	0.01	0.03	0.00	10.82	0.0000	0.0002	0.0001	0.0002	0.0000	0.10	0.00000	0.00000	0.10
TK-1900 to TK-1971	TK-1900 to TK-1971 Sour Water	126	509.00	0.01	0.02	7.61	7.48	0.0000	0.0001	0.0001	0.0002	0.0685	0.07	0.00000	0.00000	0.07
Misc.	0.5 Hour Purge	14431	1133.86	2.26	4.51	0.00	1,914.06	0.0036	0.0361	1.6258	3.2457	0.0010	1,378.12	0.00260	0.02597	1,379.54
Misc.	1.0 Hour Purge	28861	1133.86	4.52	9.02	0.00	3,827.98	0.0072	0.0721	1.4270	2.8489	0.0008	1,209.64	0.00228	0.02280	1,210.89
Misc.	Train 1 Amine Still	22760	192.21	0.60	1.21	1,286.98	511.76	0.0010	0.0096	0.0036	0.0072	7.72	3.07	0.00001	0.00006	3.07
Misc.	Train 2 Amine Still	22760	192.21	0.60	1.21	1,286.98	511.76	0.0010	0.0096	0.0036	0.0072	7.72	3.07	0.00001	0.00006	3.07
Misc.	Train 3 Amine Still	22760	192.21	0.60	1.21	1,286.98	511.76	0.0010	0.0096	0.0036	0.0072	7.72	3.07	0.00001	0.00006	3.07
Misc.	Amine Flash Bridle (1)	0.3	932.67	0.00	0.00	0.00	0.03	0.0000	0.0000	0.0000	0.0000	0.0000	0.00	0.00000	0.00000	0.00
Misc.	Stabilizer OH to Flare	18378	2406.04	6.10	12.18	104.49	5,172.39	0.0097	0.0975	0.0366	0.0731	0.63	31.03	0.00006	0.00058	31.07
Misc.	Train 1 Amine Flash to Flare	4915	932.67	0.63	1.26	20.66	536.23	0.0010	0.0101	0.0038	0.0076	0.12	3.22	0.00001	0.00006	3.22
Misc.	Train 2 Amine Flash to Flare	4915	932.67	0.63	1.26	20.66	536.23	0.0010	0.0101	0.0038	0.0076	0.12	3.22	0.00001	0.00006	3.22
Misc.	Train 3 Amine Flash to Flare	4915	932.67	0.63	1.26	20.66	536.23	0.0010	0.0101	0.0038	0.0076	0.12	3.22	0.00001	0.00006	3.22
Misc.	Train 1 TEG Flash to Flare	2147	1325.75	0.39	0.78	0.00	332.90	0.0006	0.0063	0.0024	0.0047	0.0000	2.00	0.00000	0.00004	2.00
Misc.	Train 2 TEG Flash to Flare	2147	1325.75	0.39	0.78	0.00	332.90	0.0006	0.0063	0.0024	0.0047	0.0000	2.00	0.00000	0.00004	2.00
Misc.	Train 3 TEG Flash to Flare	2147	1325.75	0.39	0.78	0.00	332.90	0.0006	0.0063	0.0024	0.0047	0.0000	2.00	0.00000	0.00004	2.00
Misc.	NGL Flash to Flare	200	1465.73	0.04	0.08	1.00	34.29	0.0001	0.0006	0.0002	0.0005	0.01	0.21	0.00000	0.00000	0.21
Totals:				29.46	58.81	8,263.03	24,970.58	0.05	0.47	3.83	7.66	73.37	3,250.71	0.006	0.06	3,254.05

¹ Facility blowdowns listed above are routed to FL-1850. Blowdown volumes, pressues, durations, and number per year are conservatively estimated based on facility and equipment design.

² ProMax simulation of the facility used to estimate density, composition, and heating value for each blowdown activity.

³ Quantity of blend gas is estimated for each activity to reduce the H₂S content of the stream to the required 6% based on facility design, as well as the composition and quantity of each stream.

⁴ Emissions (Lb/Blowdown) = Volume (scf) * Molecular Weight (lb/lbmol) / 379.3 (scf/lbmol) * Component Mass Fraction (%)

⁵ Uncontrolled Hourly Emissions (lb/hr) = Emissions (lb/blowdown) * Blowdown Duration (hr/blowdown)

Uncontrolled Annual Emissions (tpy) = Emissions (lb/blowdown) * Number of Blowdowns per Year / 2000 lb/ton

⁶ Controlled Emissions = Uncontrolled Emissions * (1 - DRE)

⁷ TNRCC RG-109 emission factors for high-Btu flares

⁸ 40 CFR 98 Subpart A, Table A-1, and Subpart C

⁹ Hourly NOx and CO Emissions (lb/hr) = Emission Factor (lb/MMBTU) * Volume (scf) * Blowdown Heating Value (BTU/scf) / 10⁶ (BTU/MMBTU)

Hourly SO₂ Emissions (lb/hr) = DRE * (64 lb/lbmol SO₂/34 lb/lbmol H₂S) * Uncontrolled H₂S (lb/hr).

Dark Horse Facility
Train 4, 5, and 6 Process Flare

Unit(s):	FL-1950
Description:	4, 5, and 6 Process Flare
Destruction Efficiency:	98%
Pilot Operating Hours:	8760

Fuel Data

	Flare Pilot	180	scf/hr	Design
	Flare Pilot	1,251	Btu/scf	ProMax Makeup Fuel
	Flare Pilot	0.23	MMBtu/hr	Calculated
	Sweep Gas Flow Rate	1,500	scf/hr	Design
	Sweep Gas Flow Rate	1,251	Btu/scf	ProMax Makeup Fuel
	Sweep Gas	1.88	MMBtu/hr	Calculated
	Total Flare Flowrate	1,680.0	scf/hr	
		0.0017	MMscf/hr	
		1,251	Btu/scf	ProMax Weighted Average
		2.1	MMBtu/hr	
		14.7	MMscf/yr	
		18,414.0	MMBtu/yr	

Emission Rates

Pilot, Acid, & Assist Gas						
	NOx	CO	VOC ⁴	H ₂ S ⁴	SO ₂ ⁵	Units
	0.138	0.2755		0.25	5	lb/MMBtu ⁶
			5.5			gr/100 scf
						lb/MMscf
	0.03	0.06	0.001	6.43E-05	2.57E-03	lb/hr
	0.14	0.27	0.004	2.82E-04	1.13E-02	tpy
	0.26	0.52	0.01	5.36E-04	2.14E-02	lb/hr
	1.13	2.26	0.04	2.35E-03	9.39E-02	tpy
	NOx	CO	VOC	H ₂ S	SO ₂	Units
Pilot & Sweep Gas	0.29	0.58	0.01	0.001	0.02	lb/hr
	1.27	2.54	0.036	0.003	0.11	tpy

Greenhouse Gas Calculations

CO ₂	N ₂ O	CH ₄	CO ₂ e
53.1	0.0001	0.001	kg/MMBtu ⁸
1	265	28	GWP ⁹
245.89	0.00	0.00	lb/hr ¹⁰
1077.01	0.00203	0.0203	tpy ⁷

¹ Component Molecular Weights from the following source: https://www.engineeringtoolbox.com/molecular-weight-gas-vapor-d_1156.html
Component Net Heating Values from the following source: <https://www.enggcyclopedia.com/2011/09/heating-values-natural-gas/>
³ Hourly and Annual Event gas emissions calculated as follows:
Hourly Emissions (lb/hr) = Hourly Gas Volume (scf/hr) * Component Mol Wt (lb/lb-mol) * Component Mole% / 379.4 ft³/lb mol
Annual Emissions (tpy) = Annual Gas Volume (scf/yr) * Component Mol Wt (lb/lb-mol) * Component Mole% / 379.4 ft³/lb mol / 2000 lb/ton
⁴ Assumed 98% combustion for H₂S, HAP and VOC. 98% DRE
⁵ Assumed 100% conversion of combusted H₂S to SO₂, SO₂= DRE * (64/34) * uncontrolled H₂S.
⁶ To be conservative the TNRCC RG-109 emission factors for high-Btu flares were used.
⁸ Greenhouse gas emission factors are from 40 CFR 98 Subpart C
⁹ 40 CFR 98 Subpart A, Table A-1
¹⁰ CO₂, N₂O and CH₄ lb/hr = EF (kg/MMBtu) * 2.20462lb/kg * Fuel consumption (MMBtu/hr)
CO₂e lb/hr = CO₂ lb/hr + (CH₄ lb/hr * GWP) + (N₂O lb/hr * GWP)

Dark Horse Facility
Equipment for Blowdowns to FL-1950

Emission Unit: FL-1950 BD
Source Description: Equipment for Blowdowns to FL-1950
Destruction Efficiency: 98%

Blowdown Activities Inputs

Equipment Tag	Equipment Type	Volume Standard (ft ³) ¹	Blowdown Pressure (psig) ¹	Molecular Weight (lb/lbmol) ²	Mass VOC Content (%) ²	Mass HAP Content (%) ²	Mass H ₂ S Content (%) ²	Blend Gas (scf/scf) ³	Blowdown Heating Value (BTU/ft ³)	Blowdown Duration (min) ¹	Blowdowns Per Year ¹	Promax Flow Sheet (Train IV-VI)	Promax Stream Number	Comments
PR-XXXX	LP Pig Receiver	851.0	35	24.58	28.29%	2.76%	2.50%	0.0	1,259.90	60	104	LP Inlet	LP Inlet	
PR-XXXX	HP Pig Receiver	6761.0	1250	22.30	28.29%	2.09%	2.50%	0.0	1,259.90	60	72	HP Inlet	Field Gathering	
PL-XXXX	Treated Gas Pig Launcher	9527.0	1250	21.79	28.29%	2.15%	0.0001%	0.0	1,131.18	60	282	Dehy	To Cryo	
C-1680	AGI Compressor	12535.0	1,250	39.11	0.67%	0.11%	29.30%	2507.0	349.64	60	12	Acid Gas Injection	AGI Suction	Blow down then sweet fuel purge for 1hr at 35 psi
C-1685	AGI Compressor	12535.0	1,250	39.11	0.67%	0.11%	29.30%	2507.0	349.64	60	12	Acid Gas Injection	AGI Suction	Blow down then sweet fuel purge for 1hr at 35 psi
C-1690	AGI Compressor	12535.0	1,250	39.11	0.67%	0.11%	29.30%	2507.0	349.64	60	12	Acid Gas Injection	AGI Suction	Blow down then sweet fuel purge for 1hr at 35 psi
C-1695	AGI Compressor	12535.0	1,250	39.11	0.67%	0.11%	29.30%	2507.0	349.64	60	12	Acid Gas Injection	AGI Suction	Blow down then sweet fuel purge for 1hr at 35 psi
P-1697	AGI H-Pump	3402.0	2,500	40.47	0.67%	0.11%	29.30%	680.4	359.97	60	24	Acid Gas Injection	AG2	Blow down then sweet fuel purge for 30min at 35 psi
P-1698	AGI H-Pump	3402.0	2,500	40.47	0.67%	0.11%	29.30%	680.4	359.97	60	24	Acid Gas Injection	AG2	Blow down then sweet fuel purge for 30min at 35 psi
F-5301	Amine Inlet Coalescing Filter	1122.0	1250	22.50	28.29%	2.04%	2.50%	0.0	1,259.90	60	12	Amine Treating	Sour Feed	Blow down then sweet fuel purge for 1hr at 35 psi
F-5515	Amine Pre-Filter	69.1	15	21.79	28.29%	2.15%	0.0001%	0.0	1,131.18	60	52	Dehy	To Cryo	Sweet fuel purge 0.5hr at 35psi
F-5516	Amine Charcoal Filter	863.9	15	21.79	28.29%	2.15%	0.0001%	0.0	1,131.18	60	2	Dehy	To Cryo	Sweet fuel purge 0.5hr at 35psi
F-5517	Amine Post-Filter	69.1	15	21.79	28.29%	2.15%	0.0001%	0.0	1,131.18	60	52	Dehy	To Cryo	Sweet fuel purge 0.5hr at 35psi
F-6301	Amine Inlet Coalescing Filter	1122.0	1250	22.50	28.29%	2.04%	2.50%	0.0	1,259.90	60	12	Amine Treating	Sour Feed	Blow down then sweet fuel purge for 1hr at 35 psi
F-6515	Amine Pre-Filter	69.1	15	21.79	28.29%	2.15%	0.0001%	0.0	1,131.18	60	52	Dehy	To Cryo	Sweet fuel purge 0.5hr at 35psi
F-6516	Amine Charcoal Filter	863.9	15	21.79	28.29%	2.15%	0.0001%	0.0	1,131.18	60	2	Dehy	To Cryo	Sweet fuel purge 0.5hr at 35psi
F-6517	Amine Post-Filter	69.1	15	21.79	28.29%	2.15%	0.0001%	0.0	1,131.18	60	52	Dehy	To Cryo	Sweet fuel purge 0.5hr at 35psi
F-6001	HP Liquid Condensate Filters	157.0	1250	21.56	28.29%	5.54%	0.43%	0.0	2,417.20	60	12	HP Inlet	_18	Blow down then sweet fuel purge for 1hr at 35 psi
C-1680	AGI Comp. - Packing Purge	105.0	15	32.95	0.67%	0.10%	29.30%	0.0	399.33	60	876	Acid Gas Injection	Vent to VRU	Compressor packing purge volume
C-1685	AGI Comp. - Packing Purge	105.0	15	32.95	0.67%	0.10%	29.30%	0.0	399.33	60	876	Acid Gas Injection	Vent to VRU	Compressor packing purge volume
C-1690	AGI Comp. - Packing Purge	105.0	15	32.95	0.67%	0.10%	29.30%	0.0	399.33	60	876	Acid Gas Injection	Vent to VRU	Compressor packing purge volume
C-1695	AGI Comp. - Packing Purge	105.0	15	32.95	0.67%	0.10%	29.30%	0.0	399.33	60	876	Acid Gas Injection	Vent to VRU	Compressor packing purge volume
Misc.	0.5 Hour Purge	14,431	35	21.79	28.29%	2.15%	0.0001%	0.0	1,131.18	60	872	Dehy	To Cryo	Sweet fuel purge calculation (2x per maint activity)
Misc.	1.0 Hour Purge	28,861	35	21.79	28.29%	2.15%	0.0001%	0.0	1,131.18	60	168	Dehy	To Cryo	Sweet fuel purge calculation (2x per maint activity)
Misc.	Train 5 Amine Still	46074.3	10	39.11	0.67%	0.11%	29.30%	9214.9	349.64	60	12	Amine Treating	Acid Gas	EST 0.25HR downtime per month
Misc.	Train 6 Amine Still	46074.3	10	39.11	0.67%	0.11%	29.30%	9214.9	349.64	60	12	Amine Treating	Acid Gas	EST 0.25HR downtime per month
Misc.	Amine Flash Bridle (1)	0.3	100	22.28	10.99%	0.67%	3.52%	0.0	938.44	60	52	Amine Treating	Flash Gas to Fuel	Assumes 3", 72" Average length
Misc.	Stabilizer OH to Flare	104729.2	150	47.70	83.24%	8.18%	2.42%	0.0	2,389.27	60	12	Stabilizer	29	EST 1HR downtime per month
Misc.	Train 5 Amine Flash to Flare	10903.1	110	22.28	10.99%	0.67%	3.52%	0.0	938.44	60	12	Amine Treating	Flash Gas to Fuel	EST 1HR downtime per month
Misc.	Train 6 Amine Flash to Flare	10903.1	110	22.28	10.99%	0.67%	3.52%	0.0	938.44	60	12	Amine Treating	Flash Gas to Fuel	EST 1HR downtime per month
Misc.	Train 5 TEG Flash to Flare	3687.1	110	28.33	39.12%	3.85%	0.0004%	0.0	1,316.61	60	12	Dehy	Flash Gas to Fuel	EST 1HR downtime per month
Misc.	Train 6 TEG Flash to Flare	3687.1	110	28.33	39.12%	3.85%	0.00%	0.0	1,316.61	60	12	Dehy	Flash Gas to Fuel	EST 1HR downtime per month
Misc.	Train 4 Amine Still	46,074.3	10	39.11	0.67%	0.11%	29.30%	9214.9	349.64	60	12	Amine Treating	Acid Gas	Train IV-VI Promax Sheet
Misc.	Train 4 Amine Flash to Flare	10,903.1	110	22.28	10.99%	0.67%	3.52%	0.0	938.44	60	12	Amine Treating	Flash Gas to Fuel	
Misc.	Train 4 TEG Flash to Flare	3,687.1	110	28.33	39.12%	3.85%	0.0004%	0.0	1,316.61	60	12	Dehy	Flash Gas to Fuel	

VOC, HAP, and H₂S Emission Calculations

Equipment Tag	Equipment Type	Mass VOC (lb/blowdown) ⁴	Mass HAP (lb/blowdown) ⁴	Mass H ₂ S (lb/blowdown) ⁴	Uncontrolled ⁵						Controlled ⁶					
					VOC (lb/hr)	HAP (lb/hr)	H ₂ S (lb/hr)	VOC (tpy)	HAP (tpy)	H ₂ S (tpy)	VOC (lb/hr)	HAP (lb/hr)	H ₂ S (lb/hr)	VOC (tpy)	HAP (tpy)	H ₂ S (tpy)
PR-XXXX	LP Pig Receiver	15.60	1.52	1.38	15.60	1.52	1.38	0.81	0.08	0.07	0.31	0.03	0.03	0.02	0.00	0.00
PR-XXXX	HP Pig Receiver	112.44	8.31	9.94	112.44	8.31	9.94	4.05	0.30	0.36	2.25	0.17	0.20	0.08	0.01	0.01
PL-XXXX	Treated Gas Pig Launcher	154.80	11.79	0.00	154.80	11.79	0.00	21.83	1.66	0.00	3.10	0.24	0.00	0.44	0.03	0.00
C-1680	AGI Compressor	8.66	1.40	378.69	8.66	1.40	378.69	0.05	0.01	2.27	0.17	0.03	7.57	0.001	0.000	0.045
C-1685	AGI Compressor	8.66	1.40	378.69	8.66	1.40	378.69	0.05	0.01	2.27	0.17	0.03	7.57	0.001	0.000	0.045
C-1690	AGI Compressor	8.66	1.40	378.69	8.66	1.40	378.69	0.05	0.01	2.27	0.17	0.03	7.57	0.001	0.000	0.045
C-1695	AGI Compressor	8.66	1.40	378.69	8.66	1.40	378.69	0.05	0.01	2.27	0.17	0.03	7.57	0.001	0.000	0.045
P-1697	AGI H-Pump	2.43	0.40	106.35	2.43	0.40	106.35	0.03	0.00	1.28	0.05	0.01	2.13	0.00	0.00	0.03
P-1698	AGI H-Pump	2.43	0.40	106.35	2.43	0.40	106.35	0.03	0.00	1.28	0.05	0.01	2.13	0.00	0.00	0.03
F-5301	Amine Inlet Coalescing Filter	18.83	1.36	1.66	18.83	1.36	1.66	0.11	0.01	0.38	0.01	0.03	0.03	0.00	0.00	0.00
F-5515	Amine Pre-Filter	1.12	0.09	0.00	1.12	0.09	0.00	0.03	0.00	0.00	0.02	0.00	0.00	0.00	0.000	0.0000
F-5516	Amine Charcoal Filter	14.04	1.07	0.00	14.04	1.07	0.00	0.01	0.00	0.00	0.28	0.02	0.00	0.00	0.000	0.0000
F-5517	Amine Post-Filter	1.12	0.09	0.00	1.12	0.09	0.00	0.03	0.00	0.00	0.02	0.00	0.00	0.00	0.000	0.0000
F-6301	Amine Inlet Coalescing Filter	18.83	1.36	1.66	18.83	1.36	1.66	0.11	0.01	0.38	0.01	0.03	0.03	0.00	0.00	0.00
F-6515	Amine Pre-Filter	1.12	0.09	0.00	1.12	0.09	0.00	0.03	0.00	0.00	0.02	0.00	0.0000	0.00	0.000	0.0000
F-6516	Amine Charcoal Filter	14.04	1.07	0.00	14.04	1.07	0.00	0.01	0.00	0.00	0.28	0.02	0.0000	0.00	0.000	0.0000
F-6517	Amine Post-Filter	1.12	0.09	0.00	1.12	0.09	0.00	0.03	0.00	0.00	0.02	0.00	0.0000	0.00	0.000	0.0000
F-6001	HP Liquid Condensate Filters	2.53	0.49	0.04	2.53	0.49	0.04	0.02	0.00	0.00	0.05	0.01	0.00	0.00	0.00	0.00
C-1680	AGI Comp. - Packing Purge	0.06	0.01	2.67	0.06	0.01	2.67	0.03	0.00	1.17	0.00	0.00	0.0534	0.00	0.00	0.02341
C-1685	AGI Comp. - Packing Purge	0.06	0.01	2.67	0.06	0.01	2.67	0.03	0.00	1.17	0.00	0.00	0.05	0.00	0.00	0.02
C-1690	AGI Comp. - Packing Purge	0.06	0.01	2.67	0.06	0.01	2.67	0.03	0.00	1.17	0.00	0.00	0.0534	0.00	0.00	0.0234
C-1695	AGI Comp. - Packing Purge	0.06	0.01	2.67	0.06	0.01	2.67	0.03	0.00	1.17	0.00	0.00	0.05	0.00	0.00	0.02
Misc.	0.5 Hour Purge	234.49	17.86	0.00	234.49	17.86	0.00	102.24	7.79	0.00	4.69	0.36	0.00	2.04	0.16	0.00
Misc.	1.0 Hour Purge	468.95	35.72	0.00	468.95	35.72	0.00	39.39	3.00	0.00	9.38	0.71	0.00	0.79	0.06	0.00
Misc.	Train 5 Amine Still	31.83	5.15	1391.94	31.83	5.15	1,391.94	0.19	0.03	8.35	0.64	0.10	27.84	0.00	0.00	0.17
Misc.	Train 6 Amine Still	31.83	5.15	1391.94	31.83	5.15	1,391.94	0.19	0.03	8.35	0.64	0.10	27.84	0.00	0.00	0.17
Misc.	Amine Flash Bridle (1)	0.00	0.00	0.00	0.00	0.00	0.00	0.0001	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Misc.	Stabilizer OH to Flare	10963.36	1077.91	318.72	10,963.36	1,077.91	318.72	65.78	6.47	1.91	219.27	21.56	6.37	1.32	0.13	0.04
Misc.	Train 5 Amine Flash to Flare	70.41	4.26	22.52	70.41	4.26	22.52	0.42	0.03	0.14	1.41	0.09	0.45	0.01	0.00	0.00
Misc.	Train 6 Amine Flash to Flare	70.41	4.26	22.52	70.41	4.26	22.52	0.42	0.03	0.14	1.41	0.09	0.45	0.01	0.00	0.00
Misc.	Train 5 TEG Flash to Flare	107.74	10.60	0.00	107.74	10.60	0.00	0.65	0.06	0.0000	2.15	0.21	0.0000	0.01	0.00	0.0000
Misc.	Train 6 TEG Flash to Flare	107.74	10.60	0.00	107.74	10.60	0.00	0.65	0.06	0.0000	2.15	0.21	0.0000	0.01	0.00	0.0000
Misc.	Train 4 Amine Still	32.29	5.22	1412.04	32.29	5.22	1,412.04	0.19	0.03	8.47	0.65	0.10	28.24	0.00	0.00	0.17
Misc.	Train 4 Amine Flash to Flare	71.43	4.32	22.85	71.43	4.32	22.85	0.43	0.03	0.14	1.43	0.09	0.46	0.01	0.001	0.00
Misc.	Train 4 TEG Flash to Flare	109.30	10.75	0.00	109.30	10.75	0.001	0.66	0.06	0.000	2.19	0.22	0.0000	0.01	0.00	0.000000

Totals:	12,695.12	1,225.56	6,335.37	238.65	19.75	44.27	253.90	24.51	126.71	4.77	0.39	0.89
---------	-----------	----------	----------	--------	-------	-------	--------	-------	--------	------	------	------

Emission Factors					
Pollutant	NOx	CO	CO ₂	N ₂ O	CH ₄
Factor (lb/MMBTU) ⁷	0.138	0.2755	-	-	-
Factor (kg/MMBTU) ⁸	-	-	53.06	0.0001	0.001
GWP ⁸	-	-	1	265	28

NOx, CO, SO₂ and GHG Emission Calculations

Equipment Tag	Equipment Type	Volume Standard (ft3)1	Blowdown Heating Value (BTU/ft³) ²	Hourly Emission Rate (lb/hr) ⁹						Annual Emission Rate (tpy) ¹⁰						
				NOx	CO	SO₂	CO₂	N₂O	CH₄	NOx	CO	SO₂	CO₂	N₂O	CH₄	CO₂e
PR-XXXX	LP Pig Receiver	851	1207.68	0.14	0.28	2.54	120.22	0.0002	0.0023	0.01	0.01	0.13	6.25	0.00001	0.00012	6.26
PR-XXXX	HP Pig Receiver	6761	1065.51	0.99	1.98	18.33	842.69	0.0016	0.0159	0.04	0.07	0.66	30.34	0.00006	0.00057	30.37
PL-XXXX	Treated Gas Pig Launcher	9527	1131.18	1.49	2.97	0.00	1,260.63	0.0024	0.0238	0.21	0.42	0.00	177.75	0.00033	0.00335	177.93
C-1680	AGI Compressor	12535	192.80	0.33	0.67	698.57	282.70	0.0005	0.0053	0.00	0.00	4.19	1.70	0.00000	0.00003	1.70
C-1685	AGI Compressor	12535	192.80	0.33	0.67	698.57	282.70	0.0005	0.0053	0.00	0.00	4.19	1.70	0.00000	0.00003	1.70
C-1690	AGI Compressor	12535	192.80	0.33	0.67	698.57	282.70	0.0005	0.0053	0.00	0.00	4.19	1.70	0.00000	0.00003	1.70
C-1695	AGI Compressor	12535	192.80	0.33	0.67	698.57	282.70	0.0005	0.0053	0.00	0.00	4.19	1.70	0.00000	0.00003	1.70
P-1697	AGI H-Pump	3402	205.19	0.10	0.19	196.19	81.66	0.0002	0.0015	0.0012	0.0023	2.35	0.98	0.00000	0.00002	0.98
P-1698	AGI H-Pump	3402	205.19	0.10	0.19	196.19	81.66	0.0002	0.0015	0.0012	0.0023	2.35	0.98	0.00000	0.00002	0.98
F-5301	Amine Inlet Coalescing Filter	1122	1095.90	0.17	0.34	3.07	143.84	0.0003	0.0027	0.0010	0.0020	0.02	0.86	0.00000	0.00002	0.86
F-5515	Amine Pre-Filter	69	1131.18	0.01	0.02	0.00	9.15	0.0000	0.0002	0.0003	0.0006	0.0000	0.24	0.00000	0.00000	0.24
F-5516	Amine Charcoal Filter	864	1131.18	0.13	0.27	0.00	114.32	0.0002	0.0022	0.0001	0.0003	0.0000	0.11	0.00000	0.00000	0.11
F-5517	Amine Post-Filter	69	1131.18	0.01	0.02	0.00	9.15	0.0000	0.0002	0.0003	0.0006	0.0000	0.24	0.00000	0.00000	0.24
F-6301	Amine Inlet Coalescing Filter	1122	1095.90	0.17	0.34	3.07	143.84	0.0003	0.0027	0.0010	0.0020	0.02	0.86	0.00000	0.00002	0.86
F-6515	Amine Pre-Filter	69	1131.18	0.01	0.02	0.00	9.15	0.0000	0.0002	0.0003	0.0006	0.0000	0.24	0.00000	0.00000	0.24
F-6516	Amine Charcoal Filter	864	1131.18	0.13	0.27	0.00	114.32	0.0002	0.0022	0.0001	0.0003	0.0000	0.11	0.00000	0.00000	0.11
F-6517	Amine Post-Filter	69	1131.18	0.01	0.02	0.00	9.15	0.0000	0.0002	0.0003	0.0006	0.0000	0.24	0.00000	0.00000	0.24
F-6001	HP Liquid Condensate Filters	157	2417.20	0.05	0.10	0.07	44.39	0.0001	0.0008	0.0003	0.0006	0.00	0.27	0.00000	0.00001	0.27
C-1680	AGI Comp. - Packing Purge	105	399.33	0.01	0.01	4.93	4.90	0.0000	0.0001	0.0025	0.0051	2.1592	2.15	0.00000	0.00004	2.15
C-1685	AGI Comp. - Packing Purge	105	399.33	0.01	0.01	4.93	4.90	0.0000	0.0001	0.0025	0.0051	2.1592	2.15	0.00000	0.00004	2.15
C-1690	AGI Comp. - Packing Purge	105	399.33	0.01	0.01	4.93	4.90	0.0000	0.0001	0.0025	0.0051	2.1592	2.15	0.00000	0.00004	2.15
C-1695	AGI Comp. - Packing Purge	105	399.33	0.01	0.01	4.93	4.90	0.0000	0.0001	0.0025	0.0051	2.1592	2.15	0.00000	0.00004	2.15
Misc.	0.5 Hour Purge	14431	1131.18	2.25	4.50	0.00	1,909.54	0.0036	0.0360	0.9822	1.9608	0.0005	832.56	0.00157	0.01569	833.42
Misc.	1.0 Hour Purge	28861	1131.18	4.51	8.99	0.00	3,818.95	0.0072	0.0720	0.3784	0.7555	0.0002	320.79	0.00060	0.00605	321.12
Misc.	Train 5 Amine Still	46074	192.80	1.23	2.45	2,567.71	1,039.12	0.0020	0.0196	0.0074	0.0147	15.41	6.23	0.00001	0.00012	6.24
Misc.	Train 6 Amine Still	46074	192.80	1.23	2.45	2,567.71	1,039.12	0.0020	0.0196	0.0074	0.0147	15.41	6.23	0.00001	0.00012	6.24
Misc.	Amine Flash Bridle (1)	0	938.44	0.00	0.00	0.00	0.03	0.0000	0.0000	0.0000	0.0000	0.0000	0.0009	0.00000	0.00000	0.0009
Misc.	Stabilizer OH to Flare	104729	2389.27	34.53	68.94	587.94	29,270.74	0.0552	0.5517	0.2072	0.4136	3.53	175.62	0.00033	0.00331	175.80
Misc.	Train 5 Amine Flash to Flare	10903	938.44	1.41	2.82	41.55	1,196.90	0.0023	0.0226	0.0085	0.0169	0.25	7.18	0.00001	0.00014	7.19
Misc.	Train 6 Amine Flash to Flare	10903	938.44	1.41	2.82	41.55	1,196.90	0.0023	0.0226	0.0085	0.0169	0.25	7.18	0.00001	0.00014	7.19
Misc.	Train 5 TEG Flash to Flare	3687	1316.61	0.67	1.34	0.00	567.86	0.0011	0.0107	0.0040	0.0080	0.0000	3.41	0.00001	0.00006	3.41
Misc.	Train 6 TEG Flash to Flare	3687	1316.61	0.67	1.34	0.00	567.86	0.0011	0.0107	0.0040	0.0080	0.00	3.41	0.00001	0.00006	3.41
Misc.	Train 4 Amine Still	46074	192.80	1.23	2.45	2,604.80	1,039.12	0.0020	0.0196	0.0074	0.0147	15.63	6.23	0.00001	0.00012	6.24
Misc.	Train 4 Amine Flash to Flare	10903	938.44	1.41	2.82	42.15	1,196.90	0.0023	0.0226	0.0085	0.0169	0.25	7.18	0.00001	0.00014	7.19
Misc.	Train 4 TEG Flash to Flare	3687	1316.61	0.67	1.34	0.00	567.86	0.0011	0.0107	0.0040	0.0080	0.0000	3.41	0.00001	0.00006	3.41
Totals:				56.09	111.98	11,686.90	47,545.50	0.09	0.90	1.90	3.80	81.66	1,614.30	0.00	0.03	1,615.95

¹ Facility blowdowns listed above are routed to FL-1950. Blowdown volumes, pressues, durations, and number per year are conservatively estimated based on facility and equipment design.

