

11701 FM 2244, Suite 215B
Bee Cave, TX 78738

July 10, 2023

New Mexico Environment Department

Air Quality Bureau

Permits Section

525 Camino de los Marquez, Suite 1

Santa Fe, New Mexico, 87505

RE: Application for the Renewal of TV Permit P123-R3

Frontier Field Services, LLC – Maljamar Gas Plant

Frontier Field Services, LLC ("Frontier") is submitting an application to renew Title V Operating Permit No. P123-R3 for the Maljamar Gas Plant ("the Facility"). The Facility is currently permitted to operate under NSR Permit No. 319-M12 and Operating Permit No. P123-R3. The Facility is a cryogenic natural gas processing plant that recovers natural gas liquids from inlet natural gas and sweetens sour natural gas. The Facility is located approximately three (3) miles south of Maljamar in Lea County, New Mexico.

The format and content of this application are consistent with the Air Quality Bureau's current policy regarding Title V applications and uses the most current Universal Application Forms.

Title V Permit P123-R3 expires on July 21, 2024. Frontier is submitting this application in accordance with 20.2.70.300.B.2 NMAC, requiring a timely application for a Title V renewal be submitted at least 12 months prior to the date of permit expiration. Enclosed are two hard copies of the application, including an original certification. We elect to submit the electronic files via ftp and will do so upon receipt of instructions.

If you have any questions regarding this submittal, please contact me at (281) 217-8233 or via email at kat@BrightSkyENV.com.

Warm regards,



Kat Galloway
President, Bright Sky Environmental, LLC.

Enclosures

**NMED AIR QUALITY APPLICATION
TITLE V RENEWAL**

MALJAMAR GAS PLANT

TV OPERATING PERMIT P123-R3

**FRONTIER FIELD SERVICES, LLC
LEA COUNTY, NEW MEXICO**

JULY 2023



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
Frontier Field Services, LLC		07/14/2023
Permittee/Company Contact	Phone	Email
Darin B. Kennard	(346) 351-2790	DKennard@durangomidstream.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?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
2	Refused to disclose information required by the provisions of the New Mexico Air Quality Control Act?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
3	Been convicted of a felony related to environmental crime in any court of any state or the United States?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> 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?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> 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?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
5b	<p>If "No" to question 5a, go to question 6.</p> <p>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:</p> <p>a. The unpermitted facility was discovered after acquisition during a timely environmental audit that was authorized by the Department; or</p> <p>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.</p>	<input type="checkbox"/> Yes <input type="checkbox"/> No
6	Had any permit revoked or permanently suspended for cause under the environmental laws of any state or the United States?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> 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:
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Universal Air Quality Permit Application

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

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

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

Acknowledgements:

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

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

☐ Check No.: N/A in the amount of N/A

☒ 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 NMAC** (e.g. application for a new minor source would be 20.2.72.200.A NMAC, one example for a Technical Permit Revision is 20.2.72.219.B.1.b NMAC, a Title V acid rain application would be: 20.2.70.200.C NMAC)

Section 1 – Facility Information

Section 1-A: Company Information

		AI # if known (see 1 st 3 to 5 #s of permit IDEA ID No.): P123	Updating Permit/NOI # : P123-R3
1	Facility Name: Maljamar Gas Plant	Plant primary SIC Code (4 digits): 1321	
		Plant NAIC code (6 digits): 211130	
a	Facility Street Address (If no facility street address, provide directions from a prominent landmark): 1001 Conoco Rd., Maljamar, NM 88264		
2	Plant Operator Company Name: Frontier Field Services, LLC	Phone/Fax: (970) 764-6900 / (970) 382-0462	
a	Plant Operator Address: 125 Mercado St., Suite 201, Durango, CO 81301		
b	Plant Operator's New Mexico Corporate ID or Tax ID: 32-0061652		
3	Plant Owner(s) name(s): Frontier Field Services, LLC	Phone/Fax: (970) 764-6900 / (970) 382-0462	
a	Plant Owner(s) Mailing Address(s): 125 Mercado St., Suite 201, Durango, CO 81301		
4	Bill To (Company): Frontier Field Services, LLC	Phone/Fax: (970) 764-6900 / (970) 382-0462	
a	Mailing Address: 125 Mercado St., Suite 201, Durango, CO 81301	E-mail: mtaylor@durangomidstream.com	
5	√ Preparer: Kat Galloway √ Consultant: Bright Sky Environmental, LLC	Phone/Fax: 281-217-8233	
a	Mailing Address: 11701 FM 2244, Suite 215-B Bee Cave, TX 78738	E-mail: kat@brightskyenv.com	
6	Plant Operator Contact: John Prentiss	Phone/Fax: (575) 676-3528 / (575) 676-2401	
a	Address: 1001 Conoco Rd., Maljamar, NM 88264	E-mail: jprentiss@durangomidstream.com	
7	Air Permit Contact: Mary I. Taylor	Title: Environmental Manager	
a	E-mail: mtaylor@durango.com	Phone/Fax: 346-224-2459	
b	Mailing Address: 10077 Grogans Mill Road, Suite 300, The Woodlands, TX 77380		
c	The designated Air permit Contact will receive all official correspondence (i.e. letters, permits) from the Air Quality Bureau.		

Section 1-B: Current Facility Status

1.a	Has this facility already been constructed? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	1.b If yes to question 1.a, is it currently operating in New Mexico? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
2	If yes to question 1.a, was the existing facility subject to a Notice of Intent (NOI) (20.2.73 NMAC) before submittal of this application? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If yes to question 1.a, was the existing facility subject to a construction permit (20.2.72 NMAC) before submittal of this application? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
3	Is the facility currently shut down? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If yes, give month and year of shut down (MM/YY): N/A
4	Was this facility constructed before 8/31/1972 and continuously operated since 1972? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
5	If Yes to question 3, has this facility been modified (see 20.2.72.7.P NMAC) or the capacity increased since 8/31/1972? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
6	Does this facility have a Title V operating permit (20.2.70 NMAC)? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If yes, the permit No. is: P123-R3
7	Has this facility been issued a No Permit Required (NPR)? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If yes, the NPR No. is: N/A
8	Has this facility been issued a Notice of Intent (NOI)? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If yes, the NOI No. is: N/A

9	Does this facility have a construction permit (20.2.72/20.2.74 NMAC)? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If yes, the permit No. is: 0319-M12
10	Is this facility registered under a General permit (GCP-1, GCP-2, etc.)? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If yes, the register No. is: N/A

Section 1-C: Facility Input Capacity & Production Rate

1	What is the facility's maximum input capacity, specify units (reference here and list capacities in Section 20, if more room is required)			
a	Current	Hourly: 6.9 mmcf gas; 42 bbl condensate; 1,042 bbl NGL	Daily: 165 mmcf gas; 1,000 bbl condensate; 25,000 bbl NGL	Annually: 60,225 mmcf gas; 365,000 bbl condensate; 9,125,000 bbl NGL
b	Proposed	Hourly: 6.9 mmcf gas; 42 bbl condensate; 1,042 bbl NGL	Daily: 165 mmcf gas; 1,000 bbl condensate; 25,000 bbl NGL	Annually: 60,225 mmcf gas; 365,000 bbl condensate; 9,125,000 bbl NGL
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: 6.9 mmcf gas; 42 bbl condensate; 1,042 bbl NGL	Daily: 165 mmcf gas; 1,000 bbl condensate; 25,000 bbl NGL	Annually: 60,225 mmcf gas; 365,000 bbl condensate; 9,125,000 bbl NGL
b	Proposed	Hourly: 6.9 mmcf gas; 42 bbl condensate; 1,042 bbl NGL	Daily: 165 mmcf gas; 1,000 bbl condensate; 25,000 bbl NGL	Annually: 60,225 mmcf gas; 365,000 bbl condensate; 9,125,000 bbl NGL