² ProMax simulation of the facility used to estimate density, composition, and heating value for each blowdown activity.

³ Quantity of blend gas is estimated for each activity to reduce the H2S content of the stream to the required 6% based on facility design, as well as the composition and quantity of each stream.

⁴ Emissions (Lb/Blowdown) = Volume (scf) * Molecular Weight (lb/lbmol) / 379.3 (scf/lbmol) * Component Mass Fraction (%)

⁵ Uncontrolled Hourly Emissions (lb/hr) = Emissions (lb/blowdown) * Blowdown Duration (hr/blowdown)

Uncontrolled Annual Emissions (tpy) = Emissions (lb/blowdown) * Number of Blowdowns per Year / 2000 lb/ton

⁶ Controlled Emissions = Uncontrolled Emissions * (1 - DRE)

⁷ TNRCC RG-109 emission factors for high-Btu flares

⁸ 40 CFR 98 Subpart A, Table A-1, and Subpart C

⁹ Hourly NOx and CO Emissions (lb/hr) = Emission Factor (lb/MMBTU) * Volume (scf) * Blowdown Heating Value (BTU/scf) / 10^6 (BTU/MMBTU)

Hourly SO₂ Emissions (lb/hr) = DRE * (64 lb/lbmol SO₂/34 lb/lbmol H₂S) * Uncontrolled H₂S (lb/hr).

CO₂, N₂O and CH₄ lb/hr = EF (kg/MMBtu) * 2.20462lb/kg * Fuel consumption (MMBtu/hr)

CO₂e lb/hr = CO₂ lb/hr + (CH₄ lb/hr * GWP) + (N₂O lb/hr * GWP)

¹⁰ Annual Emissions (tpy) = Emissions (lb/blowdown) * Number of Blowdowns per Year / 2000 lb/ton

Dark Horse Facility
Cryogenic Process Flare

Unit(s):	FL-2050
Description:	Cryogenic Process Flare
Destruction Efficiency:	98%
Pilot Operating Hours:	8760

Fuel Data

	Flare Pilot	195	scf/hr	Design
	Flare Pilot	1,251	Btu/scf	ProMax Makeup Fuel
	Flare Pilot	0.24	MMBtu/hr	Calculated
	Sweep Gas Flow Rate	3,000	scf/hr	Design
	Sweep Gas Flow Rate	1,251	Btu/scf	ProMax Makeup Fuel
	Sweep Gas	3.75	MMBtu/hr	Calculated
	Total Flare Flowrate	3,195.0	scf/hr	ProMax Weighted Average
		0.0032	MMscf/hr	
		1,251	Btu/scf	
		4.0	MMBtu/hr	
		28.0	MMscf/yr	
		35,019.5	MMBtu/yr	

Emission Rates

Pilot, Acid, & Assist Gas						
	NOx	CO	VOC ⁴	H ₂ S ⁴	SO ₂ ⁵	Units
	0.138	0.2755		0.25	5	lb/MMBtu ⁶
			5.5			gr/100 scf
						lb/MMscf
	0.03	0.07	0.001	6.96E-05	2.79E-03	lb/hr
	0.15	0.29	0.005	3.05E-04	1.22E-02	tpy
	0.52	1.03	0.02	1.07E-03	4.29E-02	lb/hr
	2.27	4.53	0.07	4.69E-03	1.88E-01	tpy
	NOx	CO	VOC	H ₂ S	SO ₂	Units
Pilot & Sweep Gas	0.55	1.10	0.02	0.001	0.05	lb/hr
	2.42	4.82	0.072	0.005	0.20	tpy

Greenhouse Gas Calculations

CO ₂	N ₂ O	CH ₄	CO ₂ e	
53.1	0.0001	0.001		kg/MMBtu ⁸
1	265	28		GWP ⁹
467.63	0.00	0.01	468.1	lb/hr ¹⁰
2048.24	0.00386	0.0386	2050.3	tpy ⁷

¹ Component Molecular Weights from the following source: https://www.engineeringtoolbox.com/molecular-weight-gas-vapor-d_1156.html
Component Net Heating Values from the following source: <https://www.enggcyclopedia.com/2011/09/heating-values-natural-gas/>
³ Hourly and Annual Event gas emissions calculated as follows:
Hourly Emissions (lb/hr) = Hourly Gas Volume (scf/hr) * Component Mol Wt (lb/lb-mol) * Component Mole% / 379.4 ft³/lb mol
Annual Emissions (tpy) = Annual Gas Volume (scf/yr) * Component Mol Wt (lb/lb-mol) * Component Mole% / 379.4 ft³/lb mol / 2000 lb/ton
⁴ Assumed 98% combustion for H₂S, HAP and VOC. 98% DRE
⁵ Assumed 100% conversion of combusted H₂S to SO₂, SO₂= DRE * (64/34) * uncontrolled H₂S.
⁶ To be conservative the TNRCC RG-109 emission factors for high-Btu flares were used.
⁸ Greenhouse gas emission factors are from 40 CFR 98 Subpart C
⁹ 40 CFR 98 Subpart A, Table A-1
¹⁰ CO₂, N₂O and CH₄ lb/hr = EF (kg/MMBtu) * 2.20462lb/kg * Fuel consumption (MMBtu/hr)
CO₂e lb/hr = CO₂ lb/hr + (CH₄ lb/hr * GWP) + (N₂O lb/hr * GWP)

Dark Horse Facility
Equipment for Blowdowns to FL-2050

Emission Unit:	FL-2050 BD
Source Description:	Equipment for Blowdowns to FL-2050
Destruction Efficiency:	98%

Blowdown Activities Inputs

Equipment Tag	Equipment Type	Volume (ft ³) ¹	Blowdown Pressure (psig) ¹	Molecular Weight (lb/lbmol) ²	Mass VOC Content (%) ²	Mass HAP Content (%) ²	Mass H ₂ S Content (%) ²	Blowdown Duration (min) ¹	Blowdowns Per Year ¹	Promax Flow Sheet (Cryo_Rej Train I-II)	Promax Stream Number	Comments
C-1200	Residue Compressor	8,364	255	17.88	0.47%	0.00001%	0.0001%	60	12	Residue Compression	1	Blowdown to atmosphere
C-1225	Residue Compressor	8,364	255	17.88	0.47%	0.00001%	0.0001%	60	12	Residue Compression	1	Blowdown to atmosphere
C-1250	Residue Compressor	8,364	255	17.88	0.47%	0.00001%	0.0001%	60	12	Residue Compression	1	Blowdown to atmosphere
C-1275	Residue Compressor	8,364	255	17.88	0.47%	0.00001%	0.0001%	60	12	Residue Compression	1	Blowdown to atmosphere
C-2200	Residue Compressor	8,364	255	17.88	0.47%	0.00001%	0.0001%	60	12	Residue Compression	1	Blowdown to atmosphere
C-2225	Residue Compressor	8,364	255	17.88	0.47%	0.00001%	0.0001%	60	12	Residue Compression	1	Blowdown to atmosphere
C-2250	Residue Compressor	8,364	255	17.88	0.47%	0.00001%	0.0001%	60	12	Residue Compression	1	Blowdown to atmosphere
C-2275	Residue Compressor	8,364	255	17.88	0.47%	0.00001%	0.0001%	60	12	Residue Compression	1	Blowdown to atmosphere
T-1501	Demethanizer Blowdown	1,597,021	275	17.88	0.47%	0.00001%	0.0001%	60	12	Cryo Plant	16	Blowdown to flare
T-2501	Demethanizer Blowdown	1,597,021	275	17.88	0.47%	0.00001%	0.0001%	60	12	Cryo Plant	16	Blowdown to flare
F-1441	Mol Sieve Inlet Coalescing Filter	1122	800	21.79	24.16%	2.15%	0.0001%	60	2	Cryo Plant	7	Blowdown to flare
F-1445/6	Mol Sieve Dust Filter	69.12	800	21.79	24.16%	2.16%	0.0001%	60	4	Cryo Plant	40	Blowdown to flare
F-2441	Mol Sieve Inlet Coalescing Filter	863.94	800	21.79	24.16%	2.15%	0.0001%	60	2	Cryo Plant	7	Blowdown to flare
F-2445/6	Mol Sieve Dust Filter	69.12	800	21.79	24.16%	2.16%	0.0001%	60	4	Cryo Plant	40	Blowdown to flare

VOC, HAP, and H₂S Emission Calculations

Equipment Tag	Equipment Type	Mass VOC (lb/blowdown) ⁴	Mass HAP (lb/blowdown) ⁴	Mass H ₂ S (lb/blowdown) ⁴	Uncontrolled ⁵						Controlled ⁶					
					VOC (lb/hr)	HAP (lb/hr)	H ₂ S (lb/hr)	VOC (tpy)	HAP (tpy)	H ₂ S (tpy)	VOC (lb/hr)	HAP (lb/hr)	H ₂ S (lb/hr)	VOC (tpy)	HAP (tpy)	H ₂ S (tpy)
C-1200	Residue Compressor	1.84	0.00	0.00	1.84	0.00	0.00	0.01	0.00	0.00	0.04	0.00	0.00	0.00	0.00	0.000
C-1225	Residue Compressor	1.84	0.00	0.00	1.84	0.00	0.00	0.01	0.00	0.00	0.04	0.00	0.00	0.00	0.00	0.000
C-1250	Residue Compressor	1.84	0.00	0.00	1.84	0.00	0.00	0.01	0.00	0.00	0.04	0.00	0.00	0.00	0.00	0.000
C-1275	Residue Compressor	1.84	0.00	0.00	1.84	0.00	0.00	0.01	0.00	0.00	0.04	0.00	0.00	0.00	0.00	0.000
C-2200	Residue Compressor	1.84	0.00	0.00	1.84	0.00	0.00	0.01	0.00	0.00	0.04	0.00	0.00	0.00	0.00	0.000
C-2225	Residue Compressor	1.84	0.00	0.00	1.84	0.00	0.00	0.01	0.00	0.00	0.04	0.00	0.00	0.00	0.00	0.000
C-2250	Residue Compressor	1.84	0.00	0.00	1.84	0.00	0.00	0.01	0.00	0.00	0.04	0.00	0.00	0.00	0.00	0.000
C-2275	Residue Compressor	1.84	0.00	0.00	1.84	0.00	0.00	0.01	0.00	0.00	0.04	0.00	0.00	0.00	0.00	0.000
T-1501	Demethanizer Blowdown	351.64	0.01	0.05	351.64	0.01	0.05	2.11	0.00	0.00	7.03	0.00	0.00	0.04	0.00	0.000
T-2501	Demethanizer Blowdown	351.64	0.01	0.05	351.64	0.01	0.05	2.11	0.00	0.00	7.03	0.00	0.00	0.04	0.00	0.000
F-1441	Mol Sieve Inlet Coalescing Filter	15.57	1.39	0.00	15.57	1.39	0.0000	0.02	0.00	0.000000	0.31	0.03	0.000001	0.00	0.0000	0.0000000
F-1445/6	Mol Sieve Dust Filter	0.96	0.09	0.00	0.96	0.09	0.0000	0.00	0.00	0.000000	0.02	0.00	0.000000	0.00	0.0000	0.0000000
F-2441	Mol Sieve Inlet Coalescing Filter	11.99	1.07	0.00	11.99	1.07	0.0000	0.01	0.00	0.000000	0.24	0.02	0.000001	0.00	0.0000	0.0000000
F-2445/6	Mol Sieve Dust Filter	0.96	0.09	0.00	0.96	0.09	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.000

Totals:	747.49	2.64	0.10	4.34	0.003	0.00058	14.95	0.05	0.002	0.09	0.0001	0.000012
---------	--------	------	------	------	-------	---------	-------	------	-------	------	--------	----------

Emission Factors

Pollutant	NOx	CO	CO ₂	N ₂ O	CH ₄
Factor (lb/MMBTU) ⁷	0.138	0.2755	-	-	-
Factor (kg/MMBTU) ⁸	-	-	53.06	0.0001	0.001
GWP ⁸	-	-	1	265	28

NOx, CO, SO₂ and GHG Emission Calculations

Equipment Tag	Equipment Type	Volume (ft ³) ¹	Blowdown Heating Value (BTU/ft ³) ²	Hourly Emission Rate (lb/hr) ⁹						Annual Emission Rate (tpy) ¹⁰						
				NOx	CO	SO ₂	CO ₂	N ₂ O	CH ₄	NOx	CO	SO ₂	CO ₂	N ₂ O	CH ₄	CO ₂ e
C-1200	Residue Compressor	8364	927.17	1.07	2.14	0.00	907.14	0.0017	0.0171	0.01	0.01	0.00000	5.44	0.00001	0.00010	5.45
C-1225	Residue Compressor	8364	927.17	1.07	2.14	0.00	907.14	0.0017	0.0171	0.01	0.01	0.00000	5.44	0.00001	0.00010	5.45
C-1250	Residue Compressor	8364	927.17	1.07	2.14	0.00	907.14	0.0017	0.0171	0.01	0.01	0.00000	5.44	0.00001	0.00010	5.45
C-1275	Residue Compressor	8364	927.17	1.07	2.14	0.00	907.14	0.0017	0.0171	0.01	0.01	0.00000	5.44	0.00001	0.00010	5.45
C-2200	Residue Compressor	8364	927.17	1.07	2.14	0.00	907.14	0.0017	0.0171	0.01	0.01	0.00000	5.44	0.00001	0.00010	5.45
C-2225	Residue Compressor	8364	927.17	1.07	2.14	0.00	907.14	0.0017	0.0171	0.01	0.01	0.00000	5.44	0.00001	0.00010	5.45
C-2250	Residue Compressor	8364	927.17	1.07	2.14	0.00	907.14	0.0017	0.0171	0.01	0.01	0.00000	5.44	0.00001	0.00010	5.45
C-2275	Residue Compressor	8364	927.17	1.07	2.14	0.00	907.14	0.0017	0.0171	0.0064	0.0128	0.00000	5.44	0.00001	0.00010	5.45
T-1501	Demethanizer Blowdown	1597021	927.17	204.34	407.94	0.09	173,209.78	0.3264	3.2644	1.2260	2.4476	0.00052	1,039.26	0.00196	0.01959	1,040.33
T-2501	Demethanizer Blowdown	1597021	927.17	204.34	407.94	0.09	173,209.78	0.3264	3.2644	1.2260	2.4476	0.00052	1,039.26	0.00196	0.01959	1,040.33
F-1441	Mol Sieve Inlet Coalescing Filter	1122	1131.18	0.18	0.35	0.00	148.47	0.0003	0.0028	0.0002	0.0003	0.00000	0.15	0.00000	0.00000	0.15
F-1445/6	Mol Sieve Dust Filter	69	1131.32	0.01	0.02	0.00	9.15	0.0000	0.0002	0.0000	0.0000	0.00000	0.02	0.00000	0.00000	0.02
F-2441	Mol Sieve Inlet Coalescing Filter	864	1131.18	0.13	0.27	0.00	114.32	0.0002	0.0022	0.0001	0.0003	0.00000	0.11	0.00000	0.00000	0.11
F-2445/6	Mol Sieve Dust Filter	69	1131.32	0.01	0.02	0.00	9.15	0.0000	0.0002	0.0000	0.0000	0.00000	0.02	0.00000	0.00000	0.02

Totals:	417.57	833.63	0.18	353,957.78	0.67	6.67	2.50	5.00	0.0011	2,122.36	0.004	0.04	2,124.54
---------	--------	--------	------	------------	------	------	------	------	--------	----------	-------	------	----------

¹ Facility blowdowns listed above are routed to FL-2050. Blowdown volumes, pressues, durations, and number per year are conservatively estimated based on facility and equipment design.

² ProMax simulation of the facility used to estimate density, composition, and heating value for each blowdown activity.

⁴ Emissions (Lb/Blowdown) = Volume (scf) * Molecular Weight (lb/lbmol) / 379.3 (scf/lbmol) * Component Mass Fraction (%)

⁵ Uncontrolled Hourly Emissions (lb/hr) = Emissions (lb/blowdown) * Blowdown Duration (hr/blowdown)

Uncontrolled Annual Emissions (tpy) = Emissions (lb/blowdown) * Number of Blowdowns per Year / 2000 lb/ton

⁶ Controlled Emissions = Uncontrolled Emissions * (1 - DRE)

⁷ TNRCC RG-109 emission factors for high-Btu flares

⁸ 40 CFR 98 Subpart A, Table A-1, and Subpart C

⁹ Hourly NOx and CO Emissions (lb/hr) = Emission Factor (lb/MMBTU) * Volume (scf) * Blowdown Heating Value (BTU/scf) / 10^6 (BTU/MMBTU)

Hourly SO₂ Emissions (lb/hr) = DRE * (64 lb/lbmol SO₂/34 lb/lbmol H₂S) * Uncontrolled H₂S (lb/hr).

CO₂, N₂O and CH₄ lb/hr = EF (kg/MMBtu) * 2.20462lb/kg * Fuel consumption (MMBtu/hr)

CO₂e lb/hr = CO₂ lb/hr + (CH₄ lb/hr * GWP) + (N₂O lb/hr * GWP)

¹⁰ Annual Emissions (tpy) = Emissions (lb/blowdown) * Number of Blowdowns per Year / 2000 lb/ton

Dark Horse Facility

Heaters and Reboilers

Emission Unit	Source Description
H-1600	Stabilizer Hot Oil Heater
H-1620	Amine Hot Oil Heater
H-2600	Stabilizer Hot Oil Heater
H-2620	Amine Hot Oil Heater
H-3620	Amine Hot Oil Heater
H-4620	Amine Hot Oil Heater
H-5620	Utility Hot Oil Heater
H-6620	Utility Hot Oil Heater
E-1566	TEG Reboiler (Direct Fired Heater)
E-2566	TEG Reboiler (Direct Fired Heater)
E-3566	TEG Reboiler (Direct Fired Heater)
E-4566	TEG Reboiler (Direct Fired Heater)
H-1781	Cryo Trim Heater
H-2781	Cryo Trim Heater
H-1741	Cryo Regen Heater
H-2741	Cryo Regen Heater

Fuel Inputs

Annual op hours:	8,760		
Fuel heat value	1251	Btu/scf	ProMax Makeup Fuel
Fuel H ₂ S Content	0.25	gr H ₂ S / 100 scf	Estimated
Fuel Sulfur Content	5.00	gr S / 100 scf	Estimated0.0980

Emission Factors

Source	NO _x ¹	CO ¹	VOC ¹	SO ₂ ²	PM ^{1,3}	H ₂ S ⁴	HCHO ⁵	Toluene ⁵	Benzene ⁵	n-Hexane ⁵	HAPs ⁵	Units
AP-42 Tables 1.4-1 and 1.4-2	100	84	5.5		7.6		0.075	0.0034	0.0021	1.80		lb/MMscf
Adjusted Factor	122.7	103.0	6.7		9.3		0.092	0.0042	0.0026	2.21		lb/MMscf
H-1600 (Manufacturer Guaranteed Factors)	0.0401	0.0407	0.0192		0.0156							lb/MMBtu
H-1620 (Manufacturer Guaranteed Factors)	0.0401	0.0407	0.0192		0.0156							lb/MMBtu
H-1620 (Manufacturer Guaranteed Factors)	0.0401	0.0407	0.0192		0.0156							lb/MMBtu
H-2620 (Manufacturer Guaranteed Factors)	0.0401	0.0407	0.0192		0.0156							lb/MMBtu
H-3620 (Manufacturer Guaranteed Factors)	0.0401	0.0407	0.0192		0.0156							lb/MMBtu
H-4620 (Manufacturer Guaranteed Factors)	0.0401	0.0407	0.0192		0.0156							lb/MMBtu
H-5620 (Manufacturer Guaranteed Factors)	0.0401	0.0407	0.0192		0.0156							lb/MMBtu
H-6620 (Manufacturer Guaranteed Factors)	0.0401	0.0407	0.0192		0.0156							lb/MMBtu
H-1781 (Manufacturer Guaranteed Factors)	0.0401	0.0407	0.0192		0.0132							lb/MMBtu
H-2781 (Manufacturer Guaranteed Factors)	0.0401	0.0407	0.0192		0.0132							lb/MMBtu
H-1741 (Manufacturer Guaranteed Factors)	0.0401	0.0407	0.0192		0.0132							lb/MMBtu
H-2741 (Manufacturer Guaranteed Factors)	0.0401	0.0407	0.0192		0.0132							lb/MMBtu

Hourly Emission Rates

Unit	Heat Rate (MMBTU/hr)	NO _x ¹	CO ¹	VOC ¹	SO ₂ ²	PM ^{1,3}	H ₂ S ⁴	HCHO ⁵	Toluene ⁵	Benzene ⁵	n-Hexane ⁵	HAPs ⁵	Units
H-1600	6.97	0.28	0.28	0.13	0.08	0.11	3.98E-05	5.13E-04	2.32E-05	1.44E-05	1.23E-02	1.29E-02	lb/hr ⁶
H-1620	37.00	1.48	1.51	0.71	0.44	0.58	2.11E-04	2.72E-03	1.23E-04	7.62E-05	6.53E-02	6.82E-02	lb/hr ⁶
H-2600	27.00	1.08	1.10	0.52	0.32	0.42	1.54E-04	1.99E-03	9.00E-05	5.56E-05	4.76E-02	4.98E-02	lb/hr ⁶
H-2620	37.00	1.48	1.51	0.71	0.44	0.58	2.11E-04	2.72E-03	1.23E-04	7.62E-05	6.53E-02	6.82E-02	lb/hr ⁶
H-3620	37.00	1.48	1.51	0.71	0.44	0.58	2.11E-04	2.72E-03	1.23E-04	7.62E-05	6.53E-02	6.82E-02	lb/hr ⁶
H-4620	82.00	3.29	3.34	1.57	0.98	1.28	4.68E-04	6.03E-03	2.73E-04	1.69E-04	1.45E-01	1.51E-01	lb/hr ⁶
H-5620	86.00	3.45	3.50	1.65	1.03	1.34	4.91E-04	6.32E-03	2.87E-04	1.77E-04	1.52E-01	1.59E-01	lb/hr ⁶
H-6620	86.00	3.45	3.50	1.65	1.03	1.34	4.91E-04	6.32E-03	2.87E-04	1.77E-04	1.52E-01	1.59E-01	lb/hr ⁶
E-1566	1.50	0.15	0.12	0.01	0.02	0.01	8.56E-06	1.10E-04	5.00E-06	3.09E-06	2.65E-03	2.77E-03	lb/hr ⁶
E-2566	1.50	0.15	0.12	0.01	0.02	0.01	8.56E-06	1.10E-04	5.00E-06	3.09E-06	2.65E-03	2.77E-03	lb/hr ⁶
E-3566	1.50	0.15	0.12	0.01	0.02	0.01	8.56E-06	1.10E-04	5.00E-06	3.09E-06	2.65E-03	2.77E-03	lb/hr ⁶
E-4566	3.00	0.29	0.25	0.02	0.04	0.02	1.71E-05	2.21E-04	1.00E-05	6.18E-06	5.29E-03	5.53E-03	lb/hr ⁶
H-1781	22.00	2.16	1.81	0.12	0.26	0.16	1.26E-04	1.62E-03	7.33E-05	4.53E-05	3.88E-02	4.06E-02	lb/hr ⁶
H-2781	22.00	2.16	1.81	0.12	0.26	0.16	1.26E-04	1.62E-03	7.33E-05	4.53E-05	3.88E-02	4.06E-02	lb/hr ⁶
H-1741	9.00	0.88	0.74	0.05	0.11	0.07	5.14E-05	6.62E-04	3.00E-05	1.85E-05	1.59E-02	1.66E-02	lb/hr ⁶
H-2741	9.00	0.88	0.74	0.05	0.11	0.07	5.14E-05	6.62E-04	3.00E-05	1.85E-05	1.59E-02	1.66E-02	lb/hr ⁶

Annual Emission Rates

Unit	Heat Rate (MMBTU/hr)	NO _x ¹	CO ¹	VOC ¹	SO ₂ ²	PM ^{1,3}	H ₂ S ⁴	HCHO ⁵	Toluene ⁵	Benzene ⁵	n-Hexane ⁵	HAPs ⁵	Units
H-1600	6.97	1.22	1.24	0.586	0.365	0.476	1.74E-04	2.24E-03	1.02E-04	6.29E-05	5.39E-02	5.63E-02	tons/yr ⁷
H-1620	37.00	6.50	6.60	3.112	1.936	2.528	9.25E-04	1.19E-02	5.40E-04	3.34E-04	2.86E-01	2.99E-01	tons/yr ⁷
H-2600	27.00	4.74	4.81	2.271	1.412	1.845	6.75E-04	8.70E-03	3.94E-04	2.43E-04	2.09E-01	2.18E-01	tons/yr ⁷
H-2620	37.00	6.50	6.60	3.112	1.936	2.528	9.25E-04	1.19E-02	5.40E-04	3.34E-04	2.86E-01	2.99E-01	tons/yr ⁷
H-3620	37.00	6.50	6.60	3.112	1.936	2.528	9.25E-04	1.19E-02	5.40E-04	3.34E-04	2.86E-01	2.99E-01	tons/yr ⁷
H-4620	82.00	14.40	14.62	6.896	4.290	5.603	2.05E-03	2.64E-02	1.20E-03	7.39E-04	6.34E-01	6.62E-01	tons/yr ⁷
H-5620	86.00	15.10	15.33	7.232	4.499	5.876	2.15E-03	2.77E-02	1.26E-03	7.76E-04	6.65E-01	6.94E-01	tons/yr ⁷
H-6620	86.00	15.10	15.33	7.232	4.499	5.876	2.15E-03	2.77E-02	1.26E-03	7.76E-04	6.65E-01	6.94E-01	tons/yr ⁷
E-1566	1.50	0.64	0.54	0.035	0.078	0.049	3.75E-05	4.83E-04	2.19E-05	1.35E-05	1.16E-02	1.21E-02	tons/yr ⁷
E-2566	1.50	0.64	0.54	0.035	0.078	0.049	3.75E-05	4.83E-04	2.19E-05	1.35E-05	1.16E-02	1.21E-02	tons/yr ⁷
E-3566	1.50	0.64	0.54	0.035	0.078	0.049	3.75E-05	4.83E-04	2.19E-05	1.35E-05	1.16E-02	1.21E-02	tons/yr ⁷
E-4566	3.00	1.29	1.08	0.071	0.157	0.098	7.50E-05	9.66E-04	4.38E-05	2.71E-05	2.32E-02	2.42E-02	tons/yr ⁷
H-1781	22.00	9.45	7.94	0.520	1.151	0.718	5.50E-04	7.09E-03	3.21E-04	1.98E-04	1.70E-01	1.78E-01	tons/yr ⁷
H-2781	22.00	9.45	7.94	0.520	1.151	0.718	5.50E-04	7.09E-03	3.21E-04	1.98E-04	1.70E-01	1.78E-01	tons/yr ⁷
H-1741	9.00	3.86	3.25	0.213	0.471	0.294	2.25E-04	2.90E-03	1.31E-04	8.12E-05	6.96E-02	7.27E-02	tons/yr ⁷
H-2741	9.00	3.86	3.25	0.213	0.471	0.294	2.25E-04	2.90E-03	1.31E-04	8.12E-05	6.96E-02	7.27E-02	tons/yr ⁷

Total99.9

Greenhouse Gas Calculations

Emission Factors

Source	CO ₂	N ₂ O	CH ₄	CO ₂ e	Units
40 CFR 98 Subpart C	53.06	0.00010	0.0010		kg/MMBtu ⁸
40 CFR 98 Subpart A, Table A-1	1	265	28		GWP ⁹

Hourly Emission Rates

Unit	Heat Rate (MMBTU/hr)	CO ₂	N ₂ O	CH ₄	CO ₂ e	Units
H-1600	6.97	815.33	0.00154	0.0154	-	lb/hr ¹⁰
H-1620	37.00	4328.15	0.00816	0.0816	-	lb/hr ¹⁰
H-2600	27.00	3158.38	0.00595	0.0595	-	lb/hr ¹⁰
H-2620	37.00	4328.15	0.00816	0.0816	-	lb/hr ¹⁰
H-3620	37.00	4328.15	0.00816	0.0816	-	lb/hr ¹⁰
H-4620	82.00	9592.13	0.01808	0.1808	-	lb/hr ¹⁰
H-5620	86.00	10060.03	0.01896	0.1896	-	lb/hr ¹⁰
H-6620	86.00	10060.03	0.01896	0.1896	-	lb/hr ¹⁰
E-1566	1.50	175.47	0.00033	0.0033	-	lb/hr ¹⁰
E-2566	1.50	175.47	0.00033	0.0033	-	lb/hr ¹⁰
E-3566	1.50	175.47	0.00033	0.0033	-	lb/hr ¹⁰
E-4566	3.00	350.93	0.00066	0.0066	-	lb/hr ¹⁰
H-1781	22.00	2573.50	0.00485	0.0485	-	lb/hr ¹⁰
H-2781	22.00	2573.50	0.00485	0.0485	-	lb/hr ¹⁰
H-1741	9.00	1052.79	0.00198	0.0198	-	lb/hr ¹⁰
H-2741	9.00	1052.79	0.00198	0.0198	-	lb/hr ¹⁰

Annual Emission Rates

Unit	Heat Rate (MMBTU/hr)	CO ₂	N ₂ O	CH ₄	CO ₂ e	Units
H-1600	6.97	3571.15	0.0067	0.067	3574.82	tpy ¹¹
H-1620	37.00	18957.31	0.03573	0.3573	18976.79	tpy ¹¹
H-2600	27.00	13833.72	0.02607	0.2607	13847.93	tpy ¹¹
H-2620	37.00	18957.31	0.03573	0.3573	18976.79	tpy ¹¹
H-3620	37.00	18957.31	0.03573	0.3573	18976.79	tpy ¹¹
H-4620	82.00	42013.51	0.07918	0.7918	42056.66	tpy ¹¹
H-5620	86.00	44062.95	0.08304	0.8304	44108.21	tpy ¹¹
H-6620	86.00	44062.95	0.08304	0.8304	44108.21	tpy ¹¹
E-1566	1.50	768.54	0.00145	0.0145	769.33	tpy ¹¹
E-2566	1.50	768.54	0.00145	0.0145	769.33	tpy ¹¹
E-3566	1.50	768.54	0.00145	0.0145	769.33	tpy ¹¹
E-4566	3.00	1537.08	0.00290	0.0290	1538.66	tpy ¹¹
E-4567	22.00	11271.92	0.02124	0.2124	11283.49	tpy ¹¹
E-4568	22.00	11271.92	0.02124	0.2124	11283.49	tpy ¹¹
E-4569	9.00	4611.24	0.00869	0.0869	4615.98	tpy ¹¹
E-4570	9.00	4611.24	0.00869	0.0869	4615.98	tpy ¹¹

¹ Emission factors from AP-42 Tables 1.4-1 and 1.4-2 (7/98)
Emission factors have been adjusted according to AP-42: EF (at fuel heating value) = Fuel Heat Value / EF Heat Value (1020 Btu/scf) * EF (at 1020 Btu/scf)

² SO₂ emissions based on fuel content of 5 grains of sulfur per 100 scf
SO₂ lb/hr = 5gr S/100 scf * Fuel usage (scf/hr) * 1 lb/7000 gr * 64lb SO2/ 32lb S
Assume 100% conversion of combusted H₂S into SO₂ and 98% Combustion Efficiency. Additional SO₂ emissions from the combustion of H₂S:
SO₂ (lb/hr) from H₂S = 98%*[(0.25 gr H₂S/100 scf * 1 lb/7000 gr * 64 lb/lbmol SO₂/34 lb/lbmol H₂S*scf/hr)]

³ Assumes PM (Total) = PM-10 = PM-2.5

⁴ H₂S emissions fuel content of 0.25 grains of hydrogen sulfide per 100 scf and combustion efficiency of 98%
H₂S lb/hr = (1-0.98) * 0.25 gr H₂S/100 scf * Fuel usage (scf/hr) * 1 lb/7000 gr

⁵ HAP emission factors from AP-42 Table 1.4-3
Emission factors have been adjusted according to AP-42: EF (at fuel heating value) = Fuel Heat Value / EF Heat Value (1020 Btu/scf) * EF (at 1020 Btu/scf)

⁶ Hourly emission rates calculated as follows:
NOx, CO, VOC, PM, HAP lb/hr = EF (lb/MMscf) * Fuel usage (MMscf/hr)

⁷ Annual emissions calculated as follows:
tons/yr = Hourly emissions (lb/hr) * Hours of operation * 1 ton/2000 lb

⁸ Greenhouse gas emission factors are from 40 CFR 98 Subpart C

⁹ 40 CFR 98 Subpart A, Table A-1

¹⁰ GHG lb/hr = EF (kg/MMBtu) * Heat input (MMBtu/hr) * 2.20462lb/kg

¹¹ CO₂, N₂O, CH₄ tpy = Hourly emission rate (lb/hr) * Hours of operation * 1ton/2000lb
CO₂e tpy = CO₂ Emission Rate + (N₂O Emission Rate * GWP) + (CH₄ Emission Rate * GWP)

Exhaust Parameters

Exhaust temp	600 °F	Engineering Estimate
Stack height	17 ft	Engineering Estimate
Stack diameter	0.67 ft	Engineering Estimate
Exhaust flow	4847 acfm	<i>Flow (acfm) = Flow (scfm) * (Stack Temp + 460) / 528 * 29.92 / Site Bar. Pres. / (100% - Moisture%)</i>
Exhaust velocity	229.1 ft/sec	Exhaust flow / stack area
O2 F factor	8710 dscf/MMBtu	Method 9
Moisture	0.1	nominal
	1940.1 dscfm	= heat input * O2 F * [20.9 / (20.9 - O2%)]
O2 %	10 %	
Site Elevation	3,100 ft MSL	
Pressure at Elevation	26.71 in Hg	

Dark Horse Facility
Trains 1-3 TEG Dehydrators

Emission Unit: DEHY-1 through DEHY-3
Number of Identical Units: 3
Source Description: Trains 1-3 TEG Dehydrators
Annual Operating Hours: 8760 hr
Wet Gas Flow Rate per Dehy: 110 MMscf/day
Capture Efficiency: 99%

Criteria Pollutant Emissions (per Dehydrator Unit)

Compound	Uncontrolled Flash Tank Emissions ¹ (Flash Gas to Fuel Stream)		Uncontrolled Regenerator Emissions ² (" _1" Stream)		Total Uncontrolled Emissions ³		Controlled Regenerator Emissions ⁴ (Condenser Emissions, "T12" Stream)		Controlled Flash Tank Emissions ⁵		Total Pre-Combustor Emissions		Vented Pre-Combustor Emissions ⁹	
	lb/hr	tons/yr	lb/hr	tons/yr	lb/hr	tons/yr	lb/hr	tons/yr	lb/hr	tons/yr	lb/hr	tons/yr	lb/hr	tons/yr
Methane	54.59	239.12	5.07	22.21	59.66	261.33	5.07	22.19	0.0000	0.0000	5.07	22.19	0.051	0.222
Ethane	27.39	119.98	8.05	35.26	35.44	155.23	8.01	35.07	0.0000	0.0000	8.01	35.07	0.080	0.351
Propane	26.80	117.40	14.43	63.19	41.23	180.59	14.21	62.25	0.0000	0.0000	14.21	62.25	0.142	0.622
i-Butane	6.57	28.77	4.68	20.51	11.25	49.28	4.54	19.90	0.0000	0.0000	4.54	19.90	0.045	0.199
n-Butane	15.27	66.90	15.65	68.56	30.93	135.46	14.94	65.45	0.0000	0.0000	14.94	65.45	0.149	0.655
Neo-Pentane	0.11	0.47	0.09	0.41	0.20	0.87	0.09	0.39	0.0000	0.0000	0.09	0.39	0.001	0.004
i-Pentane	5.99	26.23	9.29	40.70	15.28	66.92	8.30	36.37	0.0000	0.0000	8.30	36.37	0.083	0.364
n-Pentane	5.13	22.45	9.38	41.07	14.50	63.52	8.12	35.57	0.0000	0.0000	8.12	35.57	0.081	0.356
n-Hexane	5.61	24.59	20.74	90.83	26.35	115.42	14.64	64.12	0.0000	0.0000	14.64	64.12	0.146	0.641
nC7	1.78	7.80	9.92	43.45	11.70	51.25	4.55	19.93	0.0000	0.0000	4.55	19.93	0.046	0.199
nC8	0.36	1.59	3.22	14.09	3.58	15.68	0.75	3.27	0.0000	0.0000	0.75	3.27	0.007	0.033
nC10	0.00	0.01	0.06	0.27	0.06	0.28	0.00	0.01	0.0000	0.0000	0.00	0.01	0.000	0.000
nC9	0.07	0.32	1.05	4.62	1.13	4.94	0.12	0.51	0.0000	0.0000	0.12	0.51	0.001	0.005
Benzene	0.61	2.69	22.74	99.61	23.35	102.29	12.45	54.53	0.0000	0.0000	12.45	54.53	0.124	0.545
Toluene	0.53	2.30	33.52	146.83	34.05	149.14	9.74	42.65	0.0000	0.0000	9.74	42.65	0.097	0.427
Ethylbenzene	0.02	0.10	2.30	10.05	2.32	10.16	0.28	1.25	0.0000	0.0000	0.28	1.25	0.003	0.012
o-Xylene	0.01	0.06	1.78	7.79	1.79	7.86	0.22	0.95	0.0000	0.0000	0.22	0.95	0.002	0.010
m-Xylene	0.03	0.12	2.82	12.34	2.85	12.46	0.34	1.50	0.0000	0.0000	0.34	1.50	0.003	0.015
p-Xylene	0.03	0.12	2.69	11.80	2.72	11.92	0.33	1.46	0.0000	0.0000	0.33	1.46	0.003	0.015
Nitrogen	0.48	2.10	0.01	0.06	0.49	2.15	0.01	0.06	0.0000	0.0000	0.01	0.06	0.000	0.001
Carbon Dioxide	22.07	96.68	15.13	66.25	37.20	162.94	15.04	65.86	0.0000	0.0000	15.04	65.86	0.150	0.659
Hydrogen Sulfide	0.00	0.003	0.00	0.01	0.00	0.01	0.00	0.01	0.0000	0.0000	0.00	0.01	0.000	0.000
He	0.00	0.008	0.00	0.00	0.00	0.01	0.00	0.0003	0.0000	0.0000	0.00	0.00	0.000	0.000
O2	0.00	0.0000	0.00	0.00	0.00	0.00	0.00	0.0000	0.0000	0.0000	0.00	0.00	0.000	0.000
H2O	1.20	5.25	428.25	1875.74	429.45	1880.99	4.93	21.60	0.0000	0.0000	4.93	21.60	0.049	0.216
CHEMTHERM 650	0.00	0.0000	0.00	0.00	0.00	0.00	0.00	0.0000	0.0000	0.0000	0.00	0.00	0.000	0.000
MDEA	0.00	0.0000	0.00	0.02	0.00	0.02	0.00	0.0005	0.0000	0.0000	0.00	0.00	0.000	0.000
MeOH	0.00	0.0000	0.00	0.00	0.00	0.00	0.00	0.0000	0.0000	0.0000	0.00	0.00	0.000	0.000
SO2	0.00	0.0000	0.00	0.00	0.00	0.00	0.00	0.0000	0.0000	0.0000	0.00	0.00	0.000	0.000
Triethylene Glycol	0.01	0.04	0.12	0.53	0.13	0.57	0.00	0.0000	0.0000	0.0000	0.00	0.00	0.000	0.000
Piperazine	0.00	0.0000	0.00	0.00	0.00	0.00	0.00	0.0000	0.0000	0.0000	0.00	0.00	0.000	0.000
Hydrogen Sulfide (H2S2)	0.00	0.0000	0.00	0.00	0.00	0.00	0.00	0.0000	0.0000	0.0000	0.00	0.00	0.000	0.000
JEFFTREAT® MS-300 Solvent	0.01	0.04	4.22	18.47	4.23	18.51	0.11	0.46	0.0000	0.0000	0.11	0.46	0.001	0.005
VOC	68.94	301.94	154.36	676.11	223.30	978.05	93.63	410.12	0.0000	0.0000	93.63	410.12	0.94	4.10
HAP	6.85	30.00	86.59	379.25	93.44	409.25	38.01	166.46	0.0000	0.0000	38.01	166.46	0.38	1.66

Greenhouse Gas Emissions per DEHY

CO ₂	CH ₄	CO ₂ e	
0.66	0.22		tons/yr ⁶
1	28		GWP ⁷
0.66	6.21	6.87	tons/yr CO ₂ e ⁸

¹ From "Flash Gas to Fuel" stream in ProMax Report.

² From " _1" stream in ProMax Report (Glycol Regenerator Overheads stream).

³ Summation of the Uncontrolled Flash Tank and Regenerator Emissions. A 7.5% safety factor is included to account for variations in composition and flow rate.

⁴ As shown in the ProMax report, regenerator overheads are sent to a condenser. The emissions above are post-condenser, pre-combustor and reference the "T12" stream in ProMax Report. These emissions are then routed to the combustor for additional control and are represented at unit FL-1981.

⁵ Controlled maximum potential hourly emission rate = (Uncontrolled Flash Tank Emissions) * (1-DRE).

There will be zero controlled emissions associated with the dehydrator flash tank as the flash tank emissions are routed back to the facility inlet.

The post-condenser regenerator emissions are routed to the combustor for control.

⁶ Carbon Dioxide emissions from ProMax report. A DRE of 0% is assumed for CO₂.

⁷ 40 CFR 98 Subpart A, Table A-1

⁸ CO₂e tons/yr = tons/yr * GWP

⁹ Vented pre-combustor dehydrator emissions are assumed to occur during combustor downtime (2%). These emissions will be vented through a dehydrator vent stack and not the combustor.

Dark Horse Facility
Dehy Regen Combustor

Unit(s):	FL-1967, FL-2967, FL-3967
Description:	Dehy Regen Combustor
Capture Efficiency:	99%
Destruction Efficiency:	98%
Operating Hours:	8760

Input Data

Combustor Pilot	35.0 scf/hr	Design
Combustor Pilot ¹	1,251 Btu/scf	ProMax Makeup Fuel
Combustor Pilot	0.044 MMBtu/hr	Calculated
TEG Dehy Regen Overheads to Combustor	920.15 scf/hr	ProMax (Stream T12)
Total Hourly Flow Rate	0.000920 MMscf/hr	Calculated
Total Annual Flow Rate	8.061 MMscf/yr	Calculated
TEG Dehy Regen Overheads to Combustor	2,099.76 BTU/scf	ProMax (Stream T12)
Hourly Heat Rate	1.932 MMBtu/hr	Calculated

Emission Rates (per combustor)

Pilot and Dehy Condenser

NOx ²	CO ²	VOC ³	PM ²	H ₂ S ³	SO ₂ ⁴	HAPs ³	Benzene ³	Units	
100	84		7.6					lb/MMscf	AP-42 Table 1.4-1 & 2
122.7	103.0		9.3					lb/MMscf	Corrected Factor for Pilot Gas
205.9	172.9		15.6					lb/MMscf	Corrected Factor for Process Gas
				0.25	5			gr/100 scf	Assumed for Fuel Gas
		92.70		0.0023		37.63	12.33	lb/hr	TEG Dehy Regen Overheads
0.0043	0.0036	-	3.26E-04	1.25E-05	5.00E-04	-	-	lb/hr	
0.019	0.016	-	1.43E-03	5.48E-05	0.0022	-	-	tpy	Combustor Pilot
0.19	0.16	1.85	0.01	4.58E-05	0.004	0.75	0.25	lb/hr	
0.83	0.70	8.12	0.06	2.00E-04	0.02	3.30	1.08	tpy	Controlled Emission Rate

	NOx	CO	VOC	PM	H ₂ S	SO ₂	HAPs	Benzene	Units	
Pilot Gas + Regenerator	0.19	0.16	1.85	0.01	5.83E-05	0.0047	0.75	0.25	lb/hr	Controlled Emission Rate
	0.85	0.71	8.12	0.06	2.55E-04	0.021	3.30	1.08	tpy	

Greenhouse Gas Calculations⁶

CO ₂	N ₂ O	CH ₄	CO ₂ e	
53.1	0.0001	0.001		kg/MMBtu
1	265	28		GWP ⁷
226.0	0.0004	0.004	226.2	lb/hr ⁸
989.9	0.002	0.019	990.9	tpy ⁵

¹ Based on facility fuel gas analysis.

² NOx, CO and PM emissions are based on AP-42 Table 1.4-1 & 2 emission factors. lb/MMscf emission factors were corrected by multiplying the emission factor by the ratio of the heat value to the reference heat value of 1020 Btu/scf

³ Assumed 98% capture and then 99% control for VOC, H₂S and HAPs. Pilot H₂S emissions calculated based on 0.25 gr H₂S/100 scf.

⁴ Assumed 100% conversion of combusted H₂S to SO₂, SO₂ (lb/hr)= 98% * (64 lb/lbmol SO₂/34 lb/lbmol H₂S)*Uncontrolled H₂S (lb/hr).
Pilot SO₂ emissions based on assumption of 5 gr S/100 scf.

⁵ ton/yr = lb/hr * Hours of operation (hr/yr) * 1ton/2000lb

⁶ Greenhouse gas emission factors are from 40 CFR 98 Subpart C

⁷ 40 CFR 98 Subpart A, Table A-1

⁸ CO₂, N₂O and CH₄ lb/hr = EF (kg/MMBtu) * 2.20462lb/kg * Fuel consumption (MMBtu/hr)
CO₂e lb/hr = CO₂ lb/hr + (CH₄ lb/hr * GWP) + (N₂O lb/hr * GWP)

Dark Horse Facility
Trains 4-6 TEG Dehydrators

Emission Unit: DEHY-4 through DEHY-6
Number of Identical Units: 3
Source Description: Trains 4-6 TEG Dehydrators
Annual Operating Hours: 8760 hr
Wet Gas Flow Rate per Dehy: 220 MMscf/day
Capture Efficiency: 99%

Criteria Pollutant Emissions (per Dehydrator Unit)

Compound	Uncontrolled Flash Tank Emissions ¹ (Flash Gas to Fuel Stream)		Uncontrolled Regenerator Emissions ² ("1" Stream)		Total Uncontrolled Emissions ³		Controlled Regenerator Emissions ⁴ (Condenser Emissions, "T12" Stream)		Controlled Flash Tank Emissions ⁵		Total Pre-Combustor Emissions		Vented Pre-Combustor Emissions ⁹	
	lb/hr	tons/yr	lb/hr	tons/yr	lb/hr	tons/yr	lb/hr	tons/yr	lb/hr	tons/yr	lb/hr	tons/yr	lb/hr	tons/yr
Methane	93.919	411.37	8.787	38.49	102.71	449.86	8.778	38.45	0.0000	0.0000	8.78	38.45	0.088	0.384
Ethane	45.697	200.15	13.435	58.84	59.13	259.00	13.369	58.56	0.0000	0.0000	13.37	58.56	0.134	0.586
Propane	44.883	196.59	24.066	105.41	68.95	302.00	23.744	104.00	0.0000	0.0000	23.74	104.00	0.237	1.040
i-Butane	11.257	49.31	7.965	34.89	19.22	84.19	7.754	33.96	0.0000	0.0000	7.75	33.96	0.078	0.340
n-Butane	25.818	113.08	26.288	115.14	52.11	228.22	25.223	110.48	0.0000	0.0000	25.22	110.48	0.252	1.105
Neo-Pentane	0.193	0.84	0.168	0.73	0.36	1.58	0.159	0.70	0.0000	0.0000	0.16	0.70	0.002	0.007
i-Pentane	10.292	45.08	15.813	69.26	26.10	114.34	14.308	62.67	0.0000	0.0000	14.31	62.67	0.143	0.627
n-Pentane	8.700	38.10	15.722	68.86	24.42	106.97	13.832	60.59	0.0000	0.0000	13.83	60.59	0.138	0.606
n-Hexane	9.459	41.43	34.406	150.70	43.87	192.13	25.205	110.40	0.0000	0.0000	25.20	110.40	0.252	1.104
nC7	2.951	12.93	16.134	70.67	19.09	83.60	7.951	34.82	0.0000	0.0000	7.95	34.82	0.080	0.348
nC8	0.569	2.49	4.935	21.62	5.50	24.11	1.277	5.59	0.0000	0.0000	1.28	5.59	0.013	0.056
nC10	0.102	0.45	1.442	6.32	1.54	6.76	0.182	0.80	0.0000	0.0000	0.18	0.80	0.002	0.008
nC9	0.003	0.01	0.069	0.30	0.07	0.31	0.004	0.02	0.0000	0.0000	0.00	0.02	0.000	0.000
Benzene	0.990	4.33	36.698	160.74	37.69	165.07	20.853	91.34	0.0000	0.0000	20.85	91.34	0.209	0.913
Toluene	0.841	3.68	53.689	235.16	54.53	238.84	16.589	72.66	0.0000	0.0000	16.59	72.66	0.166	0.727
Ethylbenzene	0.035	0.15	3.428	15.02	3.46	15.17	0.461	2.02	0.0000	0.0000	0.46	2.02	0.005	0.020
o-Xylene	0.021	0.09	2.713	11.88	2.73	11.98	0.358	1.57	0.0000	0.0000	0.36	1.57	0.004	0.016
m-Xylene	0.043	0.19	4.324	18.94	4.37	19.13	0.570	2.50	0.0000	0.0000	0.57	2.50	0.006	0.025
p-Xylene	0.043	0.19	4.141	18.14	4.18	18.33	0.554	2.43	0.0000	0.0000	0.55	2.43	0.006	0.024
Nitrogen	0.811	3.55	0.022	0.10	0.83	3.65	0.022	0.10	0.0000	0.0000	0.02	0.10	0.000	0.001
Carbon Dioxide	38.125	166.99	26.395	115.61	64.52	282.60	26.230	114.89	0.0000	0.0000	26.23	114.89	0.262	1.149
Hydrogen Sulfide	0.001	0.005	0.004	0.02	0.00	0.02	0.003	0.02	0.0000	0.0000	0.00	0.02	0.000	0.000
He	0.003	0.013	0.000	0.0006	0.00	0.01	0.000	0.0006	0.0000	0.0000	0.00	0.00	0.000	0.000
O2	0.000	0.0000	0.000	0.0000	0.00	0.00	0.000	0.0000	0.0000	0.0000	0.00	0.00	0.000	0.000
H2O	2.233	9.78	853.570	3738.64	855.80	3748.42	8.405	36.81	0.0000	0.0000	8.40	36.81	0.084	0.368
CHEMTHERM 650	0.000	0.0000	0.000	0.0000	0.00	0.00	0.000	0.0000	0.0000	0.0000	0.00	0.00	0.000	0.000
MDEA	0.000	0.0000	0.000	0.0014	0.00	0.00	0.000	0.0000	0.0000	0.0000	0.00	0.00	0.000	0.000
MeOH	0.000	0.0000	0.000	0.0000	0.00	0.00	0.000	0.0000	0.0000	0.0000	0.00	0.00	0.000	0.000
SO2	0.000	0.0000	0.000	0.0000	0.00	0.00	0.000	0.0000	0.0000	0.0000	0.00	0.00	0.000	0.000
Triethylene Glycol	0.016	0.07	0.222	0.97	0.24	1.04	0.000	0.0000	0.0000	0.0000	0.00	0.00	0.000	0.000
Piperazine	0.000	0.0000	0.000	0.0000	0.00	0.00	0.000	0.0000	0.0000	0.0000	0.00	0.00	0.000	0.000
Hydrogen Sulfide (H2S2)	0.000	0.0000	0.000	0.0000	0.00	0.00	0.000	0.0000	0.0000	0.0000	0.00	0.00	0.000	0.000
JEFFTREAT® MS-300 Solvent	0.013	0.06	8.198	35.91	8.21	35.96	0.199	0.87	0.0000	0.0000	0.20	0.87	0.002	0.009
VOC	116.20	508.96	252.00	1103.77	368.20	1612.72	159.02	696.53	0.0000	0.0000	159.02	696.53	1.59	6.97
HAP	11.43	50.07	139.40	610.57	150.83	660.64	64.59	282.91	0.0000	0.0000	64.59	282.91	0.65	2.83

Greenhouse Gas Emissions per DEHY

CO ₂	CH ₄	CO ₂ e	
1.15	0.38		tons/yr ⁶
1	28		GWP ⁷
1.15	10.77	11.91	tons/yr CO ₂ e ⁸

¹ From "Flash Gas to Fuel" stream in ProMax Report.

² From "_1" stream in ProMax Report (Glycol Regenerator Overheads stream).

³ Summation of the Uncontrolled Flash Tank and Regenerator Emissions. A 7.5% safety factor is included to account for variations in composition and flow rate.

⁴ As shown in the ProMax report, regenerator overheads are sent to a condenser. The emissions above are post-condenser, pre-combustor and reference the "T12" stream in ProMax Report. These emissions are then routed to the combustor for additional control and are represented at unit FL-1981.

⁵ Controlled maximum potential hourly emission rate = (Uncontrolled Flash Tank Emissions) * (1-DRE).
There will be zero controlled emissions associated with the dehydrator flash tank as the flash tank emissions are routed back to the facility inlet.
The post-condenser regenerator emissions are routed to the combustor for control.

⁶ Carbon Dioxide emissions from ProMax report. A DRE of 0% is assumed for CO₂.

⁷ 40 CFR 98 Subpart A, Table A-1

⁸ CO₂e tons/yr = tons/yr * GWP

⁹ Vented pre-combustor dehydrator emissions are assumed to occur during combustor downtime (2%). These emissions will be vented through a dehydrator vent stack and not the combustor.

Dark Horse Facility

Dehy Regen Combustor

Unit(s):	FL-4967, FL-5967, FL-6967
Description:	Dehy Regen Combustor
Capture Efficiency:	99%
Destruction Efficiency:	98%
Operating Hours:	8760

Input Data

Combustor Pilot	35.0 scf/hr	Design
Combustor Pilot ¹	1,251 Btu/scf	ProMax Makeup Fuel
Combustor Pilot	0.044 MMBtu/hr	Calculated
TEG Dehy Regen Overheads to Combustor	1,568.54 scf/hr	ProMax (Stream T12)
Total Hourly Flow Rate	0.001569 MMscf/hr	Calculated
Total Annual Flow Rate	13.740 MMscf/yr	Calculated
TEG Dehy Regen Overheads to Combustor	2,091.94 BTU/scf	ProMax (Stream T12)
Hourly Heat Rate	3.281 MMBtu/hr	Calculated

Emission Rates (per combustor)

Pilot and Dehy Condenser

NOx ²	CO ²	VOC ³	PM ²	H ₂ S ³	SO ₂ ⁴	HAPs ³	Benzene ³	Units	
100	84		7.6					lb/MMscf	AP-42 Table 1.4-1 & 2
122.7	103.0		9.3					lb/MMscf	Corrected Factor for Pilot Gas
205.1	172.3		15.6					lb/MMscf	Corrected Factor for Process Gas
				0.25	5			gr/100 scf	Assumed for Fuel Gas
		157.43		0.0034		63.95	20.64	lb/hr	TEG Dehy Regen Overheads
0.004	0.004	-	3.26E-04	1.25E-05	5.00E-04	-	-	lb/hr	
0.02	0.02	-	1.43E-03	5.48E-05	0.0022	-	-	tpy	Combustor Pilot
0.32	0.27	3.15	0.02	6.85E-05	0.006	1.28	0.41	lb/hr	
1.41	1.18	13.79	0.11	3.00E-04	0.03	5.60	1.81	tpy	Controlled Emission Rate

	NOx	CO	VOC	PM	H ₂ S	SO ₂	HAPs	Benzene	Units	
Pilot Gas + Regenerator	0.33	0.27	3.15	0.02	8.10E-05	0.007	1.28	0.41	lb/hr	Controlled Emission Rate
	1.43	1.20	13.79	0.11	3.55E-04	0.03	5.60	1.81	tpy	

Greenhouse Gas Calculations⁶

CO ₂	N ₂ O	CH ₄	CO ₂ e	
53.1	0.0001	0.001		kg/MMBtu
1	265	28		GWP ⁷
383.8	0.0007	0.007	384.2	lb/hr ⁸
1681.2	0.003	0.032	1682.9	tpy ⁵

¹ Based on facility fuel gas analysis.

² NOx, CO and PM emissions are based on AP-42 Table 1.4-1 & 2 emission factors. lb/MMscf emission factors were corrected by multiplying the emission factor by the ratio

³ Assumed 98% capture and then 99% control for VOC, H₂S and HAPs. Pilot H₂S emissions calculated based on 0.25 gr H₂S/100 scf.

⁴ Assumed 100% conversion of combusted H₂S to SO₂, SO₂ (lb/hr)= 98% * (64 lb/lbmol SO₂/34 lb/lbmol H₂S)*Uncontrolled H₂S (lb/hr).
Pilot SO₂ emissions based on assumption of 5 gr S/100 scf.

⁵ ton/yr = lb/hr * Hours of operation (hr/yr) * 1ton/2000lb

⁶ Greenhouse gas emission factors are from 40 CFR 98 Subpart C

⁷ 40 CFR 98 Subpart A, Table A-1

⁸ CO₂, N₂O and CH₄ lb/hr = EF (kg/MMBtu) * 2.20462lb/kg * Fuel consumption (MMBtu/hr)
CO₂e lb/hr = CO₂ lb/hr + (CH₄ lb/hr * GWP) + (N₂O lb/hr * GWP)

Dark Horse Facility

400 bbl Condensate Storage Tanks

Unit: TK-1900 through TK-1901

Description: 400 bbl Condensate Storage Tanks

Number of Tanks: 2

Capture Efficiency: 100%

Operating hours: 8,760

Uncontrolled Emissions^{1,2}

VOC	Benzene	Toluene	Ethylbenzene	Xylenes	n-Hexane	Total HAPs	H ₂ S	Units	Notes
4.98	0.04	0.03	0.0009	0.0028	0.88	0.95	0.0000	lb/hr	ProMax Report
21.81	0.17	0.12	0.0040	0.0125	3.86	4.17	0.0000	tpy	ProMax Report
2.49	0.02	0.01	0.0005	0.0014	0.44	0.48	0.0000	lb/hr	Per Tank Uncontrolled
10.91	0.09	0.06	0.0020	0.0062	1.93	2.08	0.0000	tpy	Per Tank Uncontrolled
0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	lb/hr	Controlled ³
0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	tpy	Per Tank Controlled ³
CO ₂	Methane	Units	Notes						
0.0000	0.00	lb/hr	Uncontrolled	ProMax Report					
0.0000	0.00	tpy	Uncontrolled	ProMax Report					
0.0000	0.00	tpy	Controlled ³						
CO ₂ e ⁴	Units	Notes							
0.0000	tpy	Uncontrolled	ProMax Report						
0.0000	tpy	Uncontrolled per tank	ProMax Report						
0.0000	tpy	Controlled ³	ProMax Report						

Notes

¹ ProMax simulation utilized estimates the following conservative throughput:

694 bbl/day condensate.

² Emissions include working, breathing and flash.

³ Emissions from the tanks are controlled by two (2) VRUs. Automatic redundancy system ensures no VRU downtime.

100% Capture efficiency of tank gas is assumed.

⁴ CO₂e tpy Emission Rate = CO₂ Emission Rate + CH₄ Emission Rate *GWP Factor

Dark Horse Facility

400 bbl Sour Water Storage Tanks

Unit: TK-1970 through TK-1971

Description: 400 bbl Sour Water Storage Tanks

Number of Tanks: 2

Capture Efficiency: 100%

Operating hours: 8,760

Uncontrolled Emissions^{1,2}

VOC	Benzene	Toluene	Ethylbenzene	Xylenes	n-Hexane	Total HAPs	H ₂ S	Units	Notes	
0.09	0.04	0.021	0.001	0.001	0.000	0.06	2.14	lb/hr	ProMax Report	
0.40	0.16	0.093	0.003	0.006	0.001	0.26	9.36	tpy	ProMax Report	
0.05	0.02	0.011	0.000	0.001	0.000	0.03	1.07	lb/hr	Per Tank	Uncontrolled
0.20	0.08	0.046	0.002	0.003	0.001	0.13	4.68	tpy	Per Tank	Uncontrolled
0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	lb/hr	Per Tank	Controlled ³
0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	tpy	Per Tank	Controlled ³

CO ₂	Methane	Units	Notes	
1.65	0.01	lb/hr	Uncontrolled	ProMax Report
7.23	0.06	tpy	Uncontrolled	ProMax Report
0.0000	0.0000	tpy	Controlled ³	

CO ₂ e ⁴	Units	Notes	
8.70	tpy	Uncontrolled	ProMax Report
8.70	tpy	Uncontrolled per tank	ProMax Report
0.00	tpy	Controlled ³	ProMax Report

Notes

¹ ProMax simulation utilized estimates the following conservative throughput:
280 bbl/day condensate.

² Emissions include working, breathing and flash.

³ Emissions from the tanks are controlled by two (2) VRUs. Automatic redundancy system ensures no VRU downtime.
100% Capture efficiency of tank gas is assumed.

⁴ CO₂e tpy Emission Rate = CO₂ Emission Rate + CH₄ Emission Rate *GWP Factor

Dark Horse Facility

400 bbl Sour Water Storage Tanks

Unit: TK-2030 through TK-2040

Description: 400 bbl Sour Water Storage Tanks

Number of Tanks: 2

Capture Efficiency: 100%

Operating hours: 8,760

Uncontrolled Emissions^{1,2}

VOC	Benzene	Toluene	Ethylbenzene	Xylenes	n-Hexane	Total HAPs	H ₂ S	Units	Notes	
0.24	0.09	0.05	0.002	0.003	0.0009	0.14	4.43	lb/hr	ProMax Report	
1.04	0.38	0.22	8.05E-03	1.39E-02	0.004	0.63	19.38	tpy	ProMax Report	
0.12	0.04	0.03	0.001	0.002	0.000	0.07	2.21	lb/hr	Per Tank	Uncontrolled
0.52	0.19	0.11	0.004	0.007	0.002	0.32	9.69	tpy	Per Tank	Uncontrolled
0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	lb/hr	Per Tank	Controlled ³
0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	tpy	Per Tank	Controlled ³

CO ₂	Methane	Units	Notes	
7.30	0.08	lb/hr	Uncontrolled	ProMax Report
31.99	0.35	tpy	Uncontrolled	ProMax Report
0.00	0.00	tpy	Controlled ³	

CO ₂ e ⁴	Units	Notes	
40.73	tpy	Uncontrolled	ProMax Report
20.37	tpy	Uncontrolled per tank	ProMax Report
0.00	tpy	Controlled ³	ProMax Report

Notes

¹ ProMax simulation utilized estimates the following conservative throughput:
711 bbl/day condensate.