Section 1-D: Facility Location Information

1	Section: 21	Range: 32E	Township: 17S	County: Lea	Elevation (ft): 4,020
2	UTM Zone: <input type="checkbox"/> 12 or <input checked="" type="checkbox"/> 13			Datum: <input type="checkbox"/> NAD 27 <input type="checkbox"/> NAD 83 <input checked="" type="checkbox"/> WGS 84	
a	UTM E (in meters, to nearest 10 meters): 615,020			UTM N (in meters, to nearest 10 meters): 3,631,380	
b	AND Latitude (deg., min., sec.): 32°48'52"			Longitude (deg., min., sec.): -103°46'17"	
3	Name and zip code of nearest New Mexico town: Maljamar, NM 88264				
4	Detailed Driving Instructions from nearest NM town (attach a road map if necessary): From Highway 82, Head south on Maljamar Rd for 2.7 miles toward Sand Rd. Turn right onto Conoco Rd and the Maljamar gas plant will be on the right in 0.5 miles.				
5	The facility is 2.8 (distance) miles southwest (direction) of Maljamar (nearest town).				
6	Status of land at facility (check one): <input checked="" type="checkbox"/> Private <input type="checkbox"/> Indian/Pueblo <input type="checkbox"/> Federal BLM <input type="checkbox"/> Federal Forest Service <input type="checkbox"/> Other (specify)				
7	List all municipalities, Indian tribes, and counties within a ten (10) mile radius (20.2.72.203.B.2 NMAC) of the property on which the facility is proposed to be constructed or operated: Lea County, Eddy County, Maljamar, and Loco Hills				
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/)? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> 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): 90 km				
11	Distance (meters) from the perimeter of the Area of Operations (AO is defined as the plant site inclusive of all disturbed lands, including mining overburden removal areas) to nearest residence, school or occupied structure: 4,000 m				
12	Method(s) used to delineate the Restricted Area: Fence, security personnel, and locking gates. "Restricted Area" is an area to which public entry is effectively precluded. Effective barriers include continuous fencing, continuous walls, or other continuous barriers approved by the Department, such as rugged physical terrain with steep grade that would require special equipment to traverse. If a large property is completely enclosed by fencing, a restricted area within the property may be identified with signage only. Public roads cannot be part of a Restricted Area.				
13	Does the owner/operator intend to operate this source as a portable stationary source as defined in 20.2.72.7.X NMAC? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No A portable stationary source is not a mobile source, such as an automobile, but a source that can be installed permanently at one location or that can be re-installed at various locations, such as a hot mix asphalt plant that is moved to different job sites.				
14	Will this facility operate in conjunction with other air regulated parties on the same property? <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes If yes, what is the name and permit number (if known) of the other facility?				

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

1	Facility 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	<input type="checkbox"/> AM <input type="checkbox"/> PM	End: N/A	<input type="checkbox"/> AM <input type="checkbox"/> PM
3	Month and year of anticipated start of construction: N/A			
4	Month and year of anticipated construction completion: N/A			
5	Month and year of anticipated startup of new or modified facility: N/A			
6	Will this facility operate at this site for more than one year? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No			

Section 1-F: Other Facility Information

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

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

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

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

1	Responsible Official (R.O.) (20.2.70.300.D.2 NMAC): Darin B. Kennard		Phone: 346-351-2790
a	R.O. Title: Vice President and General Manager	R.O. e-mail: dkennard@durangomidstream.com	
b	R. O. Address: 10077 Grogans Mill Road, Suite 300, The Woodlands, TX 77380		
2	Alternate Responsible Official (20.2.70.300.D.2 NMAC): N/A		Phone: N/A
a	A. R.O. Title: N/A	A. R.O. e-mail: N/A	
b	A. R. O. Address: N/A		

3	Company's Corporate or Partnership Relationship to any other Air Quality Permittee (List the names of any companies that have operating (20.2.70 NMAC) permits and with whom the applicant for this permit has a corporate or partnership relationship): N/A
4	Name of Parent Company ("Parent Company" means the primary name of the organization that owns the company to be permitted wholly or in part.): Durango Midstream, LLC
a	Address of Parent Company: 10077 Grogans Mill Road, Suite 300, The Woodlands, TX 77380
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: Darin Kennard (346) 351-2790
7	Affected Programs to include Other States, local air pollution control programs (i.e. Bernalillo) and Indian tribes: Will the property on which the facility is proposed to be constructed or operated be closer than 80 km (50 miles) from other states, local pollution control programs, and Indian tribes and pueblos (20.2.70.402.A.2 and 20.2.70.7.B)? If yes, state which ones and provide the distances in kilometers: Texas State Line – 66 km.

Section 1-I – Submittal Requirements

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

Hard Copy Submittal Requirements:

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

Electronic files sent by (check one):

☐ CD/DVD attached to paper application

☒ secure electronic transfer. Air Permit Contact

Name Mary Taylor,

Email mtaylor@durangomidstream.com

Phone number (346) 224-2459.

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

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

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

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

- 1) All required electronic documents shall be submitted as 2 separate CDs or submitted through the AQB secure file transfer service. Submit a single PDF document of the entire application as submitted and the individual documents comprising the application.
- 2) The documents should also be submitted in Microsoft Office compatible file format (Word, Excel, etc.) allowing us to access the text and formulas in the documents (copy & paste). Any documents that cannot be submitted in a Microsoft Office compatible

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

- 3) It is preferred that this application form be submitted as 4 electronic files (3 MSWord docs: Universal Application section 1 [UA1], Universal Application section 3-19 [UA3], and Universal Application 4, the modeling report [UA4]) and 1 Excel file of the tables (Universal Application section 2 [UA2]). Please include as many of the 3-19 Sections as practical in a single MS Word electronic document. Create separate electronic file(s) if a single file becomes too large or if portions must be saved in a file format other than MS Word.
- 4) The **electronic file names** shall be a maximum of 25 characters long (including spaces, if any). The format of the electronic Universal Application shall be in the format: "A-3423-FacilityName". The "A" distinguishes the file as an application submittal, as opposed to other documents the Department itself puts into the database. Thus, all electronic application submittals should begin with "A-". Modifications to existing facilities should use the **core permit number** (i.e. '3423') the Department assigned to the facility as the next 4 digits. Use 'XXXX' for new facility applications. The format of any separate electronic submittals (additional submittals such as non-Word attachments, re-submittals, application updates) and Section document shall be in the format: "A-3423-9-description", where "9" stands for the **section #** (in this case Section 9-Public Notice). Please refrain, as much as possible, from submitting any scanned documents as this file format is extremely large, which uses up too much storage capacity in our database. Please take the time to fill out the **header information** throughout all submittals as this will identify any loose pages, including the Application Date (date submitted) & Revision number (0 for original, 1, 2, etc.; which will help keep track of subsequent partial update(s) to the original submittal. Do not use special symbols (#, @, etc.) in file names. The footer information should not be modified by the applicant.

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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.

Frontier Field Services, LLC ("Frontier") is submitting an application for a renewal to Title V Operating Permit No. P123-R3 for the Maljamar Gas Plant ("the Facility"). The Facility is currently permitted to operate under NSR Permit No. 319-M12 and Operating Permit No. P123-R3. The Facility is a cryogenic natural gas processing plant that recovers natural gas liquids from inlet natural gas and sweetens sour natural gas. The Facility is located approximately three (3) miles south of Maljamar in Lea County, New Mexico.