² Emissions include working, breathing and flash.

³ Emissions from the tanks are controlled by two (2) VRUs. Automatic redundancy system ensures no VRU downtime.
100% Capture efficiency of tank gas is assumed.

⁴ CO₂e tpy Emission Rate = CO₂ Emission Rate + CH₄ Emission Rate *GWP Factor

Dark Horse Facility

400 bbl Condensate Storage Tanks

Unit: TK-2050 through TK-2080

Description: 400 bbl Condensate Storage Tanks

Number of Tanks: 4

Capture Efficiency: 100%

Operating hours: 8,760

Uncontrolled Emissions^{1,2}

VOC	Benzene	Toluene	Ethylbenzene	Xylenes	n-Hexane	Total HAPs	H ₂ S	Units	Notes
20.66	0.16	0.11	0.004	0.012	3.68	3.98	0.0000	lb/hr	ProMax Report
90.51	0.72	0.49	0.016	0.05	16.14	17.42	0.0000	tpy	ProMax Report
5.17	0.04	0.03	0.001	0.003	0.92	0.99	0.0000	lb/hr	Per Tank Uncontrolled
22.63	0.18	0.12	0.004	0.013	4.03	4.36	0.0000	tpy	Per Tank Uncontrolled
0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	lb/hr	Per Tank Controlled ³
0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	tpy	Per Tank Controlled ³

CO ₂	Methane	Units	Notes
0.0000	0.00	lb/hr	Uncontrolled ProMax Report
0.0000	0.00	tpy	Uncontrolled ProMax Report
0.0000	0.00	tpy	Controlled ³

CO ₂ e ⁴	Units	Notes
0.0000	tpy	Uncontrolled ProMax Report
0.0000	tpy	Uncontrolled per tank ProMax Report
0.0000	tpy	Controlled ³ ProMax Report

Notes

¹ ProMax simulation utilized estimates the following conservative throughput:
1,703 bbl/day condensate.

² Emissions include working, breathing and flash.

³ Emissions from the tanks are controlled by two (2) VRUs. Automatic redundancy system ensures no VRU downtime.
100% Capture efficiency of tank gas is assumed.

⁴ CO₂e tpy Emission Rate = CO₂ Emission Rate + CH₄ Emission Rate *GWP Factor

Dark Horse Facility
400 bbl Slop Tank

Unit: TK-1980, TK-1981, TK-2010, and TK-2020
Description: 400 bbl Slop Tank
Number of Tanks: 4
Capture Efficiency: 100%
Operating hours: 8,760

Uncontrolled Emissions^{1,2}

VOC	Benzene	Toluene	Ethylbenzene	Xylenes	n-Hexane	Total HAPs	H ₂ S	Units	Notes	
0.026	0.017	0.007	0.000	0.001	0.000	0.024	1.119	lb/hr	ProMax Report	
0.115	0.073	0.030	0.001	0.003	0.000	0.107	4.902	tpy	ProMax Report	
0.007	0.004	0.002	0.000	0.000	0.000	0.006	0.280	lb/hr	Per Tank	Uncontrolled
0.029	0.018	0.008	0.000	0.001	0.000	0.027	1.225	tpy	Per Tank	Uncontrolled
0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	lb/hr	Per Tank	Controlled ³
0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	tpy	Per Tank	Controlled ³
CO ₂	Methane	Units	Notes							
0.477	0.001	lb/hr	Uncontrolled	ProMax Report						
2.089	0.005	tpy	Uncontrolled	ProMax Report						
0.000	0.000	tpy	Controlled ³							
CO ₂ e ⁴	Units	Notes								
2.206	tpy	Uncontrolled	ProMax Report							
0.552	tpy	Uncontrolled per tank	ProMax Report							
0.000	tpy	Controlled ³	ProMax Report							

Notes

¹ ProMax simulation utilized estimates the following conservative throughput:
157 bbl/day sour water.

² Emissions include working, breathing and flash and are per tank.

³ Emissions from the tank are controlled by two (2) VRUs. Automatic redundancy system ensures no VRU downtime.
100% Capture efficiency of tank gas is assumed.

⁴ CO₂e tpy Emission Rate = CO₂ Emission Rate + CH₄ Emission Rate *GWP Factor

Dark Horse Facility

Atmospheric Condensate and Sour Water Loadout

Unit:	COND-LOAD 1-3		
Description:	Atmospheric Condensate and Sour Water Loadout		
Condensate Throughput:	1,388	bbl/day	ProMax
Sour Water Throughput:	559	bbl/day	ProMax
Operating hours:	8,760		
Capture/Control Efficiency:	98%		

Total (Condensate and Sour Water) Uncontrolled Loading Emissions¹

VOC	Benzene	Toluene	Ethylbenzene	Xylenes	n-Hexane	Total HAPs	H ₂ S	Units	Notes	
0.21	0.002	0.001	0.00004	0.0001	0.04	0.04	0.01	lb/hr	ProMax	Uncontrolled
0.92	0.01	0.01	0.0002	0.001	0.16	0.18	0.03	tpy	ProMax	Uncontrolled
0.004	0.00004	0.00002	0.000001	0.000002	0.001	0.001	0.0002	lb/hr		Controlled ³
0.02	0.0002	0.0001	0.000004	0.00001	0.003	0.004	0.001	tpy		Controlled ³
CO ₂	Methane									
0.01	0.0001	lb/hr	ProMax Report							
0.05	4.33E-04	tpy	ProMax Report							
1.06E-03	8.66E-06	tpy	Controlled ³							
CO ₂ e ²	Units	Notes								
0.07	tpy	Uncontrolled	ProMax Report							
1.31E-03	tpy	Controlled ³	ProMax Report							

Notes

- ¹ Loading emissions from atmospheric condensate and sour water tanks estimated using ProMax.
- ² CO₂e tpy Emission Rate = CO₂ Emission Rate + CH₄ Emission Rate *GWP Factor
- ³ Emissions from loadout are controlled by VRU or FL-1850.
- 98% Capture or destruction efficiency of tank gas.

Total Condensate Uncontrolled Loading Emissions¹

VOC	Benzene	Toluene	Ethylbenzene	Xylenes	n-Hexane	Total HAPs	H ₂ S	Units	Notes	
0.21	0.002	0.001	0.00004	0.0001	0.04	0.04	0.00	lb/hr	ProMax	Uncontrolled
0.92	0.01	0.01	0.0002	0.001	0.16	0.18	0.00	tpy	ProMax	Uncontrolled
0.004	0.00003	0.00002	0.000001	0.000002	0.001	0.001	0.00	lb/hr		Controlled ³
0.02	0.0001	0.0001	0.000003	0.00001	0.003	0.004	0.00	tpy		Controlled ³

Total (Sour Water) Uncontrolled Loading Emissions¹

VOC	Benzene	Toluene	Ethylbenzene	Xylenes	n-Hexane	Total HAPs	H ₂ S	Units	Notes	
0.0003	0.0001	0.0001	0.0000	0.0000	0.0000	0.0002	0.01	lb/hr	ProMax	Uncontrolled
0.001	0.0006	0.0003	0.0000	0.0000	0.0000	0.0010	0.03	tpy	ProMax	Uncontrolled
0.00001	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0002	lb/hr		Controlled ³
0.00003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.001	tpy		Controlled ³

Dark Horse Facility

Atmospheric Condensate and Sour Water Loadout

Unit:	COND-LOAD 4-6		
Description:	Atmospheric Condensate and Sour Water Loadout		
Condensate Throughput:	6,811	bbl/day	ProMax
Sour Water Throughput:	1422	bbl/day	ProMax
Operating hours:	8,760		
Capture/Control Efficiency:	98%		

Uncontrolled Loading Emissions¹

VOC	Benzene	Toluene	Ethylbenzene	Xylenes	n-Hexane	Total HAPs	H ₂ S	Units	Notes	
1.03	0.01	0.01	0.0002	0.001	0.18	0.20	0.02	lb/hr	ProMax	Uncontrolled
4.51	0.04	0.03	0.0009	0.003	0.80	0.87	0.09	tpy	ProMax	Uncontrolled
0.02	0.0002	0.0001	0.000004	0.00001	0.004	0.004	0.0004	lb/hr		Controlled ³
0.09	0.001	0.0005	0.00002	0.00005	0.02	0.02	0.002	tpy		Controlled ³

CO ₂	Methane		
0.03	0.0004	lb/hr	ProMax Report
0.14	1.58E-03	tpy	ProMax Report
2.89E-03	3.16E-05	tpy	Controlled ³

CO ₂ e ²	Units	Notes	
0.19	tpy	Uncontrolled	ProMax Report
3.77E-03	tpy	Controlled ³	ProMax Report

Notes

¹ Loading emissions from atmospheric condensate and sour water tanks estimated using ProMax.

² CO₂e tpy Emission Rate = CO₂ Emission Rate + CH₄ Emission Rate *GWP Factor

³ Emissions from loadout are controlled by VRU or Vapor Combustor FL-7967.

98% Capture or destruction efficiency of tank gas.

Dark Horse Facility
Tank Loading Combustor

Unit(s):	FL-7967	
Description:	Tank Loading Combustor	VRU back-up
Capture Efficiency:	100%	
Destruction Efficiency:	98%	
Operating Hours:	8760	

Input Data

Combustor Pilot	130.0 scf/hr	Design
Combustor Pilot ¹	1,251 Btu/scf	ProMax Makeup Fuel
Combustor Pilot	0.163 MMBtu/hr	Calculated
Condensate loading vapors to Combustor	384.58 scf/hr	ProMax
Total Hourly Flow Rate	0.000385 MMscf/hr	Calculated
Total Annual Flow Rate	3.369 MMscf/yr	Calculated
Tank and Loading Vapors to Combustor	4,352.10 BTU/scf	ProMax
Hourly Heat Rate	1.674 MMBtu/hr	Calculated

Emission Rates (per combustor)

Pilot and Dehy Condenser

NOx ²	CO ²	VOC ³	PM ²	H ₂ S ³	SO ₂ ⁴	HAPs ³	Benzene ³	Units	
100	84		7.6					lb/MMscf	AP-42 Table 1.4-1 & 2
122.7	103.0		9.3					lb/MMscf	Corrected Factor for Pilot Gas
426.7	358.4		32.4					lb/MMscf	Corrected Factor for Process Gas
				0.25	5			gr/100 scf	Assumed for Fuel Gas
		21.69		0.02		4.18	0.17	lb/hr	Tank and Loading Vapors
0.02	0.01	-	1.21E-03	4.64E-05	1.86E-03	-	-	lb/hr	Combustor Pilot
0.07	0.06	-	5.31E-03	2.03E-04	0.0081	-	-	tpy	
0.164	0.138	0.43	0.01	4.00E-04	0.037	0.08	0.00	lb/hr	Controlled Emission Rate
0.72	0.604	1.90	0.05	1.75E-03	0.16	0.37	0.01	tpy	

	NOx	CO	VOC	PM	H ₂ S	SO ₂	HAPs	Benzene	Units	
Pilot Gas + Tank + Loading	0.18	0.15	0.43	0.01	4.46E-04	0.04	0.084	0.0034	lb/hr	Controlled Emission Rate
	0.79	0.66	1.90	0.05	1.95E-03	0.17	0.37	0.015	tpy	

Greenhouse Gas Calculations⁶

CO ₂	N ₂ O	CH ₄	CO ₂ e	
53.1	0.0001	0.001		kg/MMBtu
1	265	28		GWP ⁷
195.8	0.0004	0.004	196.0	lb/hr ⁸
857.6	0.002	0.016	858.4	tpy ⁵

¹ Based on facility fuel gas analysis.

² NOx, CO and PM emissions are based on AP-42 Table 1.4-1 & 2 emission factors. lb/MMscf emission factors were corrected by multiplying the emission factor by the ratio of the heat value to the reference heat value of 1020 Btu/scf

³ Assumed 100% capture and then 98% control for VOC, H₂S and HAPs. Pilot H₂S emissions calculated based on 0.25 gr H₂S/100 scf.

⁴ Assumed 100% conversion of combusted H₂S to SO₂. SO₂ (lb/hr)= 98% * (64 lb/lbmol SO₂/34 lb/lbmol H₂S)*Uncontrolled H₂S (lb/hr).
Pilot SO₂ emissions based on assumption of 5 gr S/100 scf.

⁵ ton/yr = lb/hr * Hours of operation (hr/yr) * 1ton/2000lb

⁶ Greenhouse gas emission factors are from 40 CFR 98 Subpart C

⁷ 40 CFR 98 Subpart A, Table A-1

⁸ CO₂, N₂O and CH₄ lb/hr = EF (kg/MMBtu) * 2.20462lb/kg * Fuel consumption (MMBtu/hr)
CO₂e lb/hr = CO₂ lb/hr + (CH₄ lb/hr * GWP) + (N₂O lb/hr * GWP)

Dark Horse Facility

Pressurized NGL Loadout

Unit: NGL-LOAD

Description: Pressurized NGL Loadout

Operating hours: 8,760

Hose Parameters

Vapor Hose Diameter	2	inches	Engineering judgment
Vapor Hose Length	1	foot	Engineering judgment
Hose Volume	0.022	ft ³	
Number of Hoses	2		
Total Hose Volume	0.044	ft ³	

NGL Data¹

NGL Tank Pressure	94.70	psia	
NGL Throughput	2052.10	bbl/day	ProMax NGL Product (Stabilizer Pstreams, Stream 16)
NGL Throughput	2,585,647	gal/month	
Capacity of Tank	9000	gal/load	Standard
NGL Throughput	288.00	loads/month	
VOC Mass %	99.999%	%	ProMax NGL Product
HAP Mass %	18.2%	%	ProMax NGL Product
H ₂ S Mass %	0.0004%	%	ProMax NGL Product

¹ Values obtained from ProMax simulation of the facility.

Physical Data

Loadout Temperature (T)	580.383	R
Molecular Weight	66.17	lb/lbmol
Moles in the vapor phase (n)	6.64E-04	lbmol/ft ³
Vapor Density ²	4.39E-02	lb/ft ³

² Calculated using PV = nRT, where R = Universal Gas Constant 10.73 cubic feet *psi/lbmole * deg R

VOC Emissions from Pressurized NGL Loadout

Source	Density (lb/ft ³)	Hose Volume (ft ³ /load)	Loads per month	Monthly Emissions (lb/month) ³	Annual Emission s (tpy) ⁴
Vapor Hoses	0.044	0.044	288.00	0.552	3.31E-03
Total VOC				5.52E-01	3.31E-03
Total HAP				1.01E-01	6.03E-04
Total H ₂ S				4.02E-07	2.41E-09

³ Monthly Emissions (lb/month) = Density (lb/ft³) x Hose Volume (ft³/load) x Loads per month (load/month)

Monthly Emission Rate (lb/month) = $\frac{0.04 \text{ lb}}{\text{ft}^3} \times \frac{0.044}{\text{load}} \times \frac{288}{\text{month}} = \frac{0.55 \text{ lb}}{\text{month}}$

⁴ Annual Emission Rate (tpy) = Uncontrolled emission rate (lb/hr) x (8,760 hr/yr) / (2,000 lb/ton).

Annual Emission Rate (tpy) = $\frac{0.55}{\text{month}} \times \frac{12 \text{ months}}{\text{yr}} \times \frac{1 \text{ ton}}{2,000 \text{ lb}} = \frac{3.31\text{E-}03 \text{ lb}}{\text{yr}}$

Emissions multiplied by component mass fractions to determine VOC, HAP and H₂S emissions.

Dark Horse Facility

Condensate, Water and NGL Truck Haul

Unit: HAUL

Description: Condensate, Water and NGL Truck Haul

Haul Road Inputs

Max Facility Throughput:					
Haul-1 Haul-2		bbl/week	bbl/yr	Truck Capacity (bbl)	Vehicles Per Day (VPD) ⁵
	Condensate +				
	Sour Water	5953.8	309599.756	200	4.24
	NGL	14364.7	746964.6	200	10.23
	Total	20318.5	1056564.32	200	14.47
Weight (tons)					
Vehicle Type	Empty Vehicle ¹	Load Size ²	Loaded Vehicle ³	Mean Vehicle ⁴	Segments per trip
Haul-1	16	22.0	38.0	27.0	1
Haul-2	16	24.5	40.5	28.3	1
			Haul-1	Haul-2	Trips per hour ⁶
	Hours of Operation per Day		24	24	
	Total Vehicles Per Day		5.00	11.00	
	Mean Vehicle Weight (tons)		27.0	28.3	
	Total Trips per Hour		1.00	1.00	

Footnotes

- ¹ Empty vehicle weight includes driver and occupants and full fuel load.
- ² Cargo, transported materials, etc. (Water Density*SG*8400 gal truck/ 2000lb/ton)
- ³ Loaded vehicle weight = Empty + Load Size
- ⁴ Mean Vehicle weight = (Loaded Weight + Empty Weight) / 2
- ⁵ Vehicles per day = Maximum Facility Throughput per year*(1/Truck Capacity)*(1 year/365 days)
- ⁶ Trips per hour = Vehicles per day * Segments per trip ÷ Hours of Operation per Day

Haul Road Emission Factor Calculation

Emission Factor Calculation (AP-42 Sec. 13.2.2.3 November, 2006, Equation 2)

Unit	Operating Hours	s, silt content ¹ %	W, Avg. Veh. Wt. tons	k, PM-10 lb/VMT	k, PM-2.5 lb/VMT	a, PM-10 lb/VMT	a, PM-2.5 lb/VMT	b, PM-10 lb/VMT	b, PM-2.5 lb/VMT
Haul-1	8760	4.8	27.0	1.5	0.15	0.9	0.9	0.45	0.45
Haul-2	8760	4.8	28.3	1.5	0.15	0.9	0.9	0.45	0.45
Hourly Emission Factor ²				Wet Day, Adjusted Emission Factor ³					
	E, PM-10 lb/VMT	E, PM-2.5 lb/VMT		Wet Days	E, PM-10 lb/VMT	E, PM-2.5 lb/VMT			
Haul-1	1.77	0.18		70	1.43	0.14			
Haul-2	1.80	0.18		70	1.46	0.15			

Haul Road Emission Calculations

Unit	Avg. Trips per Hour	Avg. Trips per Day	Segment Length	Average VMT/hr ⁴	Average VMT/yr ⁵	PM-10 ⁶		PM-2.5 ⁶	
	T	T	mi	mi/hr	mi/yr	lb/hr	tpy	lb/hr	tpy
Haul-1	1.00	5.00	0.10	0.1000	182.50	0.18	0.13	0.018	0.01
Haul-2	1.00	11.00	0.25	0.2500	1003.75	0.45	0.73	0.045	0.073
Total HAUL						0.63	0.86	0.06	0.09

Footnotes

- ¹ Surface silt = % of 75 micron diameter and smaller particles (NMED Default)
- ² $E = k \times (s/12)^a \times (W/3)^b$ (AP-42 page 13.2.2-4 Equation 1a, November 2006)
- E= Size Specific Emission Factor (lb/VMT)
- s = surface material silt content (%)
- k, a, b = constants from AP-42 Table 13.2.2-2
- W = Weighted Mean Vehicle Weight from Haul Road Inputs (tons)
- ³ Wet Day Emission Factor = $E \times (365 - \text{Wet Days})/365$. Wet days value is the NM default allowed by NMED without additional justification.
- ⁴ VMT/hr = Vehicle Miles Travelled per hour= Trips per hour * Segment Length
- ⁵ VMT/yr = Vehicle Miles Travelled per year = Trips per day * 365 days per year * Segment Length
- ⁶ lb/hr PM = lb/VMT * VMT/hr
- tpy PM = lb/VMT * VMT/yr * 1 ton/2000 lb

Dark Horse Facility
Fugitive Emissions

Component Source Counts for Treater Facility									
Equipment Type	Compressors	Separators	Tanks	TEG Units	DEA Units	C3 Refrig Skid	Expan Demeth	Mole Sieve System	Flares/ Combustors
For this facility, Number of Units	23	20	10	6	0	2	2	2	10
Valves - Inlet Gas	40	6	4	75	15	40	40	25	8
Valves - Liquid	5	4	6	20	60	35	35	0	2
Relief Valves	2	2	2	4	4	6	6	4	2
Pump Seals - Liquid	0	0	2	4	4	0	0	0	0
Flanges/Connectors - Inlet Gas	150	150	20	250	250	250	250	100	75
Flanges/Connectors - Liquid	10	10	40	20	20	20	20	20	10
Compressor Seals	6	0	0	0	0	6	0	0	0

Fugitive Emissions													
Equipment Type	Emission Factor		VOC		VOC	H ₂ S	H ₂ S	HAP	HAP	CO ₂	CH ₄	CO ₂ e	
	(lb/hr/ source)	Source Count *	% VOC	C3+	Emission Rate (lb/hr)	Emission Rate (tpy)	Emission Rate (lb/hr)	Emission Rate (tpy)	Emission Rate (lb/hr)	Emission Rate (tpy)	Emission Rate (tpy)	Emission Rate (tpy)	Emission Rate (tpy)
Valves - Inlet Gas	0.00992	1820	29.08%		5.25	23.00	0.32	1.41	0.45	1.96	6.09	38.63	971.80
Valves - Liquid	0.00550	535	100.00%		2.94	12.89	0.00	0.00	1.06	4.65	0.00	0.00	0.00
Relief Valves	0.01940	182	29.08%		1.03	4.50	0.06	0.28	0.09	0.38	1.19	7.55	190.05
Pump Seals - Liquid	0.02866	44	100.00%		1.26	5.52	0.00	0.00	0.45	1.99	0.00	0.00	0.00
Flanges/Connectors - Inlet Gas	0.00086	10100	29.08%		2.53	11.06	0.16	0.68	0.22	0.94	2.93	18.58	467.54
Flanges/Connectors - Liquid	0.00024	1170	100.00%		0.28	1.23	0.00	0.00	0.10	0.44	0.00	0.00	0.00
Compressor Seals	0.01940	150	29.08%		0.85	3.71	0.05	0.23	0.07	0.32	0.98	6.23	156.64
Total							0.59	2.59	2.44	10.69	11.20	70.99	1,786.03

* Source counts estimated from similar facilities. These counts are not actuals.
Source: EPA Protocol for Equipment Leak Emission Estimates, November, 1995, EPA-453/R-95-017

Gas Composition for Fugitive Emissions Estimate		
	Molecular Wt (lb/lb-mole)	Mass Fraction (%)
Methane	16.0	48.85%
Ethane	30.0	13.73%
Total HC (non-VOC)		62.58%
Propane	44.0	11.63%
i-Butane	58.0	2.60%
n-Butane	58.0	5.39%
i-Pentane	72.0	2.09%
n-Pentane	72.0	1.69%
Heptanes Plus	86.0	0.79%
n-Hexane	86.0	2.01%
Benzene	78.0	0.12%
Ethylbenzene	116.0	0.01%
Toluene	92.0	0.11%
Xylenes	106.0	0.02%
Total VOC		26.44%
Carbon Dioxide	44.0	7.70%
Hydrogen Sulfide	34.1	1.79%
Helium	4.0	0.00%
Nitrogen	28.0	1.48%
	Totals	99.99%
Total VOC Wt % plus 10% **		29.08%
Total HAP Wt % plus 10% **		2.48%
Total HAP Wt % liquid		36.05%
Total H ₂ S Wt % liquid		0.00%
Total CO ₂ Wt % liquid		0.00%
Total CH ₄ Wt % liquid		0.00%

** 10% added to Gas/Vapor Weight % VOC to account for variability in the gas.

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 (CO₂), nitrous oxide (N₂O), methane (CH₄), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF₆).

Calculating GHG Emissions:

1. Calculate the ton per year (tpy) GHG mass emissions and GHG CO₂e 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 CO₂e 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 CO₂e 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 CO₂ 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)

Enterprise has included GHG emissions calculations for all equipment with this application.

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.

Specification sheets for the proposed new compressor engines and generator turbines are included in this section. Along with the appropriate sections of AP-42 and EPA guidance document for fugitive emissions. The previously submitted specification sheets for the existing equipment remain unchanged.

Engine Site Rating 2,750 BHP Low Methane Emissions Engine

Site elevations= 3,200 ft.

Max. Ambient Air Temperature=115F

Fuel Gas SG=0.697 (79.12% Methane). All 2,750 HP are available (no power derate)

G3608

GAS ENGINE SITE SPECIFIC TECHNICAL DATA 2404-156



GAS COMPRESSION APPLICATION	1000	RATING STRATEGY:	STANDARD
ENGINE SPEED (rpm):	7.6	RATING LEVEL:	CONTINUOUS
COMPRESSION RATIO:	SCAC	FUEL SYSTEM:	GAV
AFTERCOOLER TYPE:	130	WITH AIR FUEL RATIO CONTROL	
AFTERCOOLER - STAGE 2 INLET (°F):	174		
AFTERCOOLER - STAGE 1 INLET (°F):	190	SITE CONDITIONS:	Gas Analysis
JACKET WATER OUTLET (°F):	TA	FUEL:	84.8-94.6
ASPIRATION:	JW+1AC, OC+2AC	FUEL PRESSURE RANGE(psia): (See note 1)	63.0
COOLING SYSTEM:	ADEM4	FUEL METHANE NUMBER:	1110
CONTROL SYSTEM:	DRY	FUEL LHV (Btu/scf):	3200
EXHAUST MANIFOLD:	LOW EMISSION	ALTITUDE(ft):	115
COMBUSTION:	0.3	INLET AIR TEMPERATURE(°F):	2750 bhp@1000rpm
NOx EMISSION LEVEL (g/bhp-hr NOx):	17	STANDARD RATED POWER:	
SET POINT TIMING			

RATING	NOTES	LOAD	MAXIMUM RATING			
			100%	100%	75%	50%
ENGINE POWER (WITHOUT FAN)	(2)	bhp	2750	2750	2063	1375
INLET AIR TEMPERATURE		°F	115	115	115	115
ENGINE DATA						
FUEL CONSUMPTION (LHV)	(3)	Btu/bhp-hr	6772	6772	7012	7479
FUEL CONSUMPTION (HHV)	(3)	Btu/bhp-hr	7471	7471	7736	8251
AIR FLOW (@inlet air temp, 14.7 psia)	(4)(5)	ft3/min	7574	7574	5734	3892
AIR FLOW (WET)	(4)(5)	lb/hr	31361	31361	23743	16116
FUEL FLOW (60°F, 14.7 psia)		scfm	280	280	217	154
INLET MANIFOLD PRESSURE	(6)	psi(abs)	58.2	58.2	43.7	30.0
EXHAUST TEMPERATURE - ENGINE OUTLET	(7)	°F	779	779	829	886
EXHAUST GAS FLOW (@engine outlet temp, 14.5 psia)	(5)(8)	ft3/min	17335	17335	13664	9705
EXHAUST GAS MASS FLOW (WET)	(5)(8)	lb/hr	32249	32249	24431	16606

EMISSIONS DATA - ENGINE OUT

NOx (as NO2)	(9)(10)	g/bhp-hr	0.30	0.30	0.30	0.30
CO	(9)(10)	g/bhp-hr	2.37	2.37	2.37	2.37
THC (mol. wt. of 15.84)	(9)(10)	g/bhp-hr	2.70	2.70	2.88	2.96
NIMHC (mol. wt. of 15.84)	(9)(10)	g/bhp-hr	1.03	1.03	1.10	1.13
NIMNEHC (VOCs) (mol. wt. of 15.84)	(9)(10)(11)	g/bhp-hr	0.48	0.48	0.51	0.53
HCHO (Formaldehyde)	(9)(10)	g/bhp-hr	0.12	0.12	0.12	0.14
CO2	(9)(10)	g/bhp-hr	433	433	450	478
EXHAUST OXYGEN	(9)(12)	% DRY	11.7	11.7	11.4	11.0

HEAT REJECTION

HEAT REJ. TO JACKET WATER (JW)	(13)	Btu/min	30077	30077	26233	21737
HEAT REJ. TO ATMOSPHERE	(13)	Btu/min	9184	9184	9813	10319
HEAT REJ. TO LUBE OIL (OC)	(13)	Btu/min	12719	12719	12593	11598
HEAT REJ. TO A/C - STAGE 1 (1AC)	(13)(14)	Btu/min	38420	38420	20215	6961
HEAT REJ. TO A/C - STAGE 2 (2AC)	(13)(14)	Btu/min	13307	13307	8065	3864

COOLING SYSTEM SIZING CRITERIA

TOTAL JACKET WATER CIRCUIT (JW+1AC)	(14)(15)	Btu/min	73426
TOTAL STAGE 2 AFTERCOOLER CIRCUIT (OC+2AC)	(14)(15)	Btu/min	29235

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



Emission Control Application Data Sheet



Maxim Silencers

6545 N. Eldridge Pkwy
Houston, TX 77041
Phone: 713-682-6777
Fax: 713-682-3628

September 26, 2018

Customer: **Compass**

Project: **US-2097 Enterprise**

Date: **12/2/2024**

Customer Contact: **Julianne Rogers**

Powertherm Contact: **Matthew Long**

Order/Quote #: **0**

Engine Data:

Engine Model: **Caterpillar G3608** Speed: **1000** RPM
Fuel & Operating Type: **Natural Gas Lean Burn** Engine Power: **2750** Hp
0 KW
Exhaust Flow Rate: **17390** acfm Exhaust Temperature: **768** °F
29546 m³/hr **409** °C
33647 lbs/hr

Catalyst Data:

Number of Core layers: **1**
Model: **MCC4SA-F6-2620C3-19581** Inlet Size: **20** in
Grade: **Super Critical** Outlet Size: **26** in
Body Diameter: **64** in Body Length: **242** in
Estimated weight: **4889** lbs Estimated Back Pressure of the unit: **5.78** in of WC
Kg **14.4** mbar
Core Part Number: **APXP-OX-SQ-1500-3600-350** Qty **4** Speed through inlet: **4856** ft/min
Cell Density **300** cpsi Back Pressure across Element(s) only **2.19** in of WC
5.5 mbar

Emission:

Min. Temp. at Core Face: **752** °F **400** °C Catalyst Type: **Oxidation**
Max. Temp. at Core Face: **947** °F **508** °C
O₂ in Exhaust vol %
H₂O in Exhaust vol %
Engine Out / Pre Emission:

Pollutant				
NOx	CO	NMNEHC/VOC	CH ₂ O/CHCO	ORGANIC PM10
0.3	2.79	0.62	0.12	0
69.69	648.14	144.03	27.88	0.00

 g/bhp-hr
mg/Nm3
Post Emission:

0.300	0.400	0.400	0.080	0.000
69.69	92.92	92.92	18.58	0.00
0.0	85.7	35.5	33.3	50.0
1.82	2.43	2.43	0.49	
7.97	10.62	10.62	2.12	
33.5	44.6	44.6	8.9	

 g/bhp-hr
mg/Nm3
% Reduction
lb/hr
tons/year operation **8760** hr/year
ppmv
ppmvd @ 15% O₂

Acoustics:

Frequency Band (Hz):

31.5	63	125	250	500	1000	2000	4000	8000
0	0	0	0	0	0	0	0	0
30	42	41	38	39	36	33	37	39
30	43	43	40	43	41	39	43	44
-30	-43	-43	-40	-43	-41	-39	-43	-44

Raw Noise SPL (dB) at 3.28 ft.: **7 dBA**
Estimated Attenuation (dB): **No Element**
Plus: **One Element Layer**
Silenced SPL (dB) at 3.28 ft.: **-34.2 dBA**

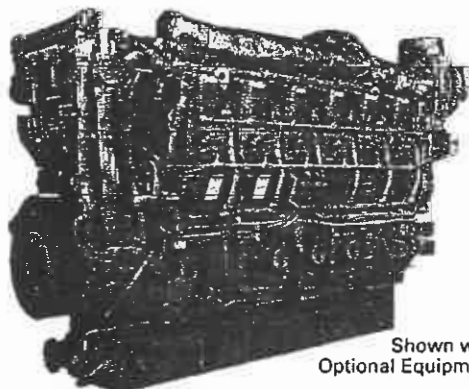
Warranty & Notes:

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

Rev level: 86

12/2/2024

CATERPILLAR®



Shown with
Optional Equipment

FEATURES

- **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 1,500 dealer outlets
 - Caterpillar factory-trained dealer technicians service every aspect of your petroleum 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 (S-O-SSM) program matches your oil sample against Caterpillar set standards to determine:
 - internal engine component condition
 - presence of unwanted fluids
 - presence of combustion by-products
- **SINGLE-SOURCE SUPPLIER**
 - Caterpillar:
 - casts engine blocks, heads, cylinder liners, and flywheel housings
 - 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 certified facilities

Gas Petroleum Engine

G3612

3195-3550 bhp
2383-2647 bkW
900-1000 rpm

CATERPILLAR® ENGINE SPECIFICATIONS

V-12, 4-Stroke-Cycle	
Bore — in (mm)	11.8 (300)
Stroke — in (mm)	11.8 (300)
Displacement — cu in (L)	15,528 (254.4)
Aspiration	Turbocharged and Aftercooled
Capacity for Liquids — U.S. gal (L)	
Jacket Water Circuit ¹	177 (669)
Aftercooler Circuit ¹	17 (64)
Lube Oil System (refill)	272 (1030)
Package Shipping Weight	
(Dry) — lb (kg)	55,300 (25 084)

¹Engine only

■ G3612

- Low emissions
- Broad operating speed range and ability to burn a wide spectrum of gaseous fuels
- Caterpillar Advanced Digital Engine Management (ADEM III) control system with detonation-sensitive timing control for individual cylinders
- Robust diesel strength design provides prolonged life and lower owning and operating costs.