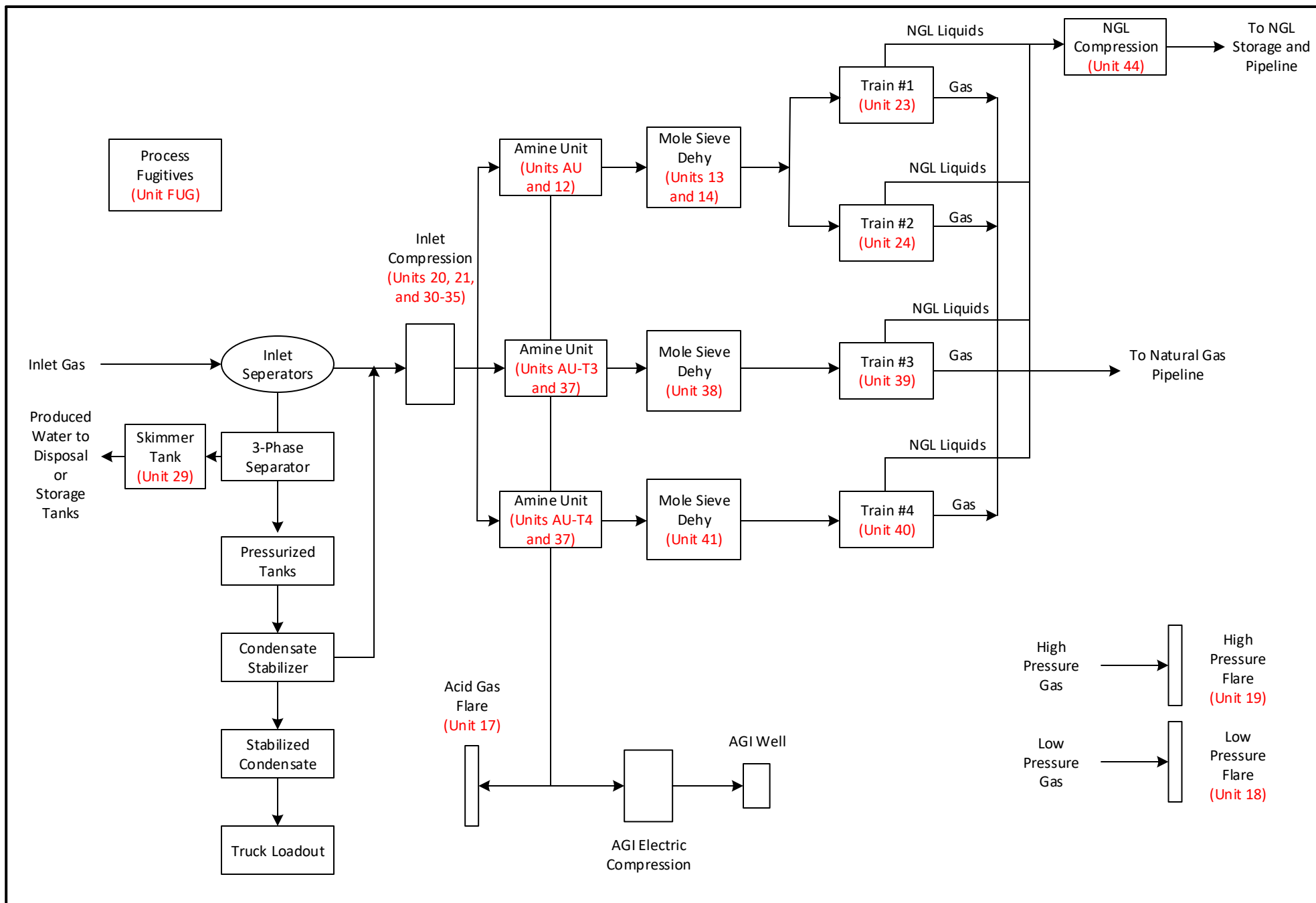
No changes to the existing NSR Permit No. 319-M12 are requested with this Title V Operating Permit renewal application. No changes in the facility's status are requested with this Title V Operating Permit renewal application.

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.

The process flow sheet has been included in this section.



Frontier Field Services, LLC

Drawn by: RL

Date: 02/04/2020

Scale:
Drawing Not to Scale

Maljamar Gas Plant – Plant Overview Process Flow Diagram
Significant Revision Application | New Mexico

Checked by: WSH

Date: 02/04/2020



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.

The plot plan has been included in this section.

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.

Refrigeration Engine (Unit 44)

The maximum short-term emissions are estimated in units of lb/hr using the maximum output power and heat rate for the engine. Emission factors for NO_x, CO, and VOC are based on emission factors from the manufacturer's specifications. The Propane Refrigeration Engine (Unit Number: 44) emission factors for NO_x, CO, VOC, and formaldehyde are 0.50 g/hp-hr, 2.24 g/hp-hr, and 0.49 g/hp-hr, and 0.52 g/hp-hr, respectively. The emission factors were converted to lb/MMBtu for ease of use in estimating emissions. PM, benzene, acetaldehyde, and acrolein emissions are estimated using emission factors from AP-42, Chapter 3.2, Table 3.2-2 for 4-stroke lean-burn engines. For the purposes of these calculations, PM = PM₁₀ = PM_{2.5}. SO₂ emissions are estimated using the emission factor listed in AP-42, Chapter 3.2, Table 3.2-2, adjusted for 5.0 g-S/100 scf of natural gas from the 0.2 gr-S/100 scf of natural gas in AP-42. The engine is equipped with a catalytic oxidizer, which controls CO and formaldehyde emissions with a 93% control efficiency and VOC emissions with a 52% control efficiency. NO_x, CO, VOC, PM₁₀, PM_{2.5}, formaldehyde, and other HAP maximum short-term emissions are estimated using the following calculation methodology (using NO_x as an example):

$$(0.5 \text{ lb NO}_x / \text{MMBtu}) \times (1,035 \text{ hp}) \times (8,183 \text{ Btu} / \text{hp-hr}) \times (\text{MMBtu} / 10^6 \text{ Btu}) = 1.14 \text{ lb} / \text{hr NO}_x$$

Annual average emissions are estimated in units of tpy, assuming operation of 8,760 hours per year. NO_x, CO, VOC, PM₁₀, PM_{2.5}, formaldehyde, and other HAP tpy emissions are estimated using the following calculation methodology (using NO_x as an example):

$$(1.14 \text{ lb NO}_x / \text{hr}) \times (8,760 \text{ hrs} / \text{yr}) \times (1 \text{ ton} / 2,000 \text{ lbs}) = 4.99 \text{ tpy NO}_x$$

All SSM emissions at the site are routed to either unit 17 acid gas flare, 18 low pressure inlet flare, or 19 high pressure inlet flare. With the installation of this new engine, SSM emissions are already accounted for and will not increase about current allowable emission rates.

Compressor Engines (Units 20, 21, 30-35, 44)

Emission factors for NO_x, CO, VOC, formaldehyde, and GHG are based on manufacturer data. NSCR and Catalytic oxidation for NO_x, CO, VOC, and formaldehyde are based on vendor guarantees with a factor for operational flexibility. Emission rates for TSP, PM₁₀, and PM_{2.5} were calculated using AP-42 Table 3.2-2 emission factors. PM₁₀ and PM_{2.5} emissions are set equal to TSP emissions as a conservative measure. SO₂ emissions were calculated based on the units' fuel consumption and AP-42 assumptions of fuel sulfur. Only those HAPs greater than 1 tpy were illustrated in the application. GHG emissions were calculated using 40 CFR 98 Subpart C Tier1.

Fugitives (FUG)

This section outlines the emission rates, calculation methodologies, and assumptions directly related to equipment components (Unit Number: FUG) associated with this project. These equipment components are potential sources of VOC, CO₂e, and HAPS emissions due to leaking valves, flanges, seals, etc. Therefore, in the event of any equipment component leaks, these pollutants could be emitted to the atmosphere.

Potential VOC and HAPS emissions from leaking equipment components are estimated using emission factors in the USEPA "Protocol for Equipment Leak Emission Estimates" for oil and gas production operations, 11/95 (EPA-453/R-95-017), Table 2-4, Page 2-15 and the percentage of each component in the inlet gas (per the representative inlet gas analysis from the Maljamar Gas Plant). The percentages of VOC and HAPs are normalized for TOC for use with fugitive emission factors only. Fugitive emission factors are listed in units of lb/hr TOC per component. Hourly emissions are calculated as follows (using VOC emissions for connectors in gas service as an example):

$$(159 \text{ connector components}) \times (4.41\text{E-}04 \text{ lb} / \text{hr} / \text{component}) \times 27.13 \% \text{ VOC} = 0.02 \text{ lb VOC} / \text{hr}$$

Annual average emissions of VOC from connectors in gas service are estimated as follows:

$$(0.02 \text{ lb VOC} / \text{hr}) \times (8,760 \text{ hours} / \text{year}) \times (1 \text{ ton} / 2,000 \text{ lbs}) = 0.27 \text{ tpy VOC}$$

Hot Oil Heater, Mol Sieve Regenerator Heaters, and TEG Regeneration Heater (Units 12, 13, 14, 27, 37, 38 ,41)

Emission rates for NO_x, CO, VOC, and PM were calculated using AP-42 factors for external natural gas combustion sources, Table 1.4-1 and 1.4-2. PM₁₀ and PM_{2.5} emissions are set equal to PM emissions as a conservative measure. SO₂ emissions were calculated based on the units' fuel consumption and a maximum sulfur content of 5/100 scf). GHG emissions were calculated using 40 CFR 98 Subpart C Tier1.

Flares (Units 17, 18, 19, & 43)

NO_x emission factors from AP-42, Table 13.5-1, February 2018. CO emission factor from TCEQ Air Permit Technical Guidance for Flares and Vapor Oxidizers, high btu. PM and PM_{2.5} emission factors from AP-42, Table 1.4-1 and 1.4-2, July 1998. SO₂ emissions assume 100% conversion of H₂S to SO₂.

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)

Engine Greenhouse Gas Emissions Estimate

GHG emissions for the combustion of natural gas in the engines are estimated using the methodology in Title 40 Code of Federal Regulations (“40 CFR”) Part 98, Subpart C. GHG emission rates of N₂O, CH₄, and CO₂ are calculated using the Mandatory Reporting Rule (“MRR”) factors, in a manner similar to NO_x, CO, VOC, PM, SO₂, formaldehyde, and HAPs emission calculations.

CH₄ emissions are estimated using the emission factor 1.0 x 10⁻³ kilograms per million British thermal units (“kg/MMBtu”) (0.0022 lb/MMBtu), N₂O emissions are estimated using the emission factor 1.0 x 10⁻⁴ kg/MMBtu (0.00022 lb/MMBtu), and CO₂ emissions are estimated using the emission factor 53.06 kg/MMBtu (116.98 lb/MMBtu) (Tables C-1 and C-2 to subpart C of 40 CFR Part 98). The emission factors are converted from kg/MMBtu to lb/MMBtu. CH₄, N₂O, and CO₂ lb/hr emissions are calculated using the following calculation methodology (using CH₄ as an example):

$$(0.0022 \text{ lb CH}_4 / \text{MMBtu}) \times (1,035 \text{ hp}) \times (8,183 \text{ Btu} / \text{hp-hr}) \times (\text{MMBtu} / 10^6 \text{ Btu}) = 0.02 \text{ lb} / \text{hr CH}_4$$

The annual average emission rate of each GHG is then estimated assuming 8,760 hours of operation per year and converted to tons. Annual emissions of each GHG are calculated as follows (using CH₄ as an example):

$$(0.02 \text{ lb CH}_4 / \text{hr}) \times (8,760 \text{ hrs} / \text{yr}) \times (1 \text{ ton} / 2,000 \text{ lbs}) = 0.09 \text{ tpy CH}_4$$

The CO₂e emission rate for the engines is then estimated by multiplying the individual GHG emission rate by the appropriate GWP as specified in 40 CFR 98, Subpart A, Table A-1.

Therefore, the maximum hourly CO₂e emission rate for the engines is estimated as follows:

$$((990.72 \text{ lb CO}_2 / \text{hr}) \times (1)) + ((0.02 \text{ lb CH}_4 / \text{hr}) \times (25)) + ((0.002 \text{ lb} / \text{N}_2\text{O hr}) \times (298)) = 991.82 \text{ lb CO}_2\text{e} / \text{hr}$$

Annual average CO₂e emissions are estimated assuming 8,760 operating hours per year and converted to tons:

$$(991.82 \text{ lb CO}_2\text{e} / \text{hr}) \times (8,760 \text{ hr} / \text{yr}) \times (1 \text{ ton} / 2,000 \text{ lbs}) = 4,344.17 \text{ tpy CO}_2\text{e}$$

Fugitive Greenhouse Gas Emissions Estimate

Total maximum CO₂, and CH₄ emissions for all components in all streams are calculated using the method described above for VOC emissions. The total CO₂e emission rate for the equipment leak fugitives is estimated by multiplying the speciated emission rates by the appropriate GWP as outlined in Table 3.1-1 and summing the results. Therefore, maximum hourly CO₂e emission rates are calculated as follows (using connectors in gas service as an example):

$$(0.001 \text{ lb CO}_2 / \text{hr} \times 1) + (0.06 \text{ lb CH}_4 / \text{hr} \times 25) = 1.48 \text{ lb CO}_2\text{e} / \text{hr}$$

The annual average CO₂e emission rate is calculated assuming 8,760 hours of operation per year and converted to tons:

$$(1.48 \text{ lb CO}_2\text{e} / \text{hour}) \times (8,760 \text{ hours} / \text{year}) \times (1 \text{ ton} / 2,000 \text{ lbs}) = 6.50 \text{ ton CO}_2\text{e} / \text{year}$$

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.
-

Engines

- NO_x, CO, and VOC emission factors are from manufacturer specifications;
- Oxidation catalyst control efficiency is from manufacturer specification;
- For these estimates, it is assumed PM = PM₁₀ = PM_{2.5};
- SO₂ emission factor based on AP-42 Table 3.2-2 and adjusted based on 5.0 gr S per 100 scf of natural gas;
- CO_{2e} emissions were estimated using 40 CFR 98, Subpart C.

Fugitives

- Emission factors in the USEPA "Protocol for Equipment Leak Emission Estimates" for oil and gas production operations, 11/95 (EPA-453/R-95-017), Table 2-4, Page 2-15; and
- The percentage of each component in the inlet gas (per the representative inlet gas analysis from the Maljamar Gas Plant)

Flares

- Site-specific inlet gas analysis.
- TCEQ and EPA Emission Factors

Heaters and reboilers

- AP-42 1.4-1 & 2 Natural Gas Combustion

Fugitives

- Site-specific inlet gas and liquid analysis

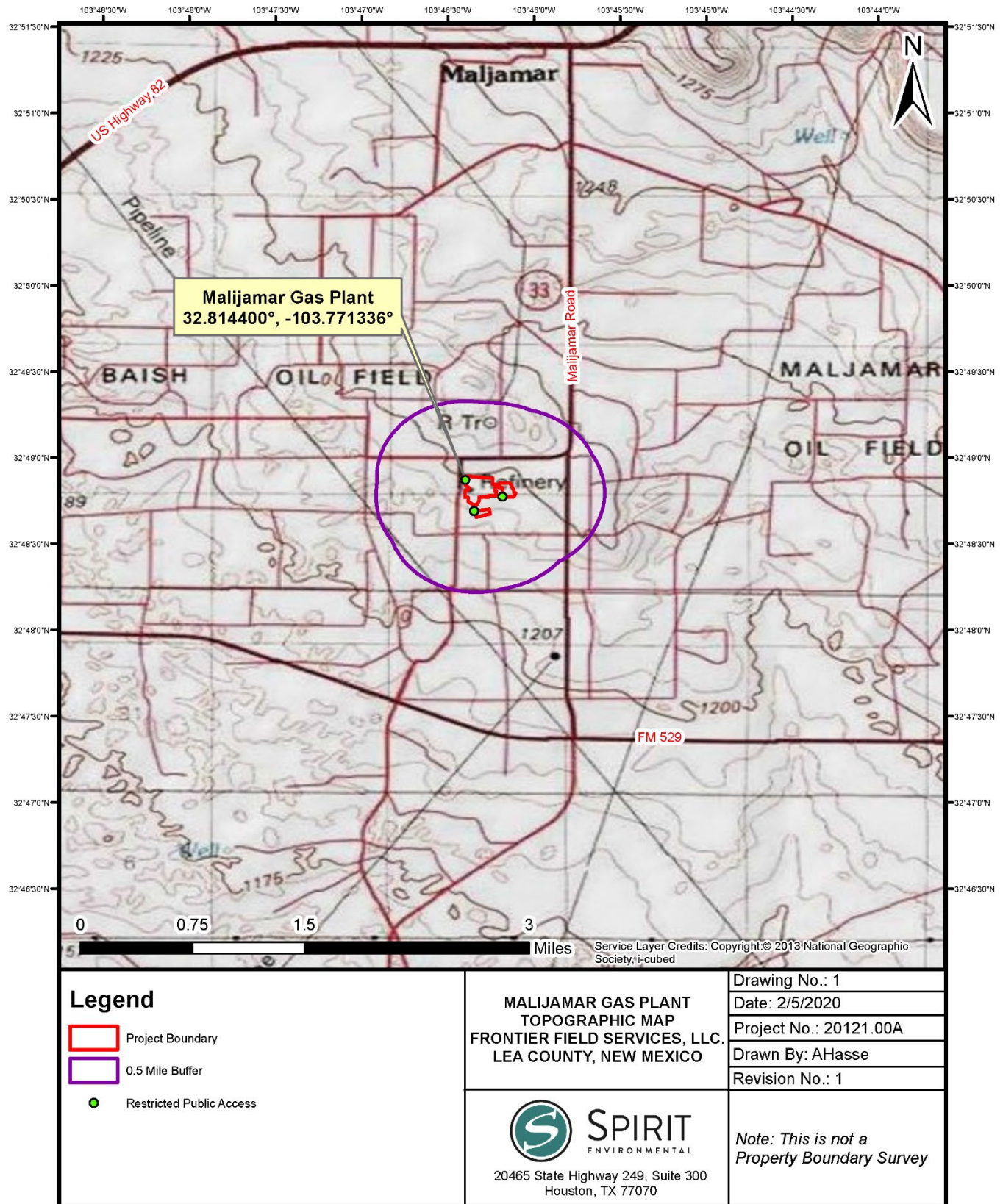
Section 8

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	

The facility map is included in this section.