■ TESTING

- Prototype testing on every model:
 - proves computer design
 - verifies system torsional stability
 - functionality tests every model
- Every Caterpillar engine is dynamometer tested under full load to ensure proper engine performance.

■ WEB SITE

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



FACTORY INSTALLED STANDARD & OPTIONAL EQUIPMENT

SYSTEM	STANDARD	OPTIONAL
Air Inlet	Air cleaner — standard-duty Inlet air adapter	Heavy-duty air cleaner with precleaners Heavy-duty air cleaner with rain protection
Charging System		Charging alternators
Control System	Caterpillar ADEM III control system provides electronic governing integrated with air/fuel ratio control and individual cylinder ignition timing control	Custom control system software is available for non-standard ratings. Software is field programmable using flash memory.
Cooling System	Jacket water pump Jacket water thermostats and housing Aftercooler pump Aftercooler water thermostats and housing Single-stage aftercooler	Expansion tank Flexible connections Jacket water heater
Exhaust System	Dry wrapped exhaust manifolds Vertical outlet adapter	Flexible bellows adapters Exhaust expander Weld flanges
Flywheel/ Flywheel Housing	SAE No. 00 flywheel SAE No. 00 flywheel housing SAE standard rotation	
Fuel System	Gas admission valves with electronically controlled fuel supply pressure	Fuel filter Gas pressure regulator Flexible connection Low energy fuel system Corrosive gas fuel system
Ignition System	ADEM III control system senses individual cylinder detonation and controls individual cylinder timing	CSA certification
Instrumentation	LCD display panel monitors engine parameters and displays diagnostic codes	Remote data monitoring and speed control Compatible with Cat Electronic Technician (ET) and Data View Customer Communication Module (CCM) Display panel deletion is optional
Lube System	Crankcase breathers (top mounted) Oil cooler Oil filter Oil pan drain valve	Air or electric motor-driven prelube Duplex oil filter LH or RH service Lube oil makeup system
Mounting System	Engine mounting feet (six total)	Mounting plates (set of six)
Power Take-Offs		Front stub shafts
Protection	Electronic shutoff system with purge cycle Crankcase explosion relief valves Gas shutoff valve	
Starting System	Air starting system	Air pressure reducing valve Natural gas starting system
General	Paint, Caterpillar yellow Vibration dampers	Engine barring device Damper guard

G3612 GAS PETROLEUM ENGINE

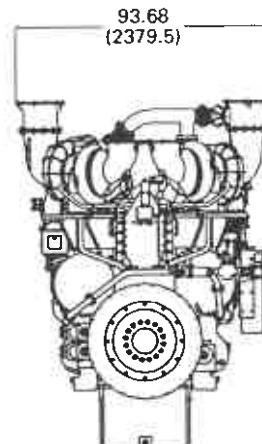
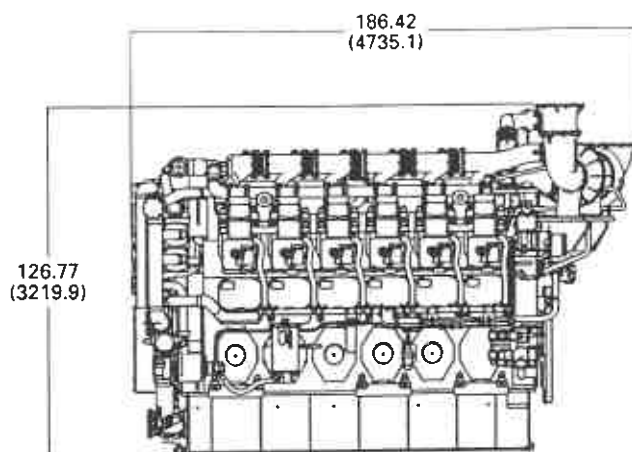


TECHNICAL DATA

G3612 Gas Petroleum Engine — 900-1000 rpm

		DM5312-00	DM5310-00
Engine Power			
@ 100% Load	bhp (bkW)	3195 (2383)	3550 (2647)
@ 75% Load	bhp (bkW)	2397 (1787)	2662 (1985)
Engine Speed		900	1000
SCAC Temperature		130 (54)	130 (54)
Compression Ratio		9.0:1	9.0:1
Emissions*			
NO _x	g/bhp-hr	0.70	0.70
CO	g/bhp-hr	2.50	2.50
Total Hydrocarbons	g/bhp-hr	5.85	6.15
Fuel Consumption			
@ 100% Load	Btu/bhp-hr (MJ/bkW-hr)	6,570 (9.30)	6,760 (9.57)
@ 75% Load	Btu/bhp-hr (MJ/bkW-hr)	6,805 (9.63)	7,050 (9.98)
Heat Balance			
Heat Rejection to Jacket Water			
@ 100% Load	Btu/mn (bkW)	32,168 (566)	36,195 (636)
@ 75% Load	Btu/mn (bkW)	28,721 (505)	31,271 (550)
Heat Rejection to Aftercooler			
@ 100% Load	Btu/mn (bkW)	21,222 (373)	26,509 (466)
@ 75% Load	Btu/mn (bkW)	9,333 (164)	14,525 (255)
Heat Rejection to Exhaust			
@ 100% Load	Btu/mn (bkW)	134,721 (2369)	154,673 (2720)
@ 75% Load	Btu/mn (bkW)	107,091 (1883)	123,759 (2176)
Exhaust System			
Exhaust Gas Flow Rate			
@ 100% Load	cfm (m ³ /min)	20,634 (584)	23,461 (664)
@ 75% Load	cfm (m ³ /min)	16,100 (456)	18,554 (525)
Exhaust Stack Temperature			
@ 100% Load	°F (°C)	846 (452)	858 (459)
@ 75% Load	°F (°C)	867 (464)	878 (470)
Intake System			
Air Inlet Flow Rate			
@ 100% Load	cfm (m ³ /min)	8,527 (241)	9,598 (272)
@ 75% Load	cfm (m ³ /min)	6,542 (185)	7,477 (212)
Gas Pressure		43 (295)	43 (295)

*at 100% load and speed

GAS PETROLEUM ENGINE


DIMENSIONS		
Length	in (mm)	186.42 (4735.1)
Width	in (mm)	93.68 (2379.5)
Height	in (mm)	126.77 (3219.9)
Shipping Weight	lb (kg)	55,300 (25 084)

Note: General configuration not to be used for installation. See general dimension drawings for detail.

RATING DEFINITIONS AND CONDITIONS

Engine performance is obtained in accordance with SAE J1995, ISO3046/1, BS5514/1, and DIN6271/1 standards.

Transient response data is acquired from an engine/generator combination at normal operating temperature and in accordance with ISO3046/1 standard ambient conditions. Also in accordance with SAE J1995, BS5514/1, and DIN6271/1 standard reference conditions.

Conditions: Power for gas engines is based on fuel having an LHV of 905 Btu/cu ft (33.74 kJ/L) at 29.91 in. Hg (101 kPa) and 59° F (15° C). Fuel rate is based on a cubic meter at 29.61 in. Hg (100 kPa) and 60.1° F (15.6° C). Air flow is based on a cubic foot at 29.61 in. Hg (100 kPa) and 77° F (25° C). Exhaust flow is based on a cubic foot at 29.61 in. Hg (100 kPa) and stack temperature.

Emissions Control Equipment Specification Summary

Ref: Hanover Compression: Luman Station

APPLICATION

of Engines: 1
Engine Operation: Gas Compression
Fuel: Pipeline Quality Natural Gas
Lubrication Oil: 0.5 wt% sulfated ash or less

Engine Data:

Engine: Caterpillar G3612 TALE
Power Output: 3,335 bhp @ 1000 rpm
Exhaust Temp: 846° F
Exhaust Flow Rate: 22,125 acfm

Combination Catalytic Converter/Silencer System Data:

Catalytic Converter Model: MHSI-543624x21-2-18/30-L2 *
Inlet / Outlet Pipe Size: Dual 18" inlets / Single 30" outlet
Overall Length: 166" OAL
Diameter: 54" dia.
Weight: 3,300 lb.
System Backpressure: 6" WC (Housing + Catalyst: Flange to Flange)

Catalyst Section Internals: 304 SS
Shell / Body Construction: CS
Inlet / Outlet Connection: Standard ANSI Flanges -- FF
Instrumentation Ports: 2 inlet / 2 outlet (1/2" NPT)
Oxygen Sensor Ports: 1 outlet (18 mm)
Exhaust Noise Attenuation: 30 - 35 dB(A) - "Hospital Grade"
Catalyst Operating Temperature Limits: 750 - 1,200° F

* Converter contains two catalyst elements; additional catalyst elements cannot be added without exceeding engine manufacturer's allowable backpressure for this engine.

EMISSION REQUIREMENTS

Exhaust Gases	Engine Outputs (gm/bhp-hr)	Converter Output (gm/bhp-hr)
NO _x	0.70	0.70
CO	2.50	0.25
THC	6.15	6.15
NMHC	0.92	0.92
NMNEHC	0.50	0.50
Formaldehyde	0.30	0.08

MIRATECH guarantees the performance of the converter, as stated above, if the engine output emissions and exhaust temperature at the catalyst are maintained as stated above using an air fuel ratio controller and the engine and catalyst are operated in accordance with the manufacturers' recommended guidelines for maintenance and operations. The converter outputs represent the achievable emission rates demonstrated throughout the engine-catalyst system life cycle.

Customer Enterprise	
Job ID	
Inquiry Number	
Run By Jad R Elzoghbi	Date Run 20-Mar-23

Engine Model TAURUS 60-7901S GSC STANDARD	
Fuel Type SD NATURAL GAS	Water Injection NO
Engine Emissions Data REV. 0.1	

NOx EMISSIONS	CO EMISSIONS	UHC EMISSIONS
----------------------	---------------------	----------------------

1	4925 kW	100.0% Load	Elev. 1950 ft	Rel. Humidity 60.0%	Temperature 70.0 Deg. F
PPMvd at 15% O2	25.00		25.00		25.00
ton/yr	23.86		14.53		8.32
lbm/MMBtu (Fuel LHV)	0.099		0.060		0.035
lbm/(MW-hr)	1.06		0.64		0.37
(gas turbine shaft pwr) lbm/hr	5.45		3.32		1.90

Notes

1. For short-term emission limits such as lbs/hr., Solar recommends using "worst case" anticipated operating conditions specific to the application and the site conditions. Worst case for one pollutant is not necessarily the same for another.
2. Solar's typical SoLoNOx warranty, for ppm values, is available for greater than 0 deg F or -20 deg F, and between 50% and 100% load for gas fuel, and between 65% and 100% load for liquid fuel (except for the Centaur 40). An emission warranty for non-SoLoNOx equipment is available for greater than 0 deg F or -20 deg F and between 80% and 100% load.
3. Fuel must meet Solar standard fuel specification ES 9-98. Emissions are based on the attached fuel composition, or, San Diego natural gas or equivalent.
4. If needed, Solar can provide Product Information Letters to address turbine operation outside typical warranty ranges, as well as non-warranted emissions of SO2, PM10/2.5, VOC, and formaldehyde.
5. Solar can provide factory testing in San Diego to ensure the actual unit(s) meet the above values within the tolerances quoted. Pricing and schedule impact will be provided upon request.
6. Any emissions warranty is applicable only for steady-state conditions and does not apply during start-up, shut-down, malfunction, or transient event.

Note: This generator predicted emission performance is for a similar 25 PPM NOx unit. The generators to be used at Dark Horse are rentals unit which have not yet been sourced, but they **will meet 15 PPM NOx as required by the Ozone Precursor Rule**. As such, calculated emissions are scaled based on a ratio of 25:15 PPM.

Solar Turbines

A Caterpillar Company

PREDICTED ENGINE PERFORMANCE

Customer Enterprise	
Job ID	
Run By Jad R Elzoghbi	Date Run 20-Mar-23
Engine Performance Code REV. 4.20.2.27.13	Engine Performance Data REV. 2.1

Model TAURUS 60-7901S
Package Type GSC
Match STANDARD
Fuel System GAS
Fuel Type SD NATURAL GAS

DATA FOR NOMINAL PERFORMANCE

Elevation	feet	1950
Inlet Loss	in H2O	4.0
Exhaust Loss	in H2O	4.0

Engine Inlet Temperature	deg F	70.0
Relative Humidity	%	60.0
Gearbox Efficiency		0.9820
Generator Efficiency		0.9740
Based On 1.0 Power Factor		

Specified Load*	kW	FULL
Net Output Power*	kW	4925
Fuel Flow	mmBtu/hr	54.88
Heat Rate*	Btu/kW-hr	11143
Therm Eff*	%	30.623

Engine Exhaust Flow	lbm/hr	155129
PT Exit Temperature	deg F	966
Exhaust Temperature	deg F	966

Fuel Gas Composition (Volume Percent)	Methane (CH4)	92.79
	Ethane (C2H6)	4.16
	Propane (C3H8)	0.84
	N-Butane (C4H10)	0.18
	N-Pentane (C5H12)	0.04
	Hexane (C6H14)	0.04
	Carbon Dioxide (CO2)	0.44
	Hydrogen Sulfide (H2S)	0.0001
	Nitrogen (N2)	1.51

Fuel Gas Properties	LHV (Btu/Scf)	939.2	Specific Gravity	0.5970	Wobbe Index at 60F	1215.6
---------------------	---------------	--------------	------------------	---------------	--------------------	---------------

*Electric power measured at the generator terminals.

This performance was calculated with a basic inlet and exhaust system. Special equipment such as low noise silencers, special filters, heat recovery systems or cooling devices will affect engine performance. Performance shown is "Expected" performance at the pressure drops stated, not guaranteed.

Table 3.2-2. UNCONTROLLED EMISSION FACTORS FOR 4-STROKE LEAN-BURN ENGINES^a
(SCC 2-02-002-54)

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

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

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

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

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

^a Reference 7. Factors represent uncontrolled levels. For NO_x, CO, and PM₁₀, “uncontrolled” means no combustion or add-on controls; however, the factor may include turbocharged units. For all other pollutants, “uncontrolled” means no oxidation control; the data set may include units with control techniques used for NO_x control, such as PCC and SCR for lean burn engines, and PSC for rich burn engines. Factors are based on large population of engines. Factors are for engines at all loads, except as indicated. SCC = Source Classification Code. TOC = Total Organic Compounds. PM-10 = Particulate Matter ≤ 10 microns (μm) aerodynamic diameter. A “<” sign in front of a factor means that the corresponding emission factor is based on one-half of the method detection limit.

^b Emission factors were calculated in units of (lb/MMBtu) based on procedures in EPA Method 19. To convert from (lb/MMBtu) to (lb/10⁶ scf), multiply by the heat content of the fuel. If the heat content is not available, use 1020 Btu/scf. To convert from (lb/MMBtu) to (lb/hp-hr) use the following equation:

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

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

^d Based on 99.5% conversion of the fuel carbon to CO₂. CO₂ [lb/MMBtu] = (3.67)(%CON)(C)(D)(1/h), where %CON = percent conversion of fuel carbon to CO₂, C = carbon content of fuel by weight (0.75), D = density of fuel, 4.1 E+04 lb/10⁶ scf, and



Protocol for Equipment Leak Emission Estimates

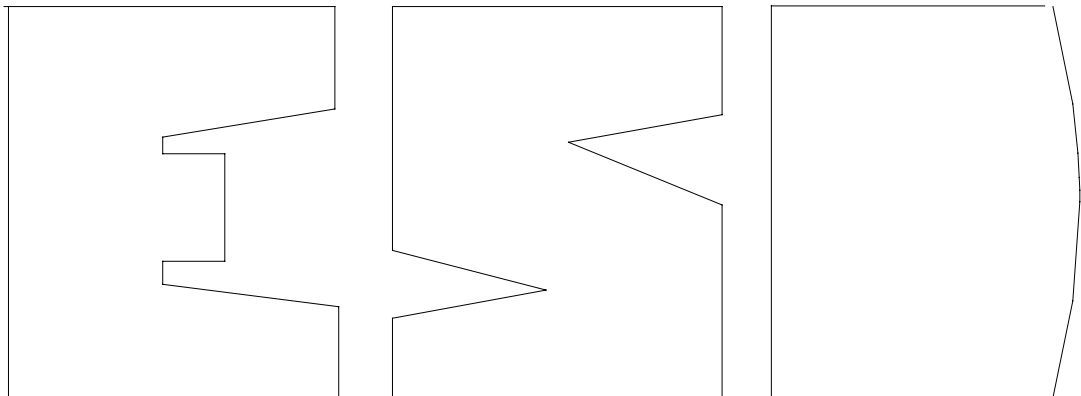
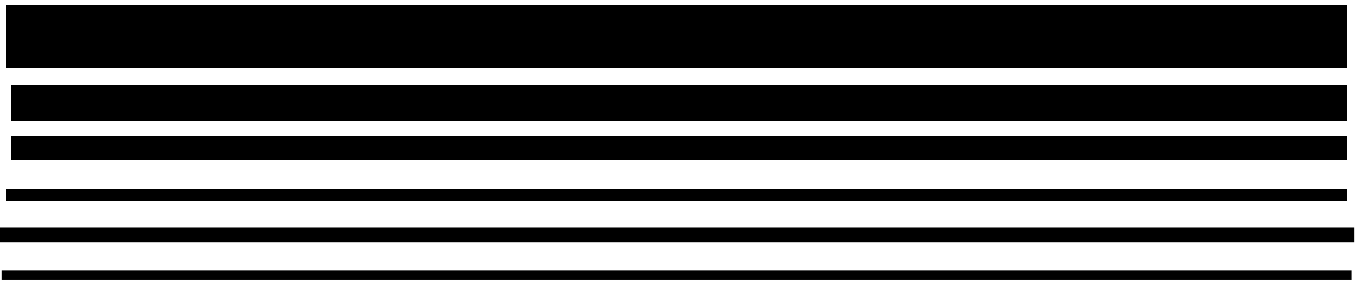


TABLE 2-4. OIL AND GAS PRODUCTION OPERATIONS AVERAGE EMISSION FACTORS (kg/hr/source)

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

^aWater/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.

^bThese 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.

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

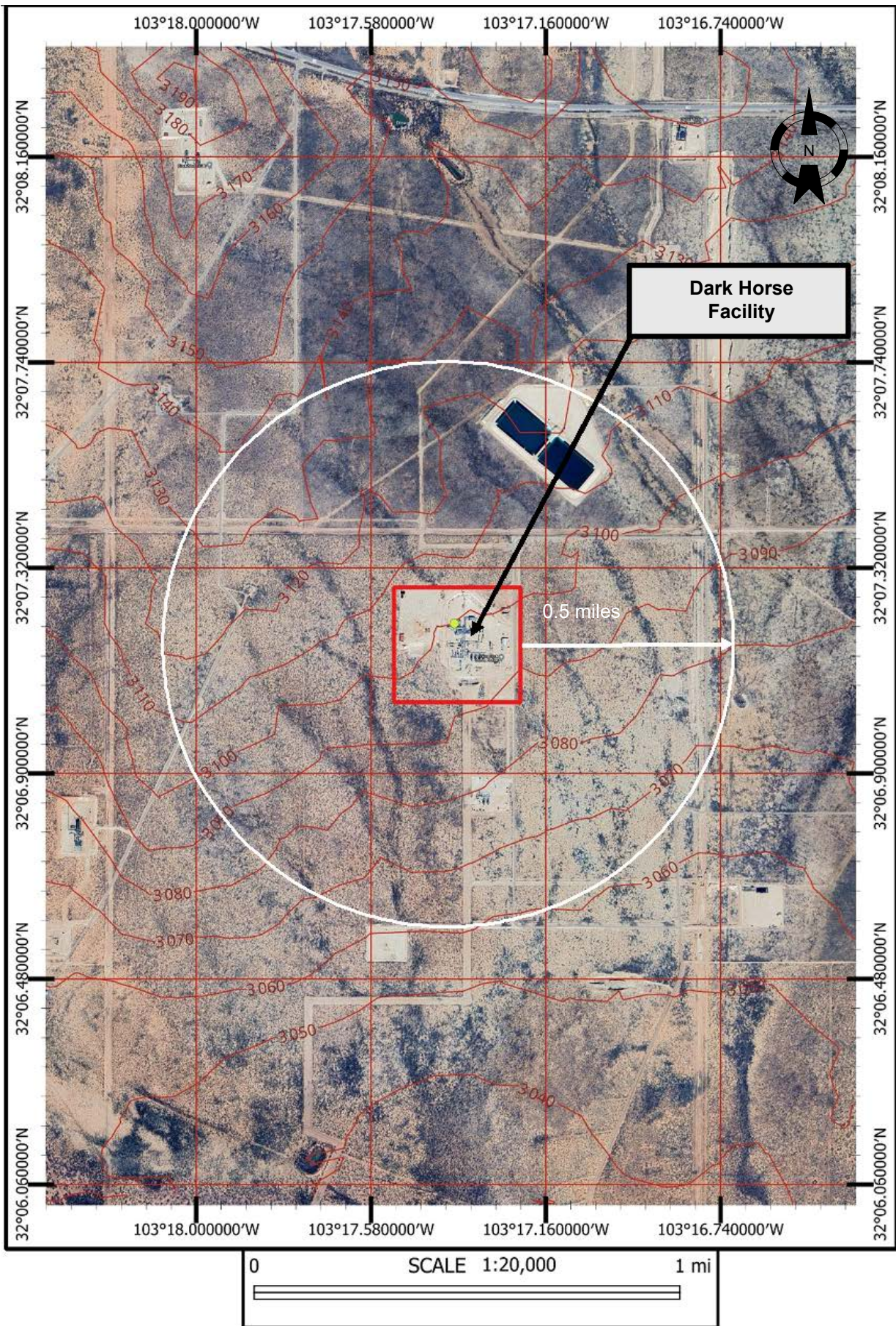
Section 8

Map(s)

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

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

An area map of the Dark Horse Facility is attached.



Area Map

Enterprise Delaware Basin Treating LLC

Scale:	Drawn by:	Date:
1:20,000	MDF	05/30/2024
	Chk'd by:	Date:

Dark Horse Facility
 N 32° 7' 12.40" Latitude
 W 103° 17' 22.79" Longitude

Project No.:	File Name:	Figure:
	Dark Horse Diagrams	

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.
-

The public notice requirements for a Significant Permit Revision application were followed. See below for information on each specific public notice requirement.

Nearby Property Owners (within 0.5 mile of the property boundary) and Municipalities/Counties (within 10 miles):

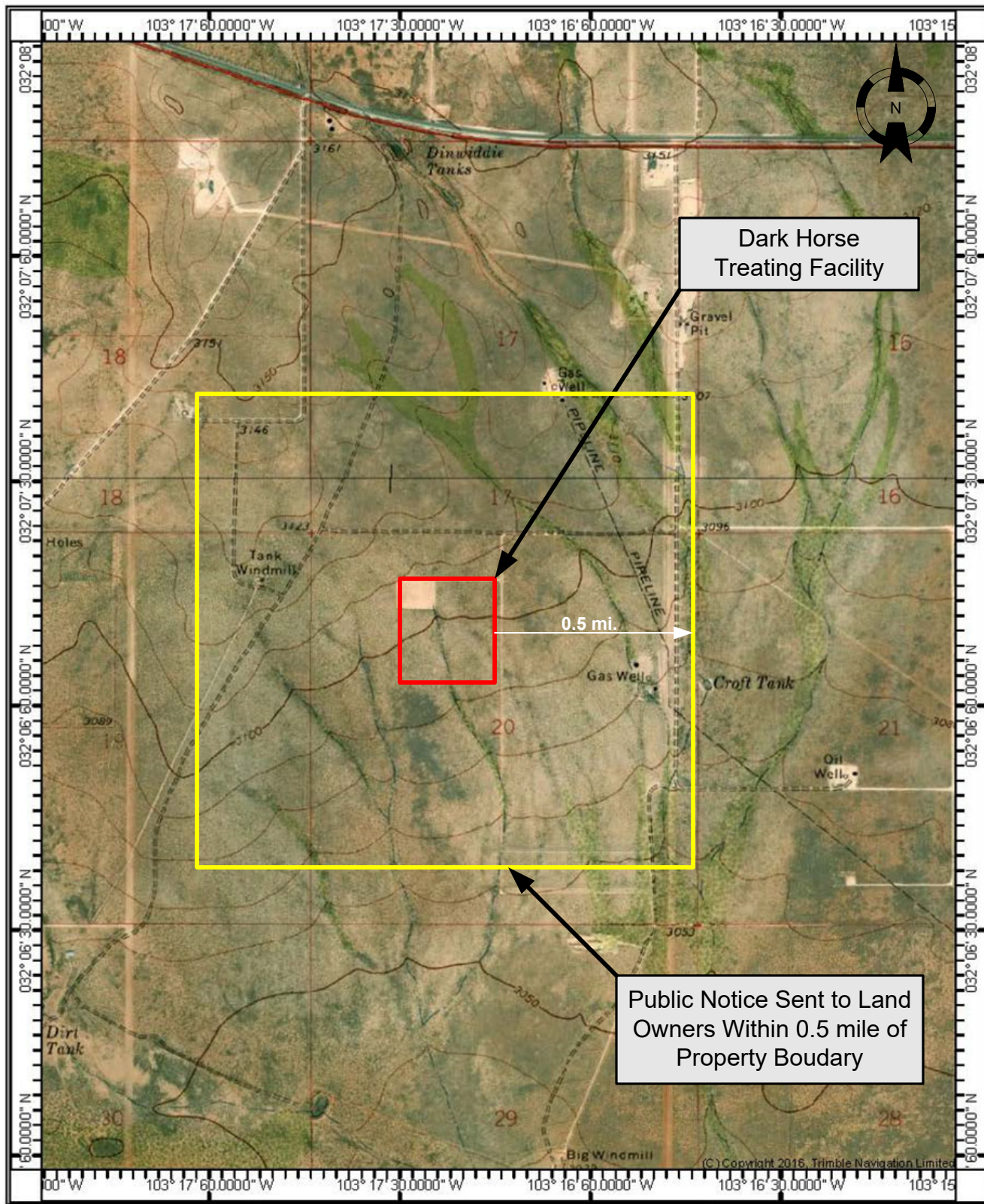
Name	Mailing Address	Category of PN
Lea County	Lea County Manager 100 North Main Lovington, NM 88260	County
City of Jal	Jal Mayor PO Drawer 340 710 W. Wyoming Jal, NM 88252	Municipality
Intrepid Potash-New Mexico, LLC	707 17 th St., Ste. 4200 Denver, CO 80202	Surrounding Property Owner
EOG Resources Inc.	P.O. Box 4362 Houston, TX 77210	Surrounding Property Owner
NGL South Ranch Inc.	2424 Ridge Rd. Rockwell, TX 75087	Surrounding Property Owner
Fulfer Ranch, LLC	PO Box 1224 Jal, NM 88252	Surrounding Property Owner
Oscar Rodriguez	PO Box 549 Jal, NM 88252	Surrounding Property Owner
Juanita Railey	3613 Jonette Dr Ft Worth, TX 76118	Surrounding Property Owner
Wayne W Webster	14 Gasoline Alley Rd Jal, NM 88252	Surrounding Property Owner
Billy Ralph Emerson	PO Box 75 Jal, NM 88252	Surrounding Property Owner
Plains Pipeline LP	Attn: Property Tax Department 333 Clay Street, Suite 1600 Houston, TX 77002	Surrounding Property Owner
El Paso Natural Gas Co	PO Box 4372 Houston, TX 77210	Surrounding Property Owner
New Mexico State Land Office	PO Box 1148 Santa Fe, NM 87504	Surrounding Property Owner
USA - Bureau of Land Management	BLM-New Mexico State Office 301 Dinosaur Trail Santa Fe, NM 87508	Surrounding Property Owner

Newspaper: Hobbs News Sun

Radio: KIXN 102.9 FM

Posting Locations:

1. Facility Entrance
2. Woolworth Community Library - 100 E Utah Ave, Jal, NM 88252
3. Jal City Hall - 710 W. Wyoming, Jal, NM 88252
4. USPS - 111 S 4th St, Jal, NM 88252



Public Notice Map

Enterprise Delaware Basin Treating LLC

Scale: 1:20,000

Drawn by: MDF

Date: 12/02/2025

Chk'd by:

Date:

Dark Horse Facility
N 32° 7' 12.40" Latitude
W 103° 17' 22.79" Longitude

Project No.:

File Name: Dark Horse Diagrams

Figure:

FW: [EXTERNAL] Public Notice Question

From Kuhn, Julia, ENV <Julia.Kuhn@env.nm.gov>
Date Mon 12/15/2025 12:38 PM
To Martin Schluep <mschluep@alliantenv.com>
Cc Hardison, Cember, ENV <Cember.Hardison@env.nm.gov>

Good morning, Martin,

Please see Cember's email below. I agree with her assessment.

Regards,

Julia Kuhn

From: Hardison, Cember, ENV <Cember.Hardison@env.nm.gov>
Sent: Monday, December 15, 2025 11:55 AM
To: Kuhn, Julia, ENV <Julia.Kuhn@env.nm.gov>
Subject: FW: [EXTERNAL] Public Notice Question

Julia,
I would tell him that they don't have to re-print public notices since emissions would be reduced and fewer modifications are being made. I would also ask him to include a copy of my email approving the current PN in their permit application in Section 9.

Do you agree?