**Legend**

- Project Boundary
- 0.5 Mile Buffer
- Restricted Public Access

MALIJAMAR GAS PLANT
TOPOGRAPHIC MAP
FRONTIER FIELD SERVICES, LLC.
LEA COUNTY, NEW MEXICO



20465 State Highway 249, Suite 300
Houston, TX 77070

Drawing No.: 1

Date: 2/5/2020

Project No.: 20121.00A

Drawn By: AHasse

Revision No.: 1

*Note: This is not a
Property Boundary Survey*

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.

This facility is a cryogenic natural gas processing plant, with a permitted maximum throughput capacity of 165 MMSCF/D. Raw field gas enters at different inlet pressures and is routed to various compressors in the plant to optimize field and plant operations. Field gas passes through inlet separation, coalescing filters, and particulate filters to remove liquids and contaminants prior to treating and processing. The facility is also equipped with a low pressure and high-pressure process flare that can burn raw field gas or residue gas during plan upset conditions.

Maljamar Gas Plant has both inlet and intermediate compression that is either electric driven or internal combustion (engine) driven. Heavier hydrocarbons that are separated in the inlet or through the various stages of compression are stabilized, collected in a pressure tank, and loaded to tanker trucks. The vapors recovered from stabilization are routed into the low-pressure inlet system. Produced water from separation/stabilization is routed to a skimmer tank and the water is pumped to a third party.

High pressure gas from the final stage of compression enters one of three contactors for sweetening. Contactor one, two, and three are capable of treating approximately 65 MMSCF/D, 60 MMSCF/D, and 30 MMSCF/D, respectively depending on inlet acid gas concentrations. Rich amine from the contactors is regenerated in two separate stills utilizing heat from two hot oil systems. The acid gas from the still overhead is sent to the Acid Gas Injection (AGI) and acid gas flare system. The AGI system consists of two redundant electric driven compression trains for sequestration via two injection wells at the site. Typical emissions from the AGI system are fugitive under normal operation. Under upset conditions, when the compression trains or wells are not operational, the acid gas from the still overhead is sent to the AGI flare.

After CO₂/H₂S removal, raw/wet sweet gas is sent to one of the four natural gas cryogenic trains for processing to extract Natural Gas Liquids (NGL) from the gas. Three of the trains have a 30 MMSCF/D capacity and one train is capable of processing 60 MMSCF/D. Each cryogenic train is equipped with mole sieve desiccant bed towers, propane refrigeration, and gas regeneration systems. NGLs from the cryo trains are sent to pressurized storage where it is pumped and exported to a third party via pipelines for delivery to market. Residue gas from the cryo system is compressed by either electric or gas fired engine driven compression and delivered via pipeline to adjacent transportation pipeline for delivery to market.

Section 11

Source Determination

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

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

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

A. Identify the emission sources evaluated in this section (list and describe):

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

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

☒ Yes ☐ No

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

☒ Yes ☐ No

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

☒ Yes ☐ No

C. Make a determination:

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

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

Section 13

Determination of State & Federal Air Quality Regulations

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

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

Required Information for Specific Equipment:

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

Required Information for Regulations that Apply to the Entire Facility:

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

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

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

Regulatory Citations for Emission Standards:

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

Federally Enforceable Conditions:

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

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

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

Table for STATE REGULATIONS:

STATE REGU- LATIONS CITATION	Title	Applies? Enter Yes or No	Unit(s) or Facility	JUSTIFICATION:
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.
20.2.7 NMAC	Excess Emissions	Yes	Facility	If your entire facility or individual pieces of equipment are subject to emissions limits in a permit or numerical emissions standards in a federal or state regulation, this applies.
20.2.23 NMAC	Fugitive Dust Control	No	Facility	<p>This regulation may apply if, this is an application for a notice of intent (NOI) per 20.2.73 NMAC, if the activity or facility is a fugitive dust source listed at 20.2.23.108.A NMAC, and if the activity or facility is located in an area subject to a mitigation plan pursuant to 40 CFR 51.930. http://164.64.110.134/parts/title20/20.002.0023.html</p> <p>As of January 2019, the only areas of the State subject to a mitigation plan per 40 CFR 51.930 are in Doña Ana and Luna Counties.</p> <p>Sources exempt from 20.2.23 NMAC are activities and facilities subject to a permit issued pursuant to the NM Air Quality Control Act, the Mining Act, or the Surface Mining Act (20.2.23.108.B NMAC).</p> <p>20.2.23.108 APPLICABILITY: A. This part shall apply to persons owning or operating the following fugitive dust sources in areas requiring a mitigation plan in accordance with 40 CFR Part 51.930: (1) disturbed surface areas or inactive disturbed surface areas, or a combination thereof, encompassing an area equal to or greater than one acre; (2) any commercial or industrial bulk material processing, handling, transport or storage operations. B. The following fugitive dust sources are exempt from this part: (1) agricultural facilities, as defined in this part; (2) roadways, as defined in this part; (3) operations issued permits pursuant to the state of New Mexico Air Quality Control Act, Mining Act or Surface Mining Act; and (4) lands used for state or federal military activities. [20.2.23.108 NMAC - N, 01/01/2019]</p>
20.2.33 NMAC	Gas Burning Equipment - Nitrogen Dioxide	No	N/A	This facility does not have new 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 does not apply to gas plants that reduce sulfur emissions by underground injection with an acid gas injection system or to acid gas flaring emissions when an AGI or SRU is being maintained. Therefore, this regulation does not apply to the Maljamar Gas Plant.
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.
<u>20.2.38</u> NMAC	Hydrocarbon Storage Facility	No	N/A	This regulation could apply to storage tanks at petroleum production facilities, processing facilities, tanks batteries, or hydrocarbon storage facilities. There are no tanks or tank batteries that meet the storage capacity and weekly throughput requirements that would trigger this requirement.

STATE REGU- LATIONS CITATION	Title	Applies? Enter Yes or No	Unit(s) or Facility	JUSTIFICATION:
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. This facility does not have a sulfur recovery plant. Therefore, this regulation does not apply.
20.2.50 NMAC	Oil and Gas Sector – Ozone Precursor Pollutants	Yes	Units 30, 31, 32, 33, 34, 35, 44, 37, and FUG	The facility is subject to the 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: 113 – Engines and Turbines 114 – Compressor Seals 115 – Control Devices and Closed Vent Systems 116 – Equipment Leaks and Fugitive Emissions 119 – Heaters (21.2 MMBtu/hr Amine Heater)
20.2.61.109 NMAC	Smoke & Visible Emissions	Yes	Stationary combustion equipment	This regulation that limits opacity to 20% applies to Stationary Combustion Equipment, such as engines, boilers, heaters, and flares unless your equipment is subject to another state regulation that limits particulate matter such as 20.2.19 NMAC (see 20.2.61.109 NMAC). If equipment at your facility was subject to the repealed regulation 20.2.37 NMAC it is now subject to 20.2.61 NMAC.
20.2.70 NMAC	Operating Permits	Yes	Facility	Applies if your facility's potential to emit (PTE) is 100 tpy or more of any regulated air pollutant other than HAPs; and/or a HAPs PTE of 10 tpy or more for a single HAP or 25 or more tpy for combined HAPs; is subject to a 20.2.79 NMAC nonattainment permit; or is a facility subject to a federal regulation that requires you to obtain a Title V permit such as landfills or air curtain incinerators. This facility is a Title V major source of NOx, CO, SO ₂ , VOC, and GHG.
20.2.71 NMAC	Operating Permit Fees	Yes	Facility	If subject to 20.2.70 NMAC and your permit includes numerical ton per year emission limits, you are subject to 20.2.71 NMAC and normally applies to the entire facility.
20.2.72 NMAC	Construction Permits	Yes	Facility	Could apply if your facility's potential emission rate (PER) is greater than 10 pph or greater than 25 tpy for any pollutant subject to a state or federal ambient air quality standard (does not include VOCs or HAPs); if the PER of lead is 5 tpy or more; if your facility is subject to 20.2.72.400 NMAC; or if you have equipment subject to 40 CFR 60 Subparts I and OOO, 40 CFR 61 Subparts C and D. This facility is subject to 20.2.72 NMAC and is permitted under NSR Permit 319-M11-R1
20.2.73 NMAC	NOI & Emissions Inventory Requirements	Yes	Facility	A Notice of Intent application 20.2.73.200 NMAC could apply if your facility's PER of <u>any</u> regulated air pollutant, including VOCs and HAPs, is 10 tpy or more or if you have lead emissions of 1 tpy or more. Include both fugitive and stack emissions to determine your PER. You could be required to submit Emissions Inventory Reporting per 20.2.73.300 NMAC if your facility is subject to 20.2.73.200, 20.2.72, or emits more than 1 ton of lead or 10 tons of PM ₁₀ , PM _{2.5} , SO _x , NO _x CO, or VOCs in any calendar year. All facilities that are a Title V Major Source as defined at 20.2.70.7.R NMAC, are subject to Emissions Inventory Reporting.
20.2.74 NMAC	Permits – Prevention of Significant Deterioration (PSD)	No	Facility	This facility is a stationary source not listed in Table I of this Part which emits or has the potential to emit stack emissions less than 250 tpy of any regulated pollutant. This facility is a PSD Synthetic Minor source.
20.2.75 NMAC	Construction Permit Fees	Yes	Facility	TV: No, in accordance with 20.2.75.11.E an annual NSR enforcement and compliance fee shall not apply to sources subject to 20.2.71 NMAC.

<u>STATE REGU- LATIONS CITATION</u>	Title	Applies? Enter Yes or No	Unit(s) or Facility	JUSTIFICATION:
20.2.77 NMAC	New Source Performance	Yes	Units subject to 40 CFR 60	This is a stationary source which is subject to the requirements of 40 CFR Part 60.
20.2.78 NMAC	Emission Standards for HAPS	No	Units Subject to 40 CFR 61	Under normal operation, this facility will not emit hazardous air pollutants which are subject to the requirements of 40 CFR Part 61. In the case of asbestos demolition, Subpart M would apply.
20.2.79 NMAC	Permits – Nonattainment Areas	No	Facility	This regulation does not apply as this facility is located in an attainment area.
20.2.80 NMAC	Stack Heights	No	N/A	This regulation does not apply to any stacks at the facility.
20.2.82 NMAC	MACT Standards for source categories of HAPS	Yes	44	This regulation applies to all sources emitting hazardous air pollutants, which are subject to the requirements of 40 CFR Part 63, specifically Subpart ZZZZ with this submittal.

Table for Applicable FEDERAL REGULATIONS:

<u>FEDERAL REGU- LATIONS CITATION</u>	Title	Applies? Enter Yes or No	Unit(s) or Facility	JUSTIFICATION:
40 CFR 50	NAAQS	Yes	Facility	This applies if you are subject to 20.2.70, 20.2.72, 20.2.74, and/or 20.2.79 NMAC.
NSPS 40 CFR 60, Subpart A	General Provisions	Yes	Units subject to 40 CFR 60	Applies if any other Subpart in 40 CFR 60 applies.
NSPS 40 CFR60.40a, Subpart Da	Subpart Da, Performance Standards for Electric Utility Steam Generating Units	No	N/A	Not applicable as there are no electric utility steam generating units at this facility.
NSPS 40 CFR60.40b Subpart Db	Electric Utility Steam Generating Units	No	N/A	Not applicable as there are no electric utility steam generating units at this facility.
40 CFR 60.40c, Subpart Dc	Standards of Performance for Small Industrial- Commercial- Institutional Steam Generating Units	Yes	37	Dc applies to unit 37. The unit heats one medium (oil) to heat another medium (Amine) thus it meets the definition of a steam generator under this subpart.

FEDERAL REGU- LATIONS CITATION	Title	Applies? Enter Yes or No	Unit(s) or Facility	JUSTIFICATION:
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	Not applicable as there are no storage tanks included with this project.
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	Not applicable as there are no storage tanks included with this project.
NSPS 40 CFR 60.330 Subpart GG	Stationary Gas Turbines	No	N/A	Not applicable as there are no turbines at the facility.
NSPS 40 CFR 60, Subpart KKK	Leaks of VOC from Onshore Gas Plants	Yes	Units FUG, 23, 24, 25 and 26 in VOC or Wet Gas Service	<p>Affected Facility with Leaks of VOC from Onshore Gas Plants. Any affected facility under paragraph (a) of this section that commences construction, reconstruction, or modification after January 20, 1984, is subject to the requirements of this subpart. The group of all equipment (each pump, pressure relief device, open-ended valve or line, valve, compressor, and flange or other connector that is in VOC service or in wet gas service, and any device or system required by this subpart) except compressors (defined in § 60.631) within a process unit is an affected facility. A compressor station, dehydration unit, sweetening unit, underground storage tank, field gas gathering system, or liquefied natural gas unit is covered by this subpart if it is located at an onshore natural gas processing plant. If the unit is not located at the plant site, then it is exempt from the provisions of this subpart.</p> <p>As certified by the permittee, Units FUG, 23, 24, 25, and 26 are affected facilities under 60.630 (a) of this section that commenced construction, reconstruction, or modification after January 20, 1984 and on or before August 23, 2011 and are in VOC wet gas service.</p> <p><u>Flares 17, 18, and 19-</u> Flare 17 is both a direct control for the Amine Unit Still Vents and back-up control for the AGI wells. Flares 18 and 19 are inlet flares for emergency. Per May 8, 2019 email from the Environmental Manager with Durango Midstream LLC, these three flares do not have applicability under KKK. Regardless of KKK applicability, the flares will have a general flare condition under Section A206.</p> <p><u>Skids 23, 24</u> are subject as applicable units.</p> <p><u>Electric Compressors 25, 26</u> are subject.</p> <p><u>Not applicable:</u> Unit AU-constructed 1964, so not covered. Units AU T3, AU T4-constructed 2014, not covered. (see discussion below under</p>

FEDERAL REGU- LATIONS CITATION	Title	Applies? Enter Yes or No	Unit(s) or Facility	JUSTIFICATION:
				subpart OOOO)
NSPS 40 CFR Part 60 Subpart LLL	Standards of Performance for Onshore Natural Gas Processing: SO ₂ Emissions	No	N/A	Pursuant to §60.640(e), the provisions of this subpart do not apply to sweetening facilities producing acid gas that is completely re-injected into oil-or-gas bearing geological strata or otherwise not released to the atmosphere.
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	<p>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.</p> <p><u>Units 30-C to 35-C</u> compressors were constructed 2014 and are subject. <u>Units 39 and 40</u> (cryogenic skids) were constructed 2013/2014 and are subject as describe and defined below: Per 60.5365(f) The group of all equipment, except compressors, within a process unit is an affected facility. 60.5430 Process unit means components assembled for the extraction of natural gas liquids from field gas, the fractionation of the liquids into natural gas products, or other operations associated with the processing of natural gas products. A process unit can operate independently if supplied with sufficient feed or raw materials and sufficient storage facilities for the products. <u>Amine Units- AU T3, AU T4</u> were constructed 2014. However, they not subject: Per 60.5365(g)(4) a sweetening facility producing acid gas that is completely reinjected into the oil-or-gas-bearing geologic strata or that is otherwise not released to the atmosphere are not subject to 60.5405 through 60.5407, 60.5410(g), 60.5415(g), and 60.5423 of this subpart. <u>Flares 17, 18, and 19</u>– are not subject since they are not used as controls for any subpart OOOO affected units.</p> <p>The new equipment components related to the capacity expansion project were installed after the September 18, 2015 applicability date for NSPS OOOOa. There is no equipment subject to this standard for which construction, modification, or reconstruction commenced after August 23,2011 and before September 18, 2015. This regulation does not apply.</p>
NSPS 40 CFR Part 60 Subpart OOOOa	Standards of Performance for Crude Oil and Natural Gas Facilities for which Construction, Modification or Reconstruction Commenced After September 18, 2015	Yes	FUG	The new equipment fugitive components related to the new engine will be installed after the September 18, 2015 applicability date for NSPS OOOOa. This equipment is subject to NSPS OOOOa.
NSPS 40 CFR 60 Subpart IIII	Standards of performance for Stationary Compression Ignition Internal Combustion Engines	No	N/A	This facility does not have any stationary compression ignition internal combustion engines. Additionally, this project does not include any compression ignition internal combustion engines. This regulation does not apply.