Cember Hardison
Title V Permit Team Supervisor
New Mexico Environment Department – Air Quality Bureau
Direct/Cell 505 629 6688 | AQB main # 505 476 4300 | Fax # 505-476-4375 | 525 Camino de los Marquez, Suite 1, Santa Fe NM 87505 | ember.hardison@env.nm.gov | [Air Quality Bureau \(nm.gov\)](https://www.airquality.nm.gov/) | regs [Chapter 2 – Air Quality \(Statewide\) - State Records Center & Archives \(nm.gov\)](#)

From: Martin Schluep <mschluep@alliantenv.com>
Sent: Monday, December 15, 2025 11:40 AM
To: Hardison, Cember, ENV <Cember.Hardison@env.nm.gov>
Subject: [EXTERNAL] Public Notice Question

CAUTION: This email originated outside of our organization. Exercise caution prior to clicking on links or opening attachments.

Hi Cember,

I hope you are well and ready for the Holidays. I sent this e-mail to Melinda as well, but I'm not sure if she's on PTO already.

The question I asked was, we published a public notice in the newspaper (and letters, radio, etc.) for Enterprise's Dark Horse Facility (the former Pinon site). Initially they were going to add three compressor engines and 7 generator turbines. That's what we published. Due to availability issues of the generator turbines, they now can only bring two generator turbines on site in 2026.

We are revising the permit revision application (not yet submitted) accordingly. It will be less emissions of course than what we published. My question is, do we have to re-publish, or are we ok with the original publication since we are asking for less emissions in the application compared to what we published. I want to avoid submitting the application and having to publish again during review, or get an incomplete notice or the application gets denied altogether.

Thank you as always, for your guidance, we much appreciate it.

Martin

Martin R. Schluep
Alliant Environmental, LLC
7804 Pan American Fwy. NE, Suite 5
Albuquerque, NM 87109
(C) 505.205.4819
www.alliantenv.com

December 3, 2025

VIA CERTIFIED MAIL

Dear **Lea County Manager**,

Enterprise Delaware Basin Treating LLC announces its application submittal to the New Mexico Environment Department for an air quality permit for the **modification** of its existing **Dark Horse Facility**. The expected date of application submittal to the Air Quality Bureau is **December 12, 2025**.

The exact location for the proposed facility known as, **Dark Horse Facility**, is at latitude **32.120112** degrees North and longitude **-103.289663** degrees West. The approximate location of this facility is **5.9 miles west of Jal in Lea County**.

The proposed **modification** consists of adding three new natural gas compressor engines, seven natural gas-powered generator turbines, re-routing some of the existing flare streams to an already permitted, identical flare and increasing hydrogen sulfide concentrations for startup, shutdown and maintenance flaring.

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

Pollutant:	Pounds per hour	Tons per year
Particulate Matter (PM)	16.0 pph	65.0 tpy
PM ₁₀	16.0 pph	65.0 tpy
PM _{2.5}	15.0 pph	64.0 tpy
Sulfur Dioxide (SO ₂)	5708.0 pph	250.0 tpy
Nitrogen Oxides (NO _x)	349.0 pph	355.0 tpy
Carbon Monoxide (CO)	617.0 pph	364.0 tpy
Volatile Organic Compounds (VOC)	385.0 pph	335.0 tpy
Total sum of all Hazardous Air Pollutants (HAPs)	20.0 pph	89.0 tpy
Toxic Air Pollutant (TAP)	n/a	n/a
Green House Gas Emissions as Total CO ₂ e	n/a	830,000 tpy

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

Owner and operator of the facility is **Enterprise Delaware Basin Treating LLC, P.O. Box 4324, Houston, TX, 77210-4324**.

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 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.

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 505-629-7748.

Sincerely,

Enterprise Delaware Basin Treating LLC
P.O. Box 4324, Houston, TX, 77210-4324

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.

9589 0710 5270 0010 9593 95

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

For delivery information, visit our website at www.usps.com®.

Jul, NM 88252

Certified Mail Fee \$5.30

Extra Services & Fees (check box, add fee as appropriate)

☐ Return Receipt (hardcopy)	\$0.00
☐ Return Receipt (electronic)	\$0.00
☐ Certified Mail Restricted Delivery	\$0.00
☐ Adult Signature Required	\$0.00
☐ Adult Signature Restricted Delivery	\$0.00

Postage \$0.78

Total Postage and Fees \$6.08

Sent To Wayne W. Webster

Street and Apt. No., or PO Box No. 14 Gasoline Alley Rd.

City, State, ZIP+4® Sal, NM 88252

PS Form 3800, January 2023 PSN 7530-02-000-9047 See Reverse for Instructions

9589 0710 5270 0010 9593 88

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

For delivery information, visit our website at www.usps.com®.

Fort Worth, TX 76118

Certified Mail Fee \$5.30

Extra Services & Fees (check box, add fee as appropriate)

☐ Return Receipt (hardcopy)	\$0.00
☐ Return Receipt (electronic)	\$0.00
☐ Certified Mail Restricted Delivery	\$0.00
☐ Adult Signature Required	\$0.00
☐ Adult Signature Restricted Delivery	\$0.00

Postage \$0.78

Total Postage and Fees \$6.08

Sent To Juanita Railey

Street and Apt. No., or PO Box No. 3613 Jonette Dr.

City, State, ZIP+4® Ft. Worth, TX 76118

PS Form 3800, January 2023 PSN 7530-02-000-9047 See Reverse for Instructions

9589 0710 5270 0010 9593 71

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

For delivery information, visit our website at www.usps.com®.

Jul, NM 88252

Certified Mail Fee \$5.30

Extra Services & Fees (check box, add fee as appropriate)

☐ Return Receipt (hardcopy)	\$0.00
☐ Return Receipt (electronic)	\$0.00
☐ Certified Mail Restricted Delivery	\$0.00
☐ Adult Signature Required	\$0.00
☐ Adult Signature Restricted Delivery	\$0.00

Postage \$0.78

Total Postage and Fees \$6.08

Sent To Oscar Rodriguez

Street and Apt. No., or PO Box No. P.O. Box 549

City, State, ZIP+4® Sal, NM 88252

PS Form 3800, January 2023 PSN 7530-02-000-9047 See Reverse for Instructions

9589 0710 5270 0010 9593 64

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

For delivery information, visit our website at www.usps.com®.

Jul, NM 88252

Certified Mail Fee \$5.30

Extra Services & Fees (check box, add fee as appropriate)

☐ Return Receipt (hardcopy)	\$0.00
☐ Return Receipt (electronic)	\$0.00
☐ Certified Mail Restricted Delivery	\$0.00
☐ Adult Signature Required	\$0.00
☐ Adult Signature Restricted Delivery	\$0.00

Postage \$0.78

Total Postage and Fees \$6.08

Sent To Fuller Ranch, LLC

Street and Apt. No., or PO Box No. P.O. Box 1224

City, State, ZIP+4® Sal, NM 88252

PS Form 3800, January 2023 PSN 7530-02-000-9047 See Reverse for Instructions

9589 0710 5270 0010 9593 57

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

For delivery information, visit our website at www.usps.com®.

Rockwall, TX 75087

Certified Mail Fee \$5.30

Extra Services & Fees (check box, add fee as appropriate)

☐ Return Receipt (hardcopy)	\$0.00
☐ Return Receipt (electronic)	\$0.00
☐ Certified Mail Restricted Delivery	\$0.00
☐ Adult Signature Required	\$0.00
☐ Adult Signature Restricted Delivery	\$0.00

Postage \$0.78

Total Postage and Fees \$6.08

Sent To NGL South Ranch, Inc.

Street and Apt. No., or PO Box No. 2424 Ridge Rd.

City, State, ZIP+4® Rockwall, TX 75087

PS Form 3800, January 2023 PSN 7530-02-000-9047 See Reverse for Instructions

9589 0710 5270 0010 9593 40

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

For delivery information, visit our website at www.usps.com®.

Houston, TX 77210

Certified Mail Fee \$5.30

Extra Services & Fees (check box, add fee as appropriate)

☐ Return Receipt (hardcopy)	\$0.00
☐ Return Receipt (electronic)	\$0.00
☐ Certified Mail Restricted Delivery	\$0.00
☐ Adult Signature Required	\$0.00
☐ Adult Signature Restricted Delivery	\$0.00

Postage \$0.78

Total Postage and Fees \$6.08

Sent To Edg Resources Inc.

Street and Apt. No., or PO Box No. P.O. Box 4362

City, State, ZIP+4® Houston, TX 77210

PS Form 3800, January 2023 PSN 7530-02-000-9047 See Reverse for Instructions

9589 0710 5270 0010 9593 33

U.S. Postal ServiceTM CERTIFIED MAIL[®] RECEIPT Domestic Mail Only

For delivery information, visit our website at www.usps.com.

Denver, CO 80202

Certified Mail Fee \$5.30

Extra Services & Fees (check box, add fee as appropriate)

☐ Return Receipt (hardcopy) \$0.00

☐ Return Receipt (electronic) \$0.00

☐ Certified Mail Restricted Delivery \$0.00

☐ Adult Signature Required \$0.00

☐ Adult Signature Restricted Delivery \$0.00

Postage \$0.78

Total Postage and Fees \$6.08

Sent To

Intrepid Potash-NM LLC

Street and Apt. No., or PO Box No. 107 17th St., Ste. 4200

City, State, ZIP+4[®] Denver, CO 80202

PS Form 3800, January 2023 PSN 7530-02-000-9047 See Reverse for Instructions

12/04/2025

Postmark
Here

U.S. Postal ServiceTM CERTIFIED MAIL[®] RECEIPT Domestic Mail Only

For delivery information, visit our website at www.usps.com.

Santa Fe, NM 87504

Certified Mail Fee \$5.30

Extra Services & Fees (check box, add fee as appropriate)

☐ Return Receipt (hardcopy) \$0.00

☐ Return Receipt (electronic) \$0.00

☐ Certified Mail Restricted Delivery \$0.00

☐ Adult Signature Required \$0.00

☐ Adult Signature Restricted Delivery \$0.00

Postage \$0.78

Total Postage and Fees \$6.08

Sent To

New Mexico State Land Office

Street and Apt. No., or PO Box No. P.O. Box 1148

City, State, ZIP+4[®] Santa Fe, NM 87504

PS Form 3800, January 2023 PSN 7530-02-000-9047 See Reverse for Instructions

Postmark
Here

12/04/2025

9589 0710 5270 0010 9594 49

U.S. Postal ServiceTM CERTIFIED MAIL[®] RECEIPT Domestic Mail Only

For delivery information, visit our website at www.usps.com.

Santa Fe, NM 87508

Certified Mail Fee \$5.30

Extra Services & Fees (check box, add fee as appropriate)

☐ Return Receipt (hardcopy) \$0.00

☐ Return Receipt (electronic) \$0.00

☐ Certified Mail Restricted Delivery \$0.00

☐ Adult Signature Required \$0.00

☐ Adult Signature Restricted Delivery \$0.00

Postage \$0.78

Total Postage and Fees \$6.08

Sent To

Bureau of Land Management

Street and Apt. No., or PO Box No. 51 Dinosaur Trail

City, State, ZIP+4[®] Santa Fe, NM 87508

PS Form 3800, January 2023 PSN 7530-02-000-9047 See Reverse for Instructions

12/04/2025

Postmark
Here

9589 0710 5270 0010 9594 25

U.S. Postal ServiceTM CERTIFIED MAIL[®] RECEIPT Domestic Mail Only

For delivery information, visit our website at www.usps.com.

Houston, TX 77210

Certified Mail Fee \$5.30

Extra Services & Fees (check box, add fee as appropriate)

☐ Return Receipt (hardcopy) \$0.00

☐ Return Receipt (electronic) \$0.00

☐ Certified Mail Restricted Delivery \$0.00

☐ Adult Signature Required \$0.00

☐ Adult Signature Restricted Delivery \$0.00

Postage \$0.78

Total Postage and Fees \$6.08

Sent To

El Paso Natural Gas Co.

Street and Apt. No., or PO Box No. P.O. Box 4372

City, State, ZIP+4[®] Houston, TX 77210

PS Form 3800, January 2023 PSN 7530-02-000-9047 See Reverse for Instructions

12/04/2025

Postmark
Here

9589 0710 5270 0010 9594 18

U.S. Postal ServiceTM CERTIFIED MAIL[®] RECEIPT Domestic Mail Only

For delivery information, visit our website at www.usps.com.

Houston, TX 77002

Certified Mail Fee \$5.30

Extra Services & Fees (check box, add fee as appropriate)

☐ Return Receipt (hardcopy) \$0.00

☐ Return Receipt (electronic) \$0.00

☐ Certified Mail Restricted Delivery \$0.00

☐ Adult Signature Required \$0.00

☐ Adult Signature Restricted Delivery \$0.00

Postage \$0.78

Total Postage and Fees \$6.08

Sent To

Plains Pipeline LP, Prop. Tax Dept.

Street and Apt. No., or PO Box No. 333 Clay Street, Ste. 1600

City, State, ZIP+4[®] Houston, TX 77002

PS Form 3800, January 2023 PSN 7530-02-000-9047 See Reverse for Instructions

12/04/2025

Postmark
Here

9589 0710 5270 0010 9594 01

U.S. Postal ServiceTM CERTIFIED MAIL[®] RECEIPT Domestic Mail Only

For delivery information, visit our website at www.usps.com.

Jal, NM 88252

Certified Mail Fee \$5.30

Extra Services & Fees (check box, add fee as appropriate)

☐ Return Receipt (hardcopy) \$0.00

☐ Return Receipt (electronic) \$0.00

☐ Certified Mail Restricted Delivery \$0.00

☐ Adult Signature Required \$0.00

☐ Adult Signature Restricted Delivery \$0.00

Postage \$0.78

Total Postage and Fees \$6.08

Sent To

Billy Ralph Emerson

Street and Apt. No., or PO Box No. P.O. Box 75

City, State, ZIP+4[®] Jal, NM 88252

PS Form 3800, January 2023 PSN 7530-02-000-9047 See Reverse for Instructions

12/04/2025

Postmark
Here

9589 0710 5270 0010 9593 26

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

For delivery information, visit our website at www.usps.com®.

Jal, NM 88252

Certified Mail Fee	\$5.30
Extra Services & Fees (check box, add fee as appropriate)	\$0.00
☐ Return Receipt (hardcopy)	\$0.00
☐ Return Receipt (electronic)	\$0.00
☐ Certified Mail Restricted Delivery	\$0.00
☐ Adult Signature Required	\$0.00
☐ Adult Signature Restricted Delivery	\$0.00
Postage	\$0.78
Total Postage and Fees	\$6.08

Sent To
Mayor of Jal, PO Drawer 340
Street and Apt. No., or PO Box No.
710 W. Wyoming
City, State, ZIP+4®
Jal, NM 88252

PS Form 3800, January 2023 PSN 7530-02-000-9047 See Reverse for Instructions

0977 02
DEC 04 2025
Postmark Here
RIO RANCHO POST OFFICE EXPRESS

LT 6656 0100 0225 0120 6856

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

For delivery information, visit our website at www.usps.com®.

Lovington, NM 88260

Certified Mail Fee	\$5.30
Extra Services & Fees (check box, add fee as appropriate)	\$0.00
☐ Return Receipt (hardcopy)	\$0.00
☐ Return Receipt (electronic)	\$0.00
☐ Certified Mail Restricted Delivery	\$0.00
☐ Adult Signature Required	\$0.00
☐ Adult Signature Restricted Delivery	\$0.00
Postage	\$0.78
Total Postage and Fees	\$6.08

Sent To
Lea County Manager
Street and Apt. No., or PO Box No.
100 North Main
City, State, ZIP+4®
Lovington, NM 88260

PS Form 3800, January 2023 PSN 7530-02-000-9047 See Reverse for Instructions

0977 02
DEC 04 2025
Postmark Here
RIO RANCHO POST OFFICE EXPRESS

Lovington

from PAGE 1

we wouldn't be here today. So, I just want to say thank you to the good Lord, thank you to the public and may (God) continue to bless the public. May (God) continue bless Lovington."

Gandy ended the invocation by praying for the new people who will replace the outgoing commissioners in January.

"I pray the new commissioners, you'll give them the grit to withstand this, and Lord God to lean on you during difficult times and to lean on you during good times," he said. "I pray for our mayor. I pray for commissioner (Lizabeth) White as they help to train and guide our new commissioners. I pray you will make this community great through them."

City Manager David Miranda presented each of the commissioners with plaques honoring their years of service to the city.

Miranda noting how long each served the city.

Boldt became a city commissioner on April 1, 2020, and served on the parks and recreation board and the planning and zoning board, in total he served six years.

Gandy became a city commissioner on March 10, 2008, and served as mayor from March 10, 2014, until March 14, 2016, a total of 17 years.

Trujillo became a city commissioner on March 8, 2004, and served as mayor from March 13, 2006 until Nov. 27, 2006. He was appointed mayor for a second time, serving from March 12, 2018 until April 11, 2022. Trujillo served on the senior citizens board, the extraterritorial zone committee and the veterans memorial committee. In total, he served 21 years.

Lea County Commissioner Dee Ann Kimbro thanked the three outgoing commissioners for their service and

for their passion in helping make Lovington a better community.

"Thank you for the service you've given to the city," she said. "I know a lot of us have butted heads once or twice. But you know what? It's because we're passionate about what we do. It's because we love where we live. You have to have the love and devotion that you guys had to do what you've done for so long. I know you've caught a lot of flak. You've also kept this city afloat. Thank you for everything you've done and the years of service that you've done for the city."

The three new city commissioners, Ezequiel "Zeke" Rodriguez, district 1; Christina Ramon district 2; and Steven Perry district 4, will be sworn in for their first commission meeting in January, along with City Commissioner White and Mayor Robbie Roberts.



SUBMITTED PHOTO

Lovington City Manager David Miranda presents Scott Boldt, district 2 city commissioner, with a plaque for his six years of public service with the City of Lovington, during Monday's city commission meeting.



SUBMITTED PHOTO

Lovington City Manager David Miranda presents Scotty Gandy, district 4 city commissioner, with a plaque for his six years of public service with the City of Lovington, during Monday's city commission meeting.



SUBMITTED PHOTO

Lovington City Manager David Miranda presents David Trujillo, district 1 city commissioner, with a plaque for his six years of public service with the City of Lovington, during Monday's city commission meeting.

T-Rex

from PAGE 1

The exhibit features fossil specimens, dynamic displays and hands-on learning opportunities, highlighting the deep connections between geology, energy and life on Earth.

In addition to the exhibit, the initiative includes:

■ A public lecture series featuring museum scientists and local geologists, exploring topics from prehistoric life to the geologic forces that shaped the Permian Basin.

■ STEAM Trek outreach kits delivered to classrooms across Lea County, providing hands-on science experiences for students who may not have access to the museum.

■ Educational programs and partnerships designed to support STEM learning and workforce development, fostering curiosity and sci-

entific literacy among the next generation.

"This project connects the story of the land — its fossils, its geology and its people," said Tony Fiorillo, Executive Director of the New Mexico Museum of Natural History and Science. "By bringing Stan the Tyrannosaurus rex to the Western Heritage Museum in Hobbs, we're amplifying our own museum's reach and linking other parts of New Mexico to Earth's extraordinary ancient past to its scientific and economic future."

"It is truly an honor for NMJC to host this exhibit at our Western Heritage Museum and Lea County Cowboy Hall of Fame, where our community can experience the richness of our ancient history firsthand," said NMJC President Cathy Mitchell. "We are so appre-

ciative of New Mexico Natural History Museum Foundation, the City of Hobbs, the Maddox Foundation and NMOGA for seeing the value in this project and providing their capital support for this endeavor."

The Permian Basin Natural History Project reflects the Museum Foundation's enduring mission to ignite curiosity and expand access to science across New Mexico, bringing discovery to communities statewide and inspiring the next generation of scientists and explorers.

For more information or to learn how to support the project, visit www.NaturalHistoryFoundation.org or contact Sarah Bush, CEO of the New Mexico Museum of Natural History Foundation, at SBush@NaturalHistoryFoundation.org.

Trump: US seizes oil tanker off Venezuela coast

WASHINGTON (AP) — President Donald Trump said Wednesday the United States has seized an oil tanker off the coast of Venezuela as tensions mount with the government of President Nicolás Maduro.

Using U.S. forces to seize an oil tanker is incredibly unusual and marks the Trump administration's latest push to increase pressure on Maduro, who has been charged with narcoterrorism in the United States. The U.S. has built up the largest military presence in the region in decades and launched a series of deadly strikes on alleged drug-smuggling boats in the Caribbean Sea and eastern Pacific Ocean. The campaign is facing growing scrutiny from Congress.

"We've just seized a tanker on the coast of Venezuela, a large tanker, very large, largest one ever seized, actually," Trump told reporters at the White House, later adding "it was seized for a very good reason."

Trump said "other things are happening," but did not offer additional details, saying he would speak more about it later. When asked what would happen to the oil

aboard the tanker, Trump said, "Well, we keep it, I guess."

The seizure was led by the U.S. Coast Guard and supported by the Navy, according to a U.S. official who was not authorized to comment publicly and spoke on the condition of anonymity. The official added the seizure was conducted under U.S. law enforcement authority.

Venezuela has the world's largest proven oil reserves and produces about 1 million barrels a day. Locked out of global oil markets by U.S. sanctions, the state-owned oil company sells most of its output at a steep discount to refiners in China.

The transactions usually involve a complex network of shadowy intermediaries, as sanctions have scared away more established traders. Many are shell companies, registered in jurisdictions known for secrecy. The buyers deploy so-called ghost tankers that hide their location and hand off their valuable cargoes in the middle of the ocean before they reach their final destination.

Maduro did not address the seizure during a speech before a ruling-party orga-

nized demonstration in Caracas, Venezuela's capital. But he told supporters the country is "prepared to break the teeth of the North American empire if necessary."

Maduro, flanked by senior officials, said only the ruling party can "guarantee peace, stability, and the harmonious development of Venezuela, South America and the Caribbean."

Maduro previously has insisted the real purpose of the U.S. military operations is to force him from office.

During past negotiations, among the concessions the U.S. has made to Maduro was approval for oil giant Chevron Corp. to resume pumping and exporting Venezuelan oil. The corporation's activities in the South American country resulted in a financial lifeline for Maduro's government.

The seizure comes a day after the U.S. military flew a pair of fighter jets over the Gulf of Venezuela in what appeared to be the closest warplanes had come to the South American country's airspace. Trump has said land attacks are coming soon but has not offered more details.

NOTICE OF AIR QUALITY PERMIT APPLICATION

Enterprise Delaware Basin Treating LLC announces its application submittal to the New Mexico Environment Department for an air quality permit for the significant revision of its existing **Dark Horse Facility**. The expected date of application submittal to the Air Quality Bureau is **December 12, 2025**.

The exact location for the proposed facility known as, **Dark Horse Facility**, is at **latitude 32.120112 dec deg North and longitude -103.289663 dec deg West**. The approximate location of this facility is **5.9 miles west of Jal in Lea County**.

The proposed significant revision consists of adding three new natural gas compressor engines, seven natural gas powered generator turbines, re-routing some of the existing flare streams to an already permitted, identical flare and increasing hydrogen sulfide concentrations for startup, shutdown and maintenance flaring.

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

Pollutant:	Pounds per hour	Tons per year
Particulate Matter (PM)	16.0 pph	65.0 tpy
PM ₁₀	16.0 pph	65.0 tpy
PM _{2.5}	15.0 pph	64.0 tpy
Sulfur Dioxide (SO ₂)	5708.0 pph	250.0 tpy
Nitrogen Oxides (NO _x)	349.0 pph	355.0 tpy
Carbon Monoxide (CO)	617.0 pph	364.0 tpy
Volatile Organic Compounds (VOC)	385.0 pph	335.0 tpy
Total sum of all Hazardous Air Pollutants (HAPs)	20.0 pph	89.0 tpy
Toxic Air Pollutant (TAP)	n/a	n/a
Green House Gas Emissions as Total CO _{2e}	n/a	830,000 tpy

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

The owner and/or operator of the Facility is: **Enterprise Delaware Basin Treating LLC, P.O. Box 4324, Houston, TX, 77210-4324**.

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 505-629-7748.

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.

SERVICE DIRECTORY

Advertise your service related business on this page
575-391-5414

Appliances



BOERNER'S APPLIANCE

SALES & SERVICE
4502 N. Lovington Hwy, Hobbs
575-393-4625

- SALES
- SERVICE
- PARTS

New & Used Appliances

FINANCING AVAILABLE!

90 Days Same As Cash!

Handyman Services

HANDYMAN SERVICE

Painting, Yard Work, AC work & more.

30 years experience
Call 575-441-6242

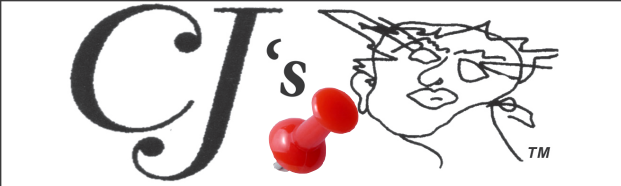


NO JOB TOO SMALL!
Brick, block, stone work, stucco.

Antonio Reyes

Call today! 806-777-2275

Organizing Services



CJ's

Overwhelmed? We do:

- Estate Sales • Garage Sales
- Packing • Organizing

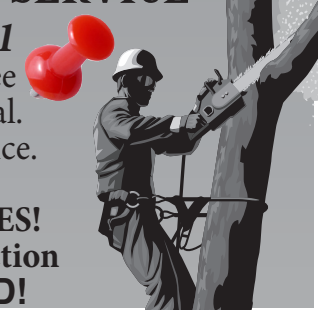
Call 575-390-3228

Tree Services

CLIFF'S TREE SERVICE

432-248-9121

Experienced tree & stump removal.
27 years experience.
Insured.
FREE ESTIMATES!
Customer Satisfaction GUARANTEED!



Water Well Servicing

Eades Drilling & Pump Service

For all your domestic, irrigation, commercial & environmental drilling & pump needs.

Call 575-392-2457



JUMBLE®

Unscramble these Jumbles, one letter to each square, to form four ordinary words.

SIJTO

SLOAS

CETSHK

AMFSOU

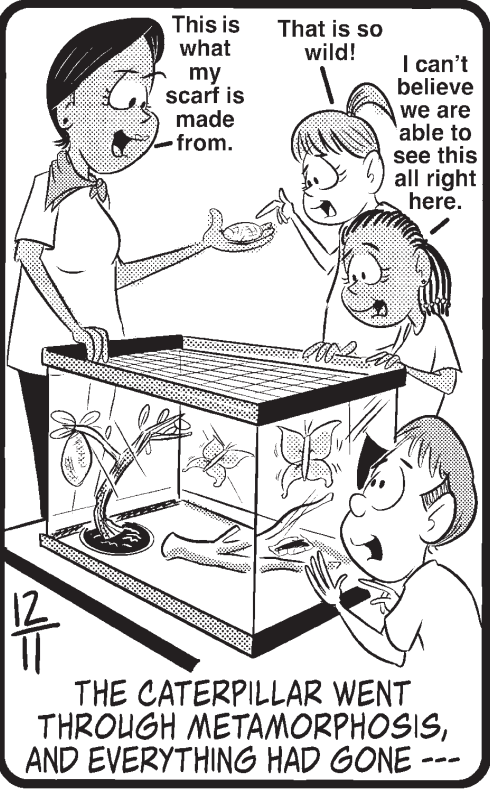
©2025 Tribune Content Agency, LLC
All Rights Reserved.

Get the free JUST JUMBLE app • Follow us on Facebook

Yesterday's Jumbles: GLAZE TWEAK METHOD DEGREE
Answer: The firewood that was too wet to burn was — WATERLOGGED

THAT SCRAMBLED WORD GAME

By David L. Hoyt and Jeff Knurek



THE CATERPILLAR WENT THROUGH METAMORPHOSIS, AND EVERYTHING HAD GONE ---

Now arrange the circled letters to form the surprise answer, as suggested by the above cartoon.

(Answers tomorrow)

There's an easier way than shopping till you drop.
Try shopping through the Classifieds
BUY • SELL • TRADE

LEGAL LEGAL

LEGAL NOTICE December 11, 2025

The **LEA COUNTY SOLID WASTE AUTHORITY** will hold a **Regular Meeting on Thursday, December 18, 2025**, at 11:00A.M. at the Lea County Annex Building, located at 1019 East Bender, Hobbs, New Mexico. A copy of the agenda can be obtained from the Lea County website www.leacounty.net or the County Manager's Office at (575) 396-8602 seventy-two (72) hours prior to the meeting. If you are an individual with a disability who needs a reader, amplifier, qualified sign language interpreter, translator or any other form of auxiliary aid or service to attend or participate in the hearing or meeting, please contact the Lea County Manager's office located in the Lea County Courthouse in Lovington, New Mexico, at (575) 396-8602 at least one week prior to the meeting or as soon as possible. Public documents, including the agenda and minutes, can be provided in various accessible formats. Please contact the Lea County Manager's Office at the Lea County Courthouse if a summary or other type of accessible format is needed.

LEA COUNTY SOLID WASTE AUTHORITY
Todd Randall, Chair
#00306176

LEGAL NOTICE DECEMBER 11, 2025

NOTICE OF AIR QUALITY PERMIT APPLICATION

Enterprise Delaware Basin Treating LLC announces its application submittal to the New Mexico Environment Department for an air quality permit for the significant revision of its existing **Dark Horse Facility**. The expected date of application submittal to the Air Quality Bureau is **December 12, 2025**.

The exact location for the proposed facility known as, **Dark Horse Facility**, is at **latitude 32.120112 dec deg North and longitude -103.289663 dec deg West**. The approximate location of this facility is **5.9 miles west of Jal in Lea County**.

The proposed significant revision consists of adding three new natural gas compressor engines, seven natural gas powered generator turbines, re-routing some of the existing flare streams to an already permitted, identical flare and increasing hydrogen sulfide concentrations for startup, shutdown and maintenance flaring.

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

Pollutant:	Pounds per hour	Tons per year
Particulate Matter (PM)	16.0 pph	65.0 tpy
PM ₁₀	16.0 pph	65.0 tpy
PM _{2.5}	15.0 pph	64.0 tpy
Sulfur Dioxide (SO ₂)	5708.0 pph	250.0 tpy
Nitrogen Oxides (NO _x)	349.0 pph	355.0 tpy
Carbon Monoxide (CO)	617.0 pph	364.0 tpy
Volatile Organic Compounds (VOC)	385.0 pph	335.0 tpy
Total sum of all Hazardous Air Pollutants (HAPs)	20.0 pph	89.0 tpy
Toxic Air Pollutant (TAP)	n/a	n/a
Green House Gas Emissions as Total CO ₂ e	n/a	830,000 tpy

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

The owner and/or operator of the Facility is: Enterprise **Delaware Basin Treating LLC, P.O. Box 4324, Houston, TX, 77210-4324**.

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 505-629-7748.

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.
#00306931

LEGAL LEGAL

LEGAL NOTICE December 11 and 18, 2025

STATE OF NEW MEXICO
COUNTY OF LEA
FIFTH JUDICIAL DISTRICT

ANGELA DUARTE,
Petitioner,

vs. D-506-DM-2020-00462

TEDDY EVERIDGE,
Respondent.

NOTICE OF SUIT PENDING

THE STATE OF NEW MEXICO TO: Teddy Everidge and any Interested Person.

NOTICE IS HEREBY GIVEN TO YOU that Petitioner, Angela Duarte, has filed a Motion to Modify Custody, Visitation and Child Support on August 23, 2025 and a Motion for Temporary Orders on August 23, 2025 in the District Court of Lea County for the purpose of the establishing custody, visitation and child support of the minor children A.E. and X.E. and requesting any other relief the Court deems appropriate.

PLEASE BE ADVISED that unless you enter your appearance or otherwise respond within the time allowed by law (30 days), Petitioner will seek judgement against you by default and will ask the Court to grant the Motion to Modify Custody, Visitation and Child Support over the minor children A.E. and X.E., and to grant any other relief the Court deems appropriate.

Petitioner's attorney is MELISSA A. SAWYERS of THE SAWYERS LAW GROUP, LLC., 1327 E. Bender Blvd., Hobbs, New Mexico 88240. Her phone number is 575-393-1300.

Witness my hand and seal of the district court this 3rd day of December 2025.

Nelda Cuellar
Clerk of the District Court

By: [/s/Alexia Franco](#)
(Seal) Deputy
#00306923

LEGAL NOTICE DECEMBER 11, 2025

NOTICE OF AIR QUALITY PERMIT APPLICATION

Enterprise Delaware Basin Treating LLC announces its application submittal to the New Mexico Environment Department for an air quality permit for the significant revision of its existing **Dark Horse Facility**. The expected date of application submittal to the Air Quality Bureau is **December 12, 2025**.

The exact location for the proposed facility known as, **Dark Horse Facility**, is at **latitude 32.120112 dec deg North and longitude -103.289663 dec deg West**. The approximate location of this facility is **5.9 miles west of Jal in Lea County**.

The proposed significant revision consists of adding three new natural gas compressor engines, seven natural gas powered generator turbines, re-routing some of the existing flare streams to an already permitted, identical flare and increasing hydrogen sulfide concentrations for startup, shutdown and maintenance flaring.

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

Pollutant:	Pounds per hour	Tons per year
Particulate Matter (PM)	16.0 pph	65.0 tpy
PM ₁₀	16.0 pph	65.0 tpy
PM _{2.5}	15.0 pph	64.0 tpy
Sulfur Dioxide (SO ₂)	5708.0 pph	250.0 tpy
Nitrogen Oxides (NO _x)	349.0 pph	355.0 tpy
Carbon Monoxide (CO)	617.0 pph	364.0 tpy
Volatile Organic Compounds (VOC)	385.0 pph	335.0 tpy
Total sum of all Hazardous Air Pollutants (HAPs)	20.0 pph	89.0 tpy
Toxic Air Pollutant (TAP)	n/a	n/a
Green House Gas Emissions as Total CO ₂ e	n/a	830,000 tpy

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

The owner and/or operator of the Facility is: Enterprise **Delaware Basin Treating LLC, P.O. Box 4324, Houston, TX, 77210-4324**.

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 505-629-7748.

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.
#00306931

NOTICE

Enterprise Delaware Basin Treating LLC announces its application submittal to the New Mexico Environment Department for an air quality permit for the significant revision of its existing **Dark Horse Facility**. The expected date of application submittal to the Air Quality Bureau is **December 12, 2025**.

The exact location for the proposed facility known as, **Dark Horse Facility**, is at **latitude 32.120112 dec deg North and longitude -103.289663 dec deg West**. The approximate location of this facility is **5.9 miles west of Jal in Lea County**.

The proposed significant revision consists of adding three new natural gas compressor engines, seven natural gas powered generator turbines, re-routing some of the existing flare streams to an already permitted, identical flare and increasing hydrogen sulfide concentrations for startup, shutdown and maintenance flaring. The estimated maximum quantities of any regulated air contaminant will be as follows in pound per hour (pph) and tons per year (tpy) and could change slightly during the course of the Department's review:

Pollutant:	Pounds per hour	Tons per year
Particulate Matter (PM)	16.0 pph	65.0 tpy
PM ₁₀	16.0 pph	65.0 tpy
PM _{2.5}	15.0 pph	64.0 tpy
Sulfur Dioxide (SO ₂)	5708.0 pph	250.0 tpy
Nitrogen Oxides (NO _x)	349.0 pph	355.0 tpy
Carbon Monoxide (CO)	617.0 pph	364.0 tpy
Volatile Organic Compounds (VOC)	385.0 pph	335.0 tpy
Total sum of all Hazardous Air Pollutants (HAPs)	20.0 pph	89.0 tpy
Toxic Air Pollutant (TAP)	n/a	n/a
Green House Gas Emissions as Total CO ₂ e	n/a	830,000 tpy

The standard and maximum operating schedules of the facility will be 24 hours a day, 7 days a week, and a maximum of 52 weeks. The owner and/or operator of the Facility is: **Enterprise Delaware Basin Treating LLC, P.O. Box 4324, Houston, TX, 77210-4324**.

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.

With your comments, please refer to the company name and facility name, or send a copy of this notice along with your comments. This information is necessary since the Department may have not yet received the permit application. Please include a legible return mailing address. Once the Department has completed its 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.

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 505-629-7748.

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.

General Posting of Notices – Certification

I, Juliana Falcomata, the undersigned, certify that on 12/4/2025, posted a true and correct copy of the attached Public Notice in the following publicly accessible and conspicuous places in the city of **Jal** of **Lea** County, State of New Mexico on the following dates:

1. Facility Entrance: 12/4/2025
2. Woolworth Community Library, 100 E Utah Ave., Jal, NM 88252: 12/4/2025
3. Jal City Hall, 710 W. Wyoming, Jal, NM 88252: 12/4/2025
4. USPS, 111 S 4th St., Jal, NM 88252: 12/4/2025

Signed this 4th day of December, 2025

Juliana Falcomata
Signature

12/4/25
Date

Juliana Falcomata
Printed Name

Field Environmental Scientist
Title

Submittal of Public Service Announcement – Certification

I, Martin R. Schluep, the undersigned, certify that on 12/3/2025, submitted a public service announcement to **KIXN 102.9 FM** that serves the City of Jal, **Lea** County, New Mexico, in which the source is or is proposed to be located and that **KIXN 102.9 FM DID NOT RESPOND to the requested PSA announcement.**

Signed this 3rd day of December, 2025,


Signature

12/3/2025
Date

Martin R. Schluep
Printed Name

Principal Consultant
Title {APPLICANT OR RELATIONSHIP TO APPLICANT}

PSA Request

From Martin Schluep <mschluep@alliantenv.com>

Date Wed 12/3/2025 2:05 PM

To kix103@1radiosquare.com <kix103@1radiosquare.com>

Cc Bissonnette, Daniel <dmbissonnette@eprod.com>; Smith, Henry <mhsmith@eprod.com>; Melissa Fetman <mfetman@alliantenv.com>

To Whom it May Concern,

Enterprise Delaware Basin Treating LLC kindly requests, according to New Mexico air quality regulations, that KIXN 102.9 FM make the following public service announcement:

"Enterprise Delaware Basin Treating LLC will be submitting an air quality permit application to the New Mexico Environment Department for modifications to its existing Dark Horse Facility located 5.9 miles west of Jal, in Lea County, NM. The proposed significant revision consists of adding three new natural gas compressor engines, seven natural gas-powered generator turbines, re-routing some of the existing flare streams to an already permitted, identical flare and increasing hydrogen sulfide concentrations for startup, shutdown and maintenance flaring.

More details about the proposed project have been included in posted notices at the following locations in Jal: the Woolworth Community Library, Jal City Hall, and the USPS on 4th Street. If you have any comments that you would like to be made as part of the permit review process for this application, please mail them to the New Mexico Environment Department Air Quality Bureau at 525 Camino de los Marquez, Suite 1; Santa Fe, New Mexico; 87505-1816. Or your comments and questions may be submitted verbally by calling (505) 476-4300 or 1 800 224-7009."

Thank you,

Martin R. Schluep

Alliant Environmental, LLC

7804 Pan American Fwy. NE, Suite 5

Albuquerque, NM 87109

(C) 505.205.4819

www.alliantenv.com

Section 10

Written Description of the Routine Operations of the Facility

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

With this application Enterprise is adding up to three (3) compressor engines, two (2) generator turbines, and increasing fugitive components counts associated with the new equipment. The compressor engines will be part of a separate compressor station, but because of its proximity to the Dark Horse Facility, the compressor station will need to be included in the NSR Permit. And the generator turbines will be used to generate electricity for Train 4 until reliable utility power is available.

In addition, Enterprise is proposing to route Train 4 SSM emissions to authorized Unit FL-1950 BD, instead of the currently permitted FL-1850 BD. These two flares are identical; therefore, the control efficiency will be the same. The H₂S content of acid gas flaring for both FL-1850 BD and FL-1950 BD is also being increased based on observed actual compositions. Please see the attached emissions calculations for more information.

No other changes to equipment or emission rates are proposed and operation shall remain as is described in the current permit.

The facility receives raw sour gas from a gathering system at high pressure and low-pressure slug catchers. Liquid dropouts are sent to bullet tanks (Units TK-1900, TK-1901, TK-1970, TK-1971, TK-1980, TK-1981, TK-2010, TK-2020, TK-2050, TK-2060, TK-2070, TK-2080) and a condensate stabilizer and then sent to storage to be trucked or piped off site (COND-LOAD-1-6, NGL-LOAD). Low pressure rich gas is compressed (Units C-1200, C-1210, C-1220, C-1230) and sent to the coalescing filter and is mixed with the high-pressure rich gas. The filtered gas is routed to amine units (Units AMINE-1-6) where sour gas is stripped and sent to electric compression (Units C-1580, C-1585, C-1590, C-1595, C-1680, C-1685, C-1690, C-1695) for disposal to an AGI well. Rich gas is sent to TEG dehydration (units DEHY-1-6) then routed to the sales line. Flares (Units FL-1850 BD, FL-1950 BD, FL-2050 BD, FL-1967 through FL-3967, FL-4967 through FL-6967) are installed onsite to control any blowdown emissions during SSM activities.

Liquid dropouts are sent to bullet tanks and a condensate stabilizer and are then sent off-site via pipeline. As a back-up, the liquids may also be stored in on-site storage tanks (Units TK-1900, TK-1901, TK-1970, TK-1971, TK-1980, TK-1981, TK-2010, TK-2020, TK-2050, TK-2060, TK-2070, TK-2080) and then trucked off-site (COND-LOAD-1-6, NGL-LOAD). Low pressure rich gas is compressed and sent to the coalescing filter and is mixed with the high-pressure rich gas.

There are multiple heaters (Units H-2600, H-2620, H-2741, H-2781, H-3620, H-4620, H-5620, H-6620)/reboilers (Unit E-4566) for the amine and dehydration units (units DEHY-1-6) to regenerate the amine or glycol used in those units. Each dehydration unit will have its own combustor to control the regenerator emissions. The condensate storage tanks (Units TK-1900, TK-1901, TK-2050, TK-2060, TK-2070, TK-2080) and loading (COND-LOAD-1-6) will be controlled by two vapor recovery units (VRUs, automatic redundancy system ensures no VRU downtime), set up in parallel to be sure all vapors are captured and sent back to the facility inlet. As a back-up, vapors can also be sent to the flare or vapor combustor (FL-7967).

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):

Dark Horse Facility:

- Compressor engines
- Hot oil heaters and reboilers for amine and dehydration units
- Flares
- Vapor combustors
- Vapor Recovery Units
- Storage tanks
- Generator turbines

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

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

☒ **Yes** ☐ **No**

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

☒ **Yes** ☐ **No**

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

☒ **Yes** ☐ **No**

C. Make a determination:

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

Section 12

Section 12.A

PSD Applicability Determination for All Sources

(Submitting under 20.2.72, 20.2.74 NMAC)

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

A. This facility is:

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

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

- a. NOx: 58.19 TPY
- b. CO: 59.48 TPY
- c. VOC: 46.90 TPY
- d. SOx: 21.79 TPY
- e. PM: 5.87 TPY
- f. PM10: 5.87 TPY
- g. PM2.5: 5.87 TPY
- h. Fluorides: 0.0 TPY
- i. Lead: 0.0 TPY
- j. Sulfur compounds (listed in Table 2): 0.15 TPY
- k. GHG: 87,907 TPY

C. 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 I – 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 Dark Horse Facility is not currently a PSD major source; therefore, the project emissions only need to be considered to determine if a PSD analysis is required.

Section 13

Determination of State & Federal Air Quality Regulations

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

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

Required Information for Specific Equipment:

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

Required Information for Regulations that Apply to the Entire Facility:

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

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

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

Regulatory Citations for Emission Standards:

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

Federally Enforceable Conditions:

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

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

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

State Regulations:

<u>State Regulation Citation</u>	Title	Applies? Enter Yes or No	Unit(s) or Facility	Justification: (You may delete instructions or statements that do not apply in the justification column to shorten the document.)
20.2.1 NMAC	General Provisions	Yes	Facility	General Provisions apply to Notice of Intent, Construction, and Title V permit applications.
20.2.3 NMAC	Ambient Air Quality Standards NMAAQS	Yes	Facility	20.2.3 NMAC is a State Implementation Plan (SIP) approved regulation that limits the maximum allowable concentration of, Sulfur Compounds, Carbon Monoxide and Nitrogen Dioxide. The facility meets the maximum allowable concentrations of the listed pollutants under this regulation.
20.2.7 NMAC	Excess Emissions	Yes	Facility	This regulation establishes requirements for the facility if operations at the facility result in any excess emissions. The owner or operator will operate the source at the facility having an excess emission, to the extent practicable, including associated air pollution control equipment, in a manner consistent with good air pollution control practices for minimizing emissions. The Facility will also notify the NMED of any excess emissions per 20.2.7.110 NMAC.
20.2.23 NMAC	Fugitive Dust Control	No	N/A	This regulation may apply if, this is an application for a notice of intent (NOI) per 20.2.73 NMAC, if the activity or facility is a fugitive dust source listed at 20.2.23.108.A NMAC, and if the activity or facility is located in an area subject to a mitigation plan pursuant to 40 CFR 51.930. As of January 2019, the only areas of the State subject to a mitigation plan per 40 CFR 51.930 are in Doña Ana and Luna Counties. As this site is located in Lea County, 20.2.23 NMAC does not apply.
20.2.33 NMAC	Gas Burning Equipment - Nitrogen Dioxide	No	N/A	This facility does not have gas burning equipment (external combustion emission sources, such as gas fired boilers and heaters) having a heat input of greater than 1,000,000 million British Thermal Units per year per unit.
20.2.34 NMAC	Oil Burning Equipment: NO ₂	No	N/A	This facility does not have oil burning equipment (external combustion emission sources, such as oil fired boilers and heaters) having a heat input of greater than 1,000,000 million British Thermal Units per year per unit.
20.2.35 NMAC	Natural Gas Processing Plant – Sulfur	No	N/A	This regulation establishes sulfur emission standards for natural gas processing plants. The proposed facility potentially meets the definition of a new natural gas processing plant under this regulation but as the plant will release less than an average of 5 tons per day of sulfur, this regulation is not applicable [20.2.35.110.A NMAC].
20.2.37 and 20.2.36 NMAC	Petroleum Processing Facilities and Petroleum Refineries	N/A	N/A	These regulations were repealed by the Environmental Improvement Board. If you had equipment subject to 20.2.37 NMAC before the repeal, your combustion emission sources are now subject to 20.2.61 NMAC.
20.2.38 NMAC	Hydrocarbon Storage Facility	No	N/A	The facility is not subject to this regulation for the following reasons: (a) This facility does not store hydrocarbons containing hydrogen sulfide in a container associated with a petroleum production facility of petroleum processing facility having a capacity of 20,000 gallons or greater with a throughput of at least 30,000 gallons per week (20.2.38.109); (b) The tank battery or storage facility is not within a municipality (20.2.38.110) or within five miles of a municipality (20.2.38.111); (c) This facility is not a new tank battery with a capacity of 65,000 gallons or greater (20.2.38.112); and (d) The facility is not a new tank battery operated in conjunction with a petroleum production facility, or a new hydrocarbon storage facility operated in conjunction with a petroleum processing facility per 20.2.38.113.

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.)
20.2.39 NMAC	Sulfur Recovery Plant - Sulfur	No	N/A	This regulation could apply to sulfur recovery plants that are not part of petroleum or natural gas processing facilities. As this site is a natural gas processing facility, this regulation does not apply.
20.2.50 NMAC	Oil and Gas Sector – Ozone Precursor Pollutants	Yes	C-1200, C-1210, C-1220, C-1230, H-1620, H-2620, H-3620, H-4620, H-5620, H-6620, H-1781, H-2781, FL-1967, FL-2967, FL-3967, FL-4967, FL-5967, FL-6967, FL-7967, DEHY-1, DEHY-2, DEHY-3, DEHY-4, DEHY-5, DEHY-6, FUG, C-1001, C-1002, C-1003, G-1001, G-1002, C-2001, C-2002	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: Check the box for the subparts that are applicable: ☒ 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 ☐ 126 – Produced Water Management Unit ☐ 127 – Flowback Vessels and Preproduction Operations

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.)
20.2.61.109 NMAC	Smoke & Visible Emissions	Yes	C-1200, C-1210, C-1220, C-1230, H-1620, H-2620, H-3620, H-4620, H-5620, H-6620, H-1781, H-2781, H-2600 E-1566, E-2566, E-3566, E-4566, FL-1967, FL-2967, FL-3967, FL-4967, FL-5967, FL-6967, FL-1850, FL-1850 BD, FL-1950, FL-1950 BD, FL-2050, FL-2050 BD, FL-7967, C-1001, C-1002, C-1003, G-1001, G-1002, C-2001, C-2002	This regulation that limits opacity to 20% applies to Stationary Combustion Equipment, such as engines, boilers, heaters, and flares unless your equipment is subject to another state regulation that limits particulate matter such as 20.2.19 NMAC (see 20.2.61.109 NMAC).
20.2.70 NMAC	Operating Permits	Yes	Facility	20.2.70 NMAC is applicable to this facility.
20.2.71 NMAC	Operating Permit Fees	No	Facility	Enterprise understands that TV fees will be required once a TV Operating Permit is issued for the site.
20.2.72 NMAC	Construction Permits	Yes	Facility	The Dark Horse Facility currently operates under Permit Number 9058M1R3. This application is being submitted as an NSR Permit modification.
20.2.73 NMAC	NOI & Emissions Inventory Requirements	Yes	Facility	The notice of intent requirements does not apply to this site. Emissions Inventory Reporting per 20.2.73.300 NMAC is currently required and will continue to be required for this site.

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.)
20.2.74 NMAC	Permits – Prevention of Significant Deterioration (PSD)	No	N/A	This site will not require a PSD Permit as the project emissions are below the PSD major source thresholds. But this modification will increase site-wide emissions over the PSD thresholds; therefore, at the time of any subsequent permit modification, a PSD evaluation may be required.
20.2.75 NMAC	Construction Permit Fees	Yes	Facility	A construction permit application fee is required for this application as it is being submitted under 20.2.72 NMAC.
20.2.77 NMAC	New Source Performance	Yes	FUG, C-1200, C-1210, C-1220, C-1230, H-1620, H-2620, H-3620, H-4620, H-5620, H-6620, H-1781, H-2781, H-2600, C-1001, C-1002, C-1003, G-1001, G-1002, C-2001, C-2002	The listed equipment is subject to the requirements of 40 CFR Part 60. See the Federal Regulations section below for more information.
20.2.78 NMAC	Emission Standards for HAPS	No	N/A	This facility emits hazardous air pollutants but there is no equipment that is required to comply with Part 61 requirements.
20.2.79 NMAC	Permits – Nonattainment Areas	No	N/A	This site is located in Lea County which is considered an attainment area; therefore, 20.2.79 NMAC does not apply.
20.2.80 NMAC	Stack Heights	Yes	Facility	Air dispersion modeling has been performed for this application. Compliance with stack height requirements is being met.
20.2.82 NMAC	MACT Standards for source categories of HAPS	Yes	C-1200, C-1210, C-1220, C-1230, DEHY-1, DEHY-2, DEHY-3, DEHY-4,	The listed equipment is subject to the requirements of 40 CFR Part 63. See the Federal Regulations section below for more information.

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.)
			DEHY-5, DEHY-6, C-1001, C-1002, C-1003, G-1001, G-1002, C-2001, C-2002	

Federal Regulations:

Federal Regulation Citation	Title	Applies? Enter Yes or No	Unit(s) or Facility	Justification:
40 CFR 50	NAAQS	Yes	Facility	As this site is subject to 20.2.72 NMAC, it is subject to the National Ambient Air Quality Standards. Air dispersion modeling has been performed for this project and results are included in Section 16 of this application. Previous air dispersion modeling was performed in the October 2023 permit application.
NSPS 40 CFR 60, Subpart A	General Provisions	Yes	FUG, C-1200, C-1210, C-1220, C-1230, H-1620, H-2620, H-3620, H-4620, H-5620, H-6620, H-1781, H-2781, H-2600, C-1001, C-1002, C-1003, G-1001, G-1002, C-2001, C2002	The listed equipment is subject to the requirements of 40 CFR Part 60. See the regulations below for more information.
NSPS 40 CFR 60.40a, Subpart Da	Subpart Da, Performance Standards for Electric Utility Steam Generating Units	No	N/A	Establishes PM, SO ₂ and NO _x emission limits/standards of performance for steam generating units with a heat input capacity greater than 250 MMBtu/hr. As there are no steam generating units with a heat capacity greater than 250 MMBtu/hr at this site, this rule 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	No	N/A	The affected facility to which this subpart applies is each steam generating unit that commences construction, modification, or reconstruction after June 19, 1984, and that has a heat input capacity from fuels combusted in the steam generating unit of greater than 29 MW (100 million Btu/hour). As there are no steam generating units with a heat input capacity greater than 100 MMBtu/hr, this rule does not apply.
40 CFR 60.40c, Subpart Dc	Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units	Yes	H-1620, H-2620, H-3620, H-4620, H-5620, H-6620, H-1781, H-2781, H-2600	Subpart Dc applies to the listed units as they were constructed after June 9, 1989 and have a maximum design heat input capacity of 29 MW (100 MMBtu/hr) or less, but greater than or equal to 2.9 MW (10 MMBtu/hr).
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	As there are no storage tanks that commenced construction between May 18, 1978 and July 23, 1984, this regulation does not apply.
NSPS 40 CFR 60, Subpart Kb	Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced After July 23, 1984	No	N/A	As there are no storage vessels at this site with a storage capacity greater than or equal to 75 cubic meters (m ³) that are used to store volatile organic liquids (VOL), this regulation does not apply.
NSPS 40 CFR 60.330 Subpart GG	Stationary Gas Turbines	No	N/A	The turbines will comply with NSPS Subpart KKKK; therefore, the turbines are exempt from Subpart GG, as stated in §60.4305(b).

Federal Regulation Citation	Title	Applies? Enter Yes or No	Unit(s) or Facility	Justification:
NSPS 40 CFR 60, Subpart KKK	Leaks of VOC from Onshore Gas Plants	No	N/A	This regulation applies to an affected Facility with Leaks of VOC from Onshore Gas Plants that commences construction, reconstruction, or modification between January 20, 1984 and August 23, 2011. As this site was constructed after August 23, 2011, this regulation does not apply.
NSPS 40 CFR Part 60 Subpart LLL	Standards of Performance for Onshore Natural Gas Processing: SO ₂ Emissions	No	N/A	This regulation applies to natural gas processing plants, including a sweetening unit followed by a sulfur recovery unit, constructed between January 20, 1984 and August 23, 2011. As this site was constructed after August 23, 2011, this regulation does not apply.
NSPS 40 CFR Part 60 Subpart KKKK	Standards of Performance for Stationary Combustion Turbines	Yes	G-1001, G-1002	The generator turbines will comply with Subpart KKKK as they are stationary combustion turbines with a heat input of 10 MMBtu/hr or greater.
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	The rule applies to “affected” facilities that are constructed, modified, or reconstructed after Aug 23, 2011 (40 CFR 60.5365): gas wells, including fractured and hydraulically refractured wells, centrifugal compressors, reciprocating compressors, pneumatic controllers, certain equipment at natural gas processing plants, sweetening units at natural gas processing plants, and storage vessels. As this site was constructed after August 23, 2011, this regulation does not apply.

Federal Regulation Citation	Title	Applies? Enter Yes or No	Unit(s) or Facility	Justification:
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 On or Before December 6, 2022	Yes	FUG, C-1200, C-1210, C-1220, C-1230	As equipment at this site was constructed between September 18, 2015, and December 6, 2022, Subpart OOOOa is applicable. The compressors associated with Units C-1200 through C-1230 were constructed or modified between September 18, 2015 and December 6, 2022 and will continue to comply with any applicable Subpart OOOOa requirements for compressors located at compressor stations. All fugitives' components constructed/installed between September 18, 2015, and December 6, 2022 will comply with Subpart OOOOa requirements for Compressor Stations. As the site is now considered a compressor station, the amine units are no longer considered sweetening units located at an onshore natural gas processing plants; therefore, Subpart OOOOa does not apply [§60.5365a(g)]. In addition, the acid gas produced onsite is completely re-injected into oil-or-gas-bearing geologic strata or otherwise not released to the atmosphere. The sweetening unit are therefore exempt from the rule requirements. [§60.5365a(g)(4)]. The storage vessels at this facility each emit less than 6 tpy of VOC and are therefore not subject to this regulation.
NSPS 40 CFR Part 60 Subpart OOOOb	Standard of Performance for Crude Oil and Natural Gas Facilities for which Construction, Modification or Reconstruction Commenced After December 6, 2022	Yes	C-1001, C-1002, C-1003, C-2001, C-2002, FUG	As the proposed equipment in this application will be constructed after December 6, 2022, Subpart OOOOb is potentially applicable. The compressors associated with the new engines will be constructed after December 6, 2022 and will comply with any applicable Subpart OOOOb requirements for compressors located at compressor stations. All fugitive components will comply with applicable Subpart OOOOb requirements for Compressor Stations.
NSPS 40 CFR 60 Subpart IIII	Standards of performance for Stationary Compression Ignition Internal Combustion Engines	No	N/A	There are no compression ignition engines at this site; therefore, this regulation does not apply.
NSPS 40 CFR Part 60 Subpart JJJJ	Standards of Performance for Stationary Spark Ignition Internal Combustion Engines	Yes	C-1200, C-1210, C-1220, C-1230, C-1001, C-1002, C-1003	The existing compressor engines at this site are 4SLB, 2500-hp engines, manufactured after July 1, 2007 and must comply with Subpart JJJJ. The new compressor engines under Scenario 1 (C-1001 through C-1003) at this site will be 4SLB engines, manufactured after July 1, 2007 and must comply with Subpart JJJJ. The potential compressor engines under Scenario 2 (C-2001 and C-2002) were manufactured in June 2002 and are not subject to Subpart JJJJ)

Federal Regulation Citation	Title	Applies? Enter Yes or No	Unit(s) or Facility	Justification:
NSPS 40 CFR 60 Subpart TTTT	Standards of Performance for Greenhouse Gas Emissions for Electric Generating Units	No	N/A	As there are no electric generating units onsite, this regulation does not apply.
NSPS 40 CFR 60 Subpart UUUU	Emissions Guidelines for Greenhouse Gas Emissions and Compliance Times for Electric Utility Generating Units	No	N/A	As there are no electric generating units onsite, 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 site is not a MSW; therefore, these regulations do not apply.
NESHAP 40 CFR 61 Subpart A	General Provisions	No	N/A	There are no Subparts of 40 CFR Part 61 that apply to equipment at this site; therefore, Subpart A does not apply.
NESHAP 40 CFR 61 Subpart E	National Emission Standards for Mercury	No	N/A	As this site does not process mercury ore to recover mercury, use mercury chlor-alkali cells to produce chlorine gas and alkali metal hydroxide, and incinerate or dry wastewater treatment plant sludge, this regulation does not apply.
NESHAP 40 CFR 61 Subpart V	National Emission Standards for Equipment Leaks (Fugitive Emission Sources)	No	N/A	The provisions of this subpart apply to each of the following sources that are intended to operate in volatile hazardous air pollutant (VHAP) service: pumps, compressors, pressure relief devices, sampling connection systems, open-ended valves or lines, valves, connectors, surge control vessels, bottoms receivers, and control devices or systems required by this subpart. VHAP service means a piece of equipment either contains or contacts a fluid (liquid or gas) that is at least 10 percent by weight of VHAP. VHAP means a substance regulated under this subpart for which a standard for equipment leaks of the substance has been promulgated. Benzene is a VHAP (See 40 CFR 61 Subpart J). There is no equipment at this site that operates in VHAP service; therefore, this regulation does not apply.

Federal Regulation Citation	Title	Applies? Enter Yes or No	Unit(s) or Facility	Justification:
MACT 40 CFR 63, Subpart A	General Provisions	Yes	C-1200, C-1210, C-1220, C-1230, DEHY-1, DEHY-2,, DEHY-3, DEHY-4, DEHY-5, DEHY-6, C-1001, C-1002, C-1003, G-1001, G-1002, C-2001, C-2002	The listed equipment is subject to the requirements of 40 CFR Part 63. See the regulations below for more information.
MACT 40 CFR 63.760 Subpart HH	Oil and Natural Gas Production Facilities	Yes	DEHY-1, DEHY-2,, DEHY-3, DEHY-4, DEHY-5, DEHY-6	As this site will be a major source of HAP emissions, Subpart HH applies to the glycol dehydration units. The dehydrators will have a natural gas flow rate greater than 85 thousand standard cubic meters per day (~3 MMscfd). The dehydrators are equipped with controls as required under MACT HH per 63.764(c)(1)-(3).
MACT 40 CFR 63 Subpart HHH	National Emission Standards for Hazardous Air Pollutants from Natural Gas Transmissions and Storage Facilities	No	N/A	This subpart applies to owners and operators of natural gas transmission and storage facilities that transport or store natural gas prior to entering the pipeline to a local distribution company or to a final end user (if there is no local distribution company), and that are major sources of hazardous air pollutants (HAP) emissions as defined in §63.1271. As this site is an onshore natural gas processing plant, Subpart HHH does not apply.
MACT 40 CFR 63 Subpart DDDDD	National Emission Standards for Hazardous Air Pollutants for Major Industrial, Commercial, and Institutional Boilers & Process Heaters	Yes	H-1600, H-1620, H-2620, H-3620, H-4620, H-5620, H-6620, H-1781, H-2781, H-1741, H-2741, E-1566, E-2566, E-3566, E-4566, H-2600	The facility will be a major source of HAPs and the units listed will be subject to MACT 40 CFR 63 Subpart DDDDD as they will be constructed after the June 4, 2010 applicability date. The boilers and process heaters will be combusting natural gas.
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 does not apply as there are no electric utility steam generating units onsite.
MACT 40 CFR 63 Subpart YYYY	National Emissions Standards for Hazardous Air Pollutants for	Yes	G-1001, G-1002	This subpart establishes national emission limitations and operating limitations for hazardous air pollutants (HAP) emitted from stationary combustion turbines located at major sources of HAP emissions.