FEDERAL REGU- LATIONS CITATION	Title	Applies? Enter Yes or No	Unit(s) or Facility	JUSTIFICATION:
NSPS 40 CFR Part 60 Subpart JJJJ	Standards of Performance for Stationary Spark Ignition Internal Combustion Engines	Yes	44, Engines 30-35	<p><u>Unit 44</u> constructed with this project was manufactured after June 12, 2006 and installed in 2020. This engine is subject to NSPS JJJJ.</p> <p>The application reports for <u>Units 30, 31, 32, 33, 34, and 35</u> construction dates of 2014 and manufacturer dates of 2011 to 2012.</p> <p><u>Units 30 and 31</u> are lean burn 3550 hp engines.</p> <p><u>Units 32-35</u> are lean burn 1380 hp engines.</p> <p><u>Engines 30-35</u> are subject per 60.4230(a)(4)(i)</p> <p>Per 60.4233(e) engines 30-35 are subject to emission standards in Table 1.</p> <p><u>Units 20 and 21</u> report construction dates before 2006 and so are not subject per 60.4230(a)(4).</p>
NSPS 40 CFR 60 Subpart TTTT	Standards of Performance for Greenhouse Gas Emissions for Electric Generating Units	No	N/A	Not applicable. This facility does not have electric generating units.
NSPS 40 CFR 60 Subpart UUUU	Emissions Guidelines for Greenhouse Gas Emissions and Compliance Times for Electric Utility Generating Units	No	N/A	Not applicable. This facility does not have electric generating units.
NSPS 40 CFR 60, Subparts WWW, XXX, Cc, and Cf	Standards of performance for Municipal Solid Waste (MSW) Landfills	No	N/A	Not applicable. This facility is not a municipal solid waste landfill.
NESHAP 40 CFR 61 Subpart A	General Provisions	No	Units Subject to 40 CFR 61	Applies if any other Subpart in 40 CFR 61 applies.
NESHAP 40 CFR 61 Subpart E	National Emission Standards for Mercury	No	N/A	The provisions of this subpart are applicable to those stationary sources which process mercury ore to recover mercury, use mercury chlor-alkali cells to produce chlorine gas and alkali metal hydroxide, and incinerate or dry wastewater treatment plant sludge
NESHAP 40 CFR 61 Subpart V	National Emission Standards for Equipment Leaks (Fugitive Emission Sources)	No	N/A	Not applicable as the facility equipment does not operate in VHAP service. 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.
MACT 40 CFR 63, Subpart A	General Provisions	Yes	Units Subject to 40 CFR 63	Applies if any other Subpart in 40 CFR 63 applies.
MACT 40 CFR 63.760 Subpart HH	Oil and Natural Gas Production Facilities	No	N/A	This facility does not contain the affected sources. This regulation does not apply.

FEDERAL REGU- LATIONS CITATION	Title	Applies? Enter Yes or No	Unit(s) or Facility	JUSTIFICATION:
MACT 40 CFR 63 Subpart HHH		No	N/A	This subpart applies to owners and operators of natural gas transmission and storage facilities that transport or store natural gas prior to entering the pipeline to a local distribution company or to a final end user (if there is no local distribution company), and that are major sources of hazardous air pollutants (HAP) emissions as defined in §63.1271. This facility is not a natural gas transmission or storage facility. This regulation does not apply.
MACT 40 CFR 63 Subpart DDDDD	National Emission Standards for Hazardous Air Pollutants for Major Industrial, Commercial, and Institutional Boilers & Process Heaters	No	N/A	This facility does not contain the affected sources. This regulation does not apply.
MACT 40 CFR 63 Subpart UUUUU	National Emission Standards for Hazardous Air Pollutants Coal & Oil Fire Electric Utility Steam Generating Unit	No	N/A	This facility does not contain the affected sources. This regulation does not apply.
MACT 40 CFR 63 Subpart ZZZZ	National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (RICE MACT)	Yes	44, 20, 21, 30- 35	<p>As defined at 63.6585(b) and 63.6675, this facility is an area source of HAPs</p> <p><u>Units 20 and 21</u>-Per 63.6590 (a)(1)(iii) Units 20 (Constr. 2001, 495 hp, 4SLB), and 21 (Constr. 2001, 495 hp, 4SLB) are ‘existing’ units subject to the rule for area sources.</p> <p><u>Units 30, 31, 32, 33, 34, and 35</u> The application reports construction dates of 2014 and manufacturer dates of 2011 to 2012.</p> <p>Units 30 and 31 are lean burn 3550 hp engines</p> <p>Units 32-35 are lean burn 1380 hp engines.</p> <p>Per 63.6590(a)(2)(iii) Units 30-35 and 44 are new units.</p> <p>Per 63.6590(c)(1) Units 30-35 and 44 meet the requirements of MACT ZZZZ by meeting NSPS JJJJ.</p>
40 CFR 64	Compliance Assurance Monitoring	No.	N/A	<p>The amine units AU (trains 1 & 2), AU-T3, AU-T4 <u>still vents</u> will be controlled with an acid gas flare (Unit 17) and AGI W, AGI W2, with flash tank emissions being routed back into the process.</p> <p>The amine units have potential uncontrolled emission rates greater than 100 tpy.</p> <p>Note: <u>Still vent emissions from Amine Units</u> are subject. However, flash tank emissions are not subject to CAM since re-routing of emissions back to the process is not a control device per 64.1. Permit conditions are required to ensure flash tank emissions are controlled and control devices are inspected.</p> <p>Applicant states in Section 13, applicability:</p> <p>Operating Permit P123R2 requires compliance with §60.18(e), including monitoring continuously for the presence of a pilot flame for Unit 17 (Acid Gas Flare). Compliance with 40 CFR 60.18 shall constitute compliance with 40 CFR 64 for this unit. Also, Units AU 1-4 would be major sources in themselves, albeit for federally enforceable controls. These units and the associated controls are subject to this part.</p> <p>Applicant states in Section 10: The acid gas from the still overhead is sent to the</p>

<u>FEDERAL REGU- LATIONS CITATION</u>	Title	Applies? Enter Yes or No	Unit(s) or Facility	JUSTIFICATION:
				Acid Gas Injection (AGI) and Flare System. The AGI system consists of two redundant electric driven compression trains for sequestration via two injection wells at the site. Typical emissions from the AGI system are fugitive only under normal operation. Under upset conditions, when the compression trains or wells are not operational, the acid gas from the still overhead is sent to the AGI flare.
40 CFR 68	Chemical Accident Prevention	Yes	Facility	This facility is a stationary source that has more than a threshold quantity of a regulated substance in a process, as determined under 40 CFR 68.115.
Title IV – Acid Rain 40 CFR 72	Acid Rain	No	N/A	Not applicable as this facility is not an acid rain source.
Title IV – Acid Rain 40 CFR 73	Sulfur Dioxide Allowance Emissions	No	N/A	Not applicable as this facility is not an acid rain source.
Title IV-Acid Rain 40 CFR 75	Continuous Emissions Monitoring	No	N/A	Not applicable as this facility is not an acid rain source.
Title IV – Acid Rain 40 CFR 76	Acid Rain Nitrogen Oxides Emission Reduction Program	No	N/A	Not applicable as this facility is not an acid rain source.
Title VI – 40 CFR 82	Protection of Stratospheric Ozone	No	N/A	Not applicable. Facility does not “service, maintain, or repair” class I or class II appliances nor “disposes” of the appliances.