Federal Regulation Citation	Title	Applies? Enter Yes or No	Unit(s) or Facility	Justification:
	Stationary Combustion Turbines			As this site is considered a major source of HAP emissions, the listed turbines must comply with the applicable requirements of Subpart YYYY.
MACT 40 CFR 63 Subpart ZZZZ	National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (RICE MACT)	Yes	C-1200, C-1210, C-1220, C-1230, C-1001, C-1002, C-1003, C-2001, C-2002	This subpart establishes national emission limitations and operating limitations for hazardous air pollutants (HAP) emitted from stationary reciprocating internal combustion engines (RICE) located at major and area sources of HAP emissions. The listed engines are 4SLB, located at a major source of HAP emissions and will comply with the applicable requirements of Subpart ZZZZ.
40 CFR 64	Compliance Assurance Monitoring	Yes	DEHY-1, DEHY-2., DEHY-3, DEHY-4, DEHY-5, DEHY-6, AMINE-1, AMINE-2, AMINE-3, AMINE-4, AMINE-5, AMINE-6	As the listed units are major in and of themselves, Dark Horse must comply with CAM requirements for these units.
40 CFR 68	Chemical Accident Prevention	Yes	Facility	The facility is an affected facility, as it will use chemicals at quantities greater than the thresholds listed in Part 68. The facility will develop and maintain an RMP for these chemicals.
Title IV – Acid Rain 40 CFR 72	Acid Rain	No	N/A	This regulation does not apply as this facility does not generate commercial electric power or electric power for sale.
Title IV – Acid Rain 40 CFR 73	Sulfur Dioxide Allowance Emissions	No	N/A	This regulation does not apply as this facility does not generate commercial electric power or electric power for sale.
Title IV-Acid Rain 40 CFR 75	Continuous Emissions Monitoring	No	N/A	This regulation does not apply as this facility does not generate commercial electric power or electric power for sale.
Title IV – Acid Rain 40 CFR 76	Acid Rain Nitrogen Oxides Emission Reduction Program	No	N/A	This regulation does not apply as this facility does not generate commercial electric power or electric power for sale.

Federal Regulation Citation	Title	Applies? Enter Yes or No	Unit(s) or Facility	Justification:
Title VI – 40 CFR 82	Protection of Stratospheric Ozone	No	N/A	Not applicable as this site does not meet any of the following: (40 CFR 82.1 and 82.100) produce, transform, destroy, import or export a controlled substance or import or export a controlled product; (40 CFR 82.30) if you perform service on a motor vehicle for consideration when this service involves the refrigerant in the motor vehicle air conditioner; (40 CFR 82.80) if you are a department, agency, and instrumentality of the United States subject to Federal procurement requirements; (82.150) if you service, maintain, or repair appliances, dispose of appliances, refrigerant reclaimers, if you are an owner or operator of an appliance , if you are a manufacturer of appliances or of recycling and recovery equipment, if you are an approved recycling and recovery equipment testing organization, and/or if you sell or offer for sell or purchase class I or class I refrigerants.

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.
-

An operational plan to mitigate emissions is available to NMED upon request.

Section 15

Alternative Operating Scenarios

(Submitting under 20.2.70, 20.2.72, 20.2.74 NMAC)

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

Construction Scenarios: When a permit is modified authorizing new construction to an existing facility, NMED includes a condition to clearly address which permit condition(s) (from the previous permit and the new permit) govern during the interval between the date of issuance of the modification permit and the completion of construction of the modification(s). There are many possible variables that need to be addressed such as: Is simultaneous operation of the old and new units permitted and, if so for example, for how long and under what restraints? In general, these types of requirements will be addressed in Section A100 of the permit, but additional requirements may be added elsewhere. Look in A100 of our NSR and/or TV permit template for sample language dealing with these requirements. Find these permit templates at: 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.

With this application Enterprise is proposing two scenarios which are based on compressor engine availability. Only one scenario will be implemented; i.e., it will either be scenario 1 or scenario 2. The two scenarios are:

Scenario 1:

Adding up to three (3) Caterpillar 3608 compressor engines, two (2) Solar SMT60 portable generator turbines, and increasing fugitive components counts associated with the new equipment. The two generator turbines will be used to generate electricity for Train 4 until reliable utility power is available.

Scenario 2:

Adding up to two (2) Caterpillar 3612 compressor engines, two (2) Solar SMT60 portable generator turbines, and increasing fugitive components counts associated with the new equipment. The two generator turbines will be used to generate electricity for Train 4 until reliable utility power is available.

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.

A modeling report (UA4) is attached for the proposed project included in this significant permit revision application.

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.

There is no compliance testing to report at this time.

Section 18

Addendum for Streamline Applications

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

This Section is not applicable as this is not a Streamline application.

Section 19

Requirements for Title V Program

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

Who Must Use this Attachment:

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

This Section is not applicable as this is not a Title V Permit application.

Section 20

Other Relevant Information

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

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

No other relevant information is being included in this application.

Section 21

Addendum for Landfill Applications

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

This Section is not applicable as this is not a landfill application.

Section 22: Certification

Company Name: Enterprise Delaware Basin Treating LLC

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

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

_____.

*Signature

Date

Pranav Kulkarni
Printed Name

Director, Environmental
Title

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

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

_____ day of _____, _____.

Notary's Signature

Date

Brenda Mendez
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.

Universal Application 4

Air Dispersion Modeling Report

Refer to and complete Section 16 of the Universal Application form (UA3) to assist your determination as to whether modeling is required. If, after filling out Section 16, you are still unsure if modeling is required, e-mail the completed Section 16 to the AQB Modeling Manager for assistance in making this determination. If modeling is required, a modeling protocol would be submitted and approved prior to an application submittal. The protocol should be emailed to the modeling manager. A protocol is recommended but optional for minor sources and is required for new PSD sources or PSD major modifications. Fill out and submit this portion of the Universal Application form (UA4), the "Air Dispersion Modeling Report", only if air dispersion modeling is required for this application submittal. This serves as your modeling report submittal and should contain all the information needed to describe the modeling. No other modeling report or modeling protocol should be submitted with this permit application.

16-A: Identification

1	Name of facility:	Dark Horse Facility
2	Name of company:	Enterprise Delaware Basin Treating LLC
3	Current Permit number:	9058M1R3
4	Name of applicant's modeler:	Martin R. Schluep
5	Phone number of modeler:	(505)205-4819
6	E-mail of modeler:	mschluep@alliantenv.com

16-B: Brief

1	Was a modeling protocol submitted and approved? Approved on 10-30-2025	Yes ☒	No ☐
2	Why is the modeling being done?	Adding New Equipment	
3	Describe the permit changes relevant to the modeling.		
	Enterprise Delaware Basin Treating LLC (Enterprise) is submitting a significant revision application to existing permit No. 9058M1R3 to request the addition of three (3) Caterpillar G3608 gas compressor engines and two (2) Solar SMT60 natural gas powered generator turbines. As an alternative option for the three Caterpillar G3608 compressor engines, two (2) Caterpillar G3612 compressor engines may be installed. Only one of these scenarios will be implemented, either three G3608 or two 3612 engines. Both scenarios are presented in the permit revision application and both scenarios were modeled. The significant revision application also includes re-routing of the Train 4 startup, shutdown and maintenance (SSM) emissions from flare FL-1850 BD to identical, permitted flare FL-1950 BD.		

4	What geodetic datum was used in the modeling?	NAD83	
5	How long will the facility be at this location?	Permanent	
6	Is the facility a major source with respect to Prevention of Significant Deterioration (PSD)?	Yes ☐	No ☒
7	Identify the Air Quality Control Region (AQCR) in which the facility is located	155	
8	List the PSD baseline dates for this region (minor or major, as appropriate).		
	NO2	3/16/1988	
	SO2	7/28/1978	
	PM10	2/20/1979	
	PM2.5	11/13/2013	
9	Provide the name and distance to Class I areas within 50 km of the facility (300 km for PSD permits).		
	The nearest Class I area is Carlsbad Caverns National Park at 102.1 km from the facility. Class I PSD Increment modeling is not required.		
10	Is the facility located in a non-attainment area? If so describe below	Yes ☐	No ☒
11	Describe any special modeling requirements, such as streamline permit requirements.		
	N/A		

16-C: Modeling History of Facility

1	Describe the modeling history of the facility, including the air permit numbers, the pollutants modeled, the National Ambient Air Quality Standards (NAAQS), New Mexico AAQS (NMAAQS), and PSD increments modeled. (Do not include modeling waivers).			
	Pollutant	Latest permit and modification number that modeled the pollutant facility-wide.	Date of Permit	Comments
	CO	9058M1	2/29/2024	
	NO ₂	9058M1	2/29/2024	
	SO ₂	9058M1	2/29/2024	
	H ₂ S	9058M1	2/29/2024	
	PM2.5	9058M1	2/29/2024	
	PM10	9058M1	2/29/2024	
	Lead	N/A		
	Ozone (PSD only)	N/A		
	NM Toxic Air Pollutants (20.2.72.402 NMAC)	N/A		

16-D: Modeling performed for this application

1	For each pollutant, indicate the modeling performed and submitted with this application. Choose the most complicated modeling applicable for that pollutant, i.e., culpability analysis assumes ROI and cumulative analysis were also performed.					
	Pollutant	ROI	Cumulative analysis	Culpability analysis	Waiver approved	Pollutant not emitted or not changed.
	CO	☒	☐	☐	☐	☐
	NO ₂	☒	☒	☐	☐	☐
	SO ₂	☒	☐	☐	☐	☐
	H ₂ S	☒	☐	☐	☐	☐
	PM _{2.5}	☒	☐	☐	☐	☐
	PM ₁₀	☒	☐	☐	☐	☐
	Lead	☐	☐	☐	☐	☒
	Ozone	☐	☐	☐	☐	☒
State air toxic(s) (20.2.72.402 NMAC)	☐	☐	☐	☐	☒	

16-E: New Mexico toxic air pollutants modeling

1	List any New Mexico toxic air pollutants (NMTAPs) from Tables A and B in 20.2.72.502 NMAC that are modeled for this application. N/A – There are no New Mexico TAPs that are modeled for this application.					
2	List any NMTAPs that are emitted but not modeled because stack height correction factor. Add additional rows to the table below, if required.					
	Pollutant	Emission Rate (pounds/hour)	Emission Rate Screening Level (pounds/hour)	Stack Height (meters)	Correction Factor	Emission Rate/Correction Factor

16-F: Modeling options

1	Was the latest version of AERMOD used with regulatory default options? If not explain below.	Yes ☒	No ☐

16-G: Surrounding source modeling

1	Date of surrounding source retrieval	N/A for this modeling analysis. Project emissions increases for all pollutants and respective averaging periods modeled resulted in below the Significant Impact Levels (SILs) with the exception of the 1-hr NO ₂ averaging period. The 1-hr NO ₂ background concentration was added to the site-wide modeled concentration instead of adding surrounding sources.
---	--------------------------------------	---

2	If the surrounding source inventory provided by the Air Quality Bureau was believed to be inaccurate, describe how the sources modeled differ from the inventory provided. If changes to the surrounding source inventory were made, use the table below to describe them. Add rows as needed.	
	AQB Source ID	Description of Corrections

16-H: Building and structure downwash

1	How many buildings are present at the facility?	One (1) building (Main Office and Control Room)	
2	How many above ground storage tanks are present at the facility?	Fourteen (14) above ground storage tanks	
3	Was building downwash modeled for all buildings and tanks? If not explain why below.	Yes ☒	No ☐
4	Building comments		

16-I: Receptors and modeled property boundary

1	"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 a 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. A Restricted Area is required in order to exclude receptors from the facility property. If the facility does not have a Restricted Area, then receptors shall be placed within the property boundaries of the facility. Describe the fence or other physical barrier at the facility that defines the restricted area.					
	The restricted area at the facility is defined by a fence and entry gates.					
	2	Receptors must be placed along publicly accessible roads in the restricted area. Are there public roads passing through the restricted area?				Yes ☐
3	Are restricted area boundary coordinates included in the modeling files?				Yes ☒	No ☐
4	Describe the receptor grids and their spacing. The table below may be used, adding rows as needed.					
	Grid Type	Shape	Spacing	Start distance from restricted area or center of facility	End distance from restricted area or center of facility	Comments
5	Describe receptor spacing along the fence line.					
	Fenceline receptors were placed along the facility boundary at least every 50-meters in linear fenceline distance.					

	A rectangular (fenceline shaped) fine grid receptor array was placed at 100- by 100-meter spacing from the fenceline outward to 1,000 meters in all directions. A medium receptor grid was placed at 250- by 250-meter spacing from the fine grid to 2,500 meters in all directions. A coarse receptor was placed at 500- by 500-meter spacing from the medium grid to 25,000 meters in all directions. A coarse receptor was placed at 1,000- by 1,000-meter spacing from the medium grid to 50,000 meters in all directions for the 1-hr NO₂ site-wide ROI.
6	Describe the PSD Class I area receptors. Not required, the nearest PSD Class I area is greater than 50km from the facility (102.1 km – Carlsbad Caverns)

16-J: Sensitive areas

1	Are there schools or hospitals or other sensitive areas near the facility? If so describe below. This information is optional (and purposely undefined) but may help determine issues related to public notice.	Yes ☐	No ☒
3	The modeling review process may need to be accelerated if there is a public hearing. Are there likely to be public comments opposing the permit application?	Yes ☐	No ☒

16-K: Modeling Scenarios

1	Identify, define, and describe all modeling scenarios. Examples of modeling scenarios include using different production rates, times of day, times of year, simultaneous or alternate operation of old and new equipment during transition periods, etc. Alternative operating scenarios should correspond to all parts of the Universal Application and should be fully described in Section 15 of the Universal Application (UA3). Two scenarios were modeled. Scenario 1 with three Caterpillar G3608 compressor engines and two Solar SMT60 gas generator turbines and Scenario 2 with two Caterpillar G3612 compressor engines and two Solar SMT60 gas generator turbines. Both scenarios also include SSM flare emissions from FL-1850-BD and FL-1950-BBD.											
2	Which scenario produces the highest concentrations? Why? Scenario 1 shows higher impacts than Scenario 2, likely due to the fact that Scenario 1 has three engines with lower stack heights compared to Scenario 2 which proposes two engines with higher stack heights.											
3	Were emission factor sets used to limit emission rates or hours of operation? (This question pertains to the "SEASON", "MONTH", "HROFDY" and related factor sets, not to the factors used for calculating the maximum emission rate.)										Yes ☐	No ☒
4	If so, describe factors for each group of sources. List the sources in each group before the factor table for that group. (Modify or duplicate table as necessary. It's ok to put the table below section 16-K if it makes formatting easier.) Sources: N/A											
5	Hour of Day	Factor	Hour of Day	Factor								

1		13										
2		14										
3		15										
4		16										
5		17										
6		18										
7		19										
8		20										
9		21										
10		22										
11		23										
12		24										
If hourly, variable emission rates were used that were not described above, describe them below.												
6	Were different emission rates used for short-term and annual modeling? If so describe below.									Yes ☐	No ☒	

16-L: NO₂ Modeling

1	Which types of NO ₂ modeling were used? Check all that apply.		
	☒	ARM2	
	☐	100% NO _x to NO ₂ conversion	
	☐	PVMRM	
	☐	OLM	
2	Describe the NO ₂ modeling.		
	ARM2 was used to convert from NO _x to NO ₂ .		
3	Were default NO ₂ /NO _x ratios (0.5 minimum, 0.9 maximum or equilibrium) used? If not describe and justify the ratios used below.		Yes ☒ No ☐
4	Describe the design value used for each averaging period modeled.		
	1-hour: High eighth high Annual: Highest Annual Average of Three Years		

16-M: Particulate Matter Modeling

1	Select the pollutants for which plume depletion modeling was used.			
	☐	PM2.5		
	☐	PM10		
	☒	None		
2	Describe the particle size distributions used. Include the source of information.			
	N/A			
3	Does the facility emit at least 40 tons per year of NO _x or at least 40 tons per year of SO ₂ ? Sources that emit at least 40 tons per year of NO _x or at least 40 tons per year of SO ₂ are considered to emit significant amounts of precursors and must account for secondary formation of PM2.5.		Yes ☒	No ☐
4	Was secondary PM modeled for PM2.5?		Yes ☐	No ☒
5	If MERPs were used to account for secondary PM2.5 fill out the information below. If another method was used describe below.			
	NO _x (ton/yr)	SO ₂ (ton/yr)	[PM2.5] _{annual}	[PM2.5] _{24-hour}
	N/A, the project increases for PM _{2.5} were modeled below the Significant Impact Levels (SILs).			

16-N: Setback Distances

1	Portable sources or sources that need flexibility in their site configuration requires that setback distances be determined between the emission sources and the restricted area boundary (e.g. fence line) for both the initial location and future locations. Describe the setback distances for the initial location.		
	N/A		
2	Describe the requested, modeled, setback distances for future locations, if this permit is for a portable stationary source. Include a haul road in the relocation modeling.		
	N/A		

16-O: PSD Increment and Source IDs

1	The unit numbers in the Tables 2-A, 2-B, 2-C, 2-E, 2-F, and 2-I should match the ones in the modeling files. Do these match? If not, provide a cross-reference table between unit numbers if they do not match below.		Yes ☒	No ☐
	Unit Number in UA-2		Unit Number in Modeling Files	
2	The emission rates in the Tables 2-E and 2-F should match the ones in the modeling files. Do these match? If not, explain why below.		Yes ☒	No ☐

3	Have the minor NSR exempt sources or Title V Insignificant Activities" (Table 2-B) sources been modeled?				Yes ☐	No ☒
4	Which units consume increment for which pollutants? None					
	Unit ID	NO ₂	SO ₂	PM10	PM2.5	
5	PSD increment description for sources. (for unusual cases, i.e., baseline unit expanded emissions after baseline date).					
6	Are all the actual installation dates included in Table 2A of the application form, as required? This is necessary to verify the accuracy of PSD increment modeling. If not please explain how increment consumption status is determined for the missing installation dates below.				Yes ☒	No ☐

16-P: Flare Modeling

1	For each flare or flaring scenario, complete the following			
	Flare ID (and scenario)	Average Molecular Weight	Gross Heat Release (cal/s)	Effective Flare Diameter (m)
	FL-1850/FL-1850-BD	22.6	1.66 x 10 ⁸	32.21
	FL-1950?FL-1950-BD	22.6	10.66 x 10 ⁸	32.21
	FL-2050	22.6	3.33 x 10 ⁸	52.62

16-Q: Volume and Related Sources

1	Were the dimensions of volume sources different from standard dimensions in the Air Quality Bureau (AQB) Modeling Guidelines?	Yes ☐	No ☒
	If not please explain how increment consumption status is determined for the missing installation dates below.		
2	Describe the determination of sigma-Y and sigma-Z for fugitive sources.		
	No volume sources were modeled.		
3	Describe how the volume sources are related to unit numbers. Or say they are the same.		
4	Describe any open pits.		
	N/A		
5	Describe emission units included in each open pit.		

	N/A
--	-----

16-R: Background Concentrations

1	Were NMED provided background concentrations used? Identify the background station used below. If non-NMED provided background concentrations were used describe the data that was used.	Yes ☐	No ☐
	CO: N/A		
	NO ₂ : Hobbs-Jefferson (350250008)		
	PM2.5: N/A		
	PM10: N/A		
	SO ₂ : N/A		
	Other:		
	Comments: The modeled project increases modeled below the SILs with the exception of the 1-hr NO ₂ standard.		
2	Were background concentrations refined to monthly or hourly values? If so describe below.	Yes ☐	No ☒

16-S: Meteorological Data

1	Was NMED provided meteorological data used? If so select the station used. Hobbs Dataset used: HOBBS2017_2021	Yes ☒	No ☐
2	If NMED provided meteorological data was not used describe the data set(s) used below. Discuss how missing data were handled, how stability class was determined, and how the data were processed.		

16-T: Terrain

1	Was complex terrain used in the modeling? If not, describe why below.	Yes ☒	No ☐
2	What was the source of the terrain data? http://nationalmap.gov/viewer.html		

16-U: Modeling Files

1	Describe the modeling files:		
	File name (or folder and file name)	Pollutant(s)	Purpose (ROI/SIA, cumulative, culpability analysis, other)
	DH_Increases_SILs_Scenario1	NO ₂ , CO, SO ₂ , PM ₁₀ , PM _{2.5} , H ₂ S	ROI/SIA
	DH_Increases_SILs_Scenario1_SO2_3_24hr	SO ₂ (3-hour and 24-hour)	ROI/SIA
	DH_ROI_NAAQS_NO2_1-hr_Scenario1	NO ₂ (1-hour)	ROI/Cumulative
	DH_Increases_SILs_Scenario2	NO ₂ , CO, SO ₂ , PM ₁₀ , PM _{2.5} , H ₂ S	ROI/SIA
	DH_Increases_SILs_Scenario2_SO2_3_24hr	SO ₂ (3-hour and 24-hour)	ROI/SIA
	DH_ROI_NAAQS_NO2_1-hr_Scenario2	NO ₂ (1-hour)	ROI/Cumulative

16-V: PSD New or Major Modification Applications – N/A

1	A new PSD major source or a major modification to an existing PSD major source requires additional analysis. Was preconstruction monitoring done (see 20.2.74.306 NMAC and PSD Preapplication Guidance on the AQB website)?	Yes ☐	No ☐
2	If not, did AQB approve an exemption from preconstruction monitoring?	Yes ☐	No ☐
3	Describe how preconstruction monitoring has been addressed or attach the approved preconstruction monitoring or monitoring exemption.		
4	Describe the additional impacts analysis required at 20.2.74.304 NMAC.		
5	If required, have ozone and secondary PM _{2.5} ambient impacts analyses been completed? If so describe below.	Yes ☐	No ☐

16-W: Modeling Results

1	If ambient standards are exceeded because of surrounding sources, a culpability analysis is required for the source to show that the contribution from this source is less than the significance levels for the specific pollutant. Was culpability analysis performed? If so describe below.	Yes ☐	No ☒
2	Identify the maximum concentrations from the modeling analysis. Rows may be modified, added and removed from the table below as necessary. Please note the additional tables (Table 16-1 and 16-2 attached with valuable modeling results summarized)		

Pollutant, Time Period and Standard	Modeled Facility Concentration (µg/m3)	Modeled Concentration with Surrounding Sources (µg/m3)	Secondary PM (µg/m3)	Background Concentration (µg/m3)	Cumulative Concentration (µg/m3)	Value of Standard (µg/m3)	Percent of Standard	Location		
								UTM E (m)	UTM N (m)	Elevation (m)
Scenario 1										
CO 1-hr (SIL)	36.83	N/A	N/A	N/A	N/A	2000 (SIL)	1.8	661100.0	3554700.0	943.70
CO 8-hr (SIL)	20.35	N/A	N/A	N/A	N/A	500 (SIL)	4.1	661100.0	3554600.0	942.09
PM _{2.5} 24-hr (SIL)	0.66	N/A	N/A	N/A	N/A	1.2 (SIL)	55.21	661100.0	3554700.0	943.70
PM _{2.5} Annual (SIL)	0.0537	N/A	N/A	N/A	N/A	0.13 (SIL)	41.3	661035.8	3554781.7	944.23
PM ₁₀ 24-hr (SIL)	0.96	N/A	N/A	N/A	N/A	5 (SIL)	19.1	661100.0	3554700.0	943.70
SO ₂ 1-hr (SIL)	6.81	N/A	N/A	N/A	N/A	7.8 (SIL)	87.37	657000.0	3553500.0	958.63
SO ₂ 3-hr (SIL)	6.81	N/A	N/A	N/A	N/A	25 (SIL)	27.24	662000.0	3555600.0	947.09
SO ₂ 24-hr (SIL)	1.90	N/A	N/A	N/A	N/A	5 (SIL)	38.02	661000.0	3554600.0	942.68
SO ₂ Annual (SIL)	0.24	N/A	N/A	N/A	N/A	1 (SIL)	33.6	661267.5	3555354.3	949.21

Pollutant, Time Period and Standard	Modeled Facility Concentration (µg/m3)	Modeled Concentration with Surrounding Sources (µg/m3)	Secondary PM (µg/m3)	Background Concentration (µg/m3)	Cumulative Concentration (µg/m3)	Value of Standard (µg/m3)	Percent of Standard	Location		
								UTM E (m)	UTM N (m)	Elevation (m)
H ₂ S 1-hr (SIL)	0.10	N/A	N/A	N/A	N/A	5 (SIL)	2.1	659500.0	3555750.0	948.72
NO ₂ 1-hr (NAAQS)	44.33 (H8H)	N/A	N/A	65.8	110.13	188.03 (NAAQS)	58.6	660785.8	3554920.1	948.41
NO ₂ Annual (SIL)	0.43	N/A	N/A	N/A	N/A	1 (SIL)	43.0	661035.8	3554781.7	944.23
Scenario 2										
CO 1-hr (SIL)	17.78	N/A	N/A	N/A	N/A	2000 (SIL)	0.9	661567.6	3555169.2	945.16
CO 8-hr (SIL)	6.87	N/A	N/A	N/A	N/A	500 (SIL)	1.4	661600.0	3555400.0	947.09
PM _{2.5} 24-hr (SIL)	0.30	N/A	N/A	N/A	N/A	1.2 (SIL)	25.1	661000.0	3554600.0	942.68
PM _{2.5} Annual (SIL)	0.0397	N/A	N/A	N/A	N/A	0.13 (SIL)	30.5	661500.0	3555400.0	947.56
PM ₁₀ 24-hr (SIL)	0.41	N/A	N/A	N/A	N/A	5 (SIL)	8.3	661100.0	3554600.0	942.09
SO ₂ 1-hr (SIL)	6.79	N/A	N/A	N/A	N/A	7.8 (SIL)	87.1	657000.0	3553500.0	958.63
SO ₂ 3-hr (SIL)	6.78	N/A	N/A	N/A	N/A	25 (SIL)	27.1	662000.0	3555600.0	947.09
SO ₂ 24-hr (SIL)	1.85	N/A	N/A	N/A	N/A	5 (SIL)	36.9	661300.0	3555400.0	950.11
SO ₂ Annual (SIL)	0.23	N/A	N/A	N/A	N/A	1 (SIL)	22.7	661267.5	3555354.3	949.21
H ₂ S 1-hr (SIL)	0.10	N/A	N/A	N/A	N/A	5 (SIL)	2.1	659500.0	3555750.0	948.72
NO ₂ 1-hr (NAAQS)	44.33 (H8H)	N/A	N/A	65.8	110.13	188.03 (NAAQS)	58.6	660785.8	3554920.1	948.41

Pollutant, Time Period and Standard	Modeled Facility Concentration (µg/m3)	Modeled Concentration with Surrounding Sources (µg/m3)	Secondary PM (µg/m3)	Background Concentration (µg/m3)	Cumulative Concentration (µg/m3)	Value of Standard (µg/m3)	Percent of Standard	Location		
								UTM E (m)	UTM N (m)	Elevation (m)
NO ₂ Annual (SIL)	0.44	N/A	N/A	N/A	N/A	1 (SIL)	44.3	661500.0	3555400.0	947.56

16-X: Summary/conclusions

	A statement that modeling requirements have been satisfied and that the permit can be issued.
1	Enterprise has demonstrated through this air dispersion modeling analysis that the proposed revisions to the existing facility neither cause nor contribute to an exceedance of the applicable standards. Tables 16-1.1 through 16-1.4 below show the modeled results.

Table 16-1.1: Significant Impacts Level Analyses and ROI's Scenario 1

Units	Criteria Pollutant	Averaging Period	Significance Level (ug/m ³)	NAAQS (ug/m ³)	GLC _{max} (ug/m ³)	GLC _{max} < Significance Level? If Yes, NAAQS is met (ug/m ³)	ROI (m)
Project Increases	NO ₂	1-hour	7.5	188.03	22.14	No	32,923
Project Increases	NO ₂	Annual	1.0	94.02	0.43	Yes, no further analysis required	0
Project Increases	PM _{2.5}	24-hour	1.2	35	0.66	Yes, no further analysis required	0
Project Increases	PM _{2.5}	Annual	0.13	12	0.0537	Yes, no further analysis required	0
Project Increases	PM ₁₀	24-hour	5.0	150	0.96	Yes, no further analysis required	0
Project Increases	CO	1-hour	2000	14,998	36.83	Yes, no further analysis required	0
Project Increases	CO	8-hour	500	9,960	20.35	Yes, no further analysis required	0
Project Increases	SO ₂	1-hour	7.8	196.4	6.81	Yes, no further analysis required	0
Project Increases	SO ₂	3-hour	25.0	1,309.3	6.81	Yes, no further analysis required	0
Project Increases	SO ₂	24-hour	5.0	261.9	1.90	Yes, no further analysis required	0
Project Increases	SO ₂	Annual	1.0	52.4	0.24	Yes, no further analysis required	0
Project Increases	H ₂ S	1-hour	5.0	139.3	0.10	Yes, no further analysis required	0

Note:

The effective diameter for the Solar SMT60 and SMT130 turbine generators was calculated as follows:

Duct stack area = $A = 8\text{ ft} \times 4\text{ ft} = 32\text{ ft}^2$

Effective diameter = Square root of four times the area (A) divided by Pi.

$$D_e = \text{SQRT}(4A/\text{Pi}) = 6.38\text{ ft}$$

Table 16-1.2: N/NMAAQS Analysis Scenario 1

Units	Criteria Pollutant	Averaging Period	NM/NAAQS (ug/m ³)	GLC _{max} (ug/m ³)	Background Concentration (ug/m ³)	GLC _{max} incl. Background conc. (ug/m ³)	GLC _{max} incl. Background conc. < NAAQS?	Percent of Standard (%)
Site-wide	NO ₂	1-hour	188.03	44.33	65.8	110.13	Yes	58.6

Note:

1-hour NO₂ GLC_{max} is the high 8th high.

Background Concentrations:

1-hour NO₂ background concentration added from ID: 5ZS, 350250008: Hobbs-Jefferson:
2320 N Jefferson Street, Hobbs, NM

Table 16-1.3: Significant Impacts Level Analyses and ROI's Scenario 2

Units	Criteria Pollutant	Averaging Period	Significance Level (ug/m ³)	NAAQS (ug/m ³)	GLC _{max} (ug/m ³)	GLC _{max} < Significance Level? If Yes, NAAQS is met (ug/m ³)	ROI (m)
Project Increases	NO ₂	1-hour	7.5	188.03	14.72	No	33,440
Project Increases	NO ₂	Annual	1.0	94.02	0.44	Yes, no further analysis required	0
Project Increases	PM _{2.5}	24-hour	1.2	35	0.30	Yes, no further analysis required	0
Project Increases	PM _{2.5}	Annual	0.13	12	0.0397	Yes, no further analysis required	0
Project Increases	PM ₁₀	24-hour	5.0	150	0.41	Yes, no further analysis required	0
Project Increases	CO	1-hour	2000	14,998	17.78	Yes, no further analysis required	0
Project Increases	CO	8-hour	500	9,960	6.87	Yes, no further analysis required	0
Project Increases	SO ₂	1-hour	7.8	196.4	6.79	Yes, no further analysis required	0
Project Increases	SO ₂	3-hour	25.0	1,309.3	6.78	Yes, no further analysis required	0
Project Increases	SO ₂	24-hour	5.0	261.9	1.85	Yes, no further analysis required	0
Project Increases	SO ₂	Annual	1.0	52.4	0.23	Yes, no further analysis required	0
Project Increases	H ₂ S	1-hour	5.0	139.3	0.10	Yes, no further analysis required	0

Note:

The effective diameter for the Solar SMT60 and SMT130 turbine generators was calculated as follows:

$$\text{Duct stack area} = A = 8\text{ft} \times 4\text{ ft} = 32\text{ ft}^2$$

Effective diameter = Square root of four times the area (A) divided by Pi.

$$D_e = \text{SQRT}(4A/\text{Pi}) = 6.38\text{ ft}$$

Table 16-1.4: N/NMAAQs Analysis Scenario 2

Units	Criteria Pollutant	Averaging Period	NM/NAAQS (ug/m ³)	GLC _{max} (ug/m ³)	Background Concentration (ug/m ³)	GLC _{max} incl. Background conc. (ug/m ³)	GLC _{max} incl. Background conc. < NAAQS?	Percent of Standard (%)
Site-wide	NO ₂	1-hour	188.03	44.33	65.8	110.13	Yes	58.6

Note:

1-hour NO₂ GLC_{max} is the high 8th high.

Background Concentrations:

1-hour NO₂ background concentration added from ID: 5ZS, 350250008: Hobbs-Jefferson:
2320 N Jefferson Street, Hobbs, NM