Section 14

Operational Plan to Mitigate Emissions

(Submitting under 20.2.70, 20.2.72, 20.2.74 NMAC)

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

Startup and shutdown procedures are performed according to guidelines, which dictate proper procedural sequence to minimize emissions from the facility during such activities.

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

Section 15

Alternative Operating Scenarios

(Submitting under 20.2.70, 20.2.72, 20.2.74 NMAC)

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

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

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

There are no alternative operating scenarios at Maljamar Gas Plant as Frontier Services, LLC understands the term.

Section 16

Air Dispersion Modeling

- 1) Minor Source Construction (20.2.72 NMAC) and Prevention of Significant Deterioration (PSD) (20.2.74 NMAC) ambient impact analysis (modeling): Provide an ambient impact analysis as required at 20.2.72.203.A(4) and/or 20.2.74.303 NMAC and as outlined in the Air Quality Bureau's Dispersion Modeling Guidelines found on the Planning Section's modeling website. If air dispersion modeling has been waived for one or more pollutants, attach the AQB Modeling Section modeling waiver approval documentation.
- 2) SSM Modeling: Applicants must conduct dispersion modeling for the total short term emissions during routine or predictable startup, shutdown, or maintenance (SSM) using realistic worst case scenarios following guidance from the Air Quality Bureau's dispersion modeling section. Refer to "Guidance for Submittal of Startup, Shutdown, Maintenance Emissions in Permit Applications (http://www.env.nm.gov/aqb/permit/app_form.html) for more detailed instructions on SSM emissions modeling requirements.
- 3) Title V (20.2.70 NMAC) ambient impact analysis: Title V applications must specify the construction permit and/or Title V Permit number(s) for which air quality dispersion modeling was last approved. Facilities that have only a Title V permit, such as landfills and air curtain incinerators, are subject to the same modeling required for preconstruction permits required by 20.2.72 and 20.2.74 NMAC.

What is the purpose of this application?	Enter an X for each purpose that applies
New PSD major source or PSD major modification (20.2.74 NMAC). See #1 above.	
New Minor Source or significant permit revision under 20.2.72 NMAC (20.2.72.219.D NMAC). See #1 above. Note: Neither modeling nor a modeling waiver is required for VOC emissions.	
Reporting existing pollutants that were not previously reported.	
Reporting existing pollutants where the ambient impact is being addressed for the first time.	
Title V application (new, renewal , significant, or minor modification. 20.2.70 NMAC). See #3 above.	X – NSR Permit 0319-M12 (latest approved modeling files)
Relocation (20.2.72.202.B.4 or 72.202.D.3.c NMAC)	
Minor Source Technical Permit Revision 20.2.72.219.B.1.d.vi NMAC for like-kind unit replacements.	
Other: i.e. SSM modeling. See #2 above.	
This application does not require modeling since this is a No Permit Required (NPR) application.	
This application does not require modeling since this is a Notice of Intent (NOI) application (20.2.73 NMAC).	
This application does not require modeling according to 20.2.70.7.E(11), 20.2.72.203.A(4), 20.2.74.303, 20.2.79.109.D NMAC and in accordance with the Air Quality Bureau's Modeling Guidelines.	

Check each box that applies:

- ☐ See attached, approved modeling **waiver for all** pollutants from the facility.
- ☐ See attached, approved modeling **waiver for some** pollutants from the facility.
- ☐ Attached in Universal Application Form 4 (UA4) is a **modeling report for all** pollutants from the facility.
- ☐ Attached in UA4 is a **modeling report for some** pollutants from the facility.
- ☒ No modeling is required.

Section 17

Compliance Test History

(Submitting under 20.2.70, 20.2.72, 20.2.74 NMAC)

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

Compliance Test History Table

Unit No.	Serial	4Q2022 Test Date	Annual JJJJ Test Date	2Q2023 Test Date
20	2054-2S	11/11/2022	2/6/2023	5/8/2023
21	17970	11/11/2022	2/6/2023	5/8/2023
30	BKE0614	11/11/2022	1/10/2023	5/8/2023
31	BKE0618	11/11/2022	1/10/2023	5/8/2023
32	JEF01437	11/11/2022	1/11/2023	5/9/2023
33	JEF01821	11/11/2022	1/11/2023	5/9/2023
34	JEF01818	11/11/2022	1/12/2023	5/9/2023
35	JEF01797	11/11/2022	1/12/2023	5/9/2023

These were all quarterly monitoring events conducted with a portable analyzer. Each test demonstrated compliance with applicable emission limits.

Section 19

Requirements for Title V Program

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

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

**Frontier Field Services LLC / Maljamar Gas Plant
CAM Plan for Amine Treater Controlled by Acid Gas Injection and Flare**

A. Background

(1) Emissions Unit

Description:	Amine Still Vents
Identification:	AU, AU T3, AU T4
Facility:	Maljamar Gas Processing Plant

(2) Applicable Regulation, Emission Limit, and Pre-CAM Monitoring Requirements

Regulation:	Amine unit control requirements and pph and tpy emission limits in Table 106.A.
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(3) Controls

Controls:	Primary Control is Acid Gas Injection System (redundant compression and two injection wells)
Bypass:	Secondary control is Acid Gas Flare 17.

Potential post-control device emissions: 100% controlled, emission rate = 0 tpy for all pollutants from acid gas injection. 98% control of VOC and H₂S for the acid gas flare.

Table C108.B(1): Monitoring Approach: Maljamar Gas Processing Plant Acid Gas Flare

	Indicator No. 1	Indicator No. 2	Indicator No. 3
I. Indicator	Presence of combustion in the flare.	Presence of Visible Emissions	Totalized flow volume of gas combusted by the flare
Measurement Approach	The presence of combustion in the flare shall be monitored by a well-maintained alarm that signals non-combustion of gas.	The flare should be monitored for visible emissions according to Condition A206.B	Gas flow rate shall be measured continuously with a flow meter, and the volume shall be totalized once every 24hr period.
II. Indicator Range	Flame present (sensed) or no flame present (sensed).	Visible emissions present or not present, in accordance with	Gas flow rate should be within the operating velocities specified in 40 CFR 60.18(b)(3)
III. Performance Criteria			
A. Data Representativeness	Destruction depends upon the presence of a flame. If the flame is not present, VOCs and H ₂ S are not being destroyed.	Efficient combustion is assumed if no visible emissions are observed.	Efficient combustion is assumed if flow rates are within the operating velocities specified in 40 CFR 60.18(b)(3)
B. QA/QC Practices and Criteria	Operators record the date and result of maintenance and repairs made to the flare pilot light monitoring equipment .	Visible emissions to be determined in accordance with Condition A206.B	Verification shall be according to 40 CFR 60.18(b)(3)
C. Monitoring Frequency	The alarm system shall be tested two times per year by turning off the thermocouples and recording the time required for the alarm to respond.	Monitor for visible emissions in accordance with Condition A206.B.	Continuous gas flow monitoring with totalized flow rate measured once per 24 hr period
	Presence of the flare pilot flame shall be verified once per 24-hour period.		
D. Data Collection Procedures	Records shall be maintained of inspection and maintenance to the flare pilot flame, monitoring equipment, and records of the absence of pilot flame.	Records shall be maintained of all visible emissions observations	Record totalized flow volume once per each 24 hr period (scf/day)
E. Averaging Period	Not applicable.	Not applicable.	24 hours

**Table C108.B(2): Monitoring Approach: Maljamar Gas Processing Plant
Acid Gas Injection (AGI)**

	Indicator No. 1	Indicator No. 2
I. Indicator	Monitor pressure (psig) at the acid gas compressors and acid gas well head.	Total flow volume of gas sent to AGI compression system.
II. Indicator Range	10-2900 psig	Absence of gas flow to the AGI compression system indicates
III. Performance Criteria A. Data Representativeness	An excursion is if the difference in pressure at the compressors and at the well head are not positive and if the pressure psigs are outside of the indicator range limits.	If no gas flow is detectible, then gas is not being routed to its primary control.
B. QA/QC Practices and Criteria	Pressure transducer shall be calibrated on an annual basis.	Combustion gas flow meters shall be calibrated on an annual basis.
C. Monitoring Frequency	Gas pressures shall be monitored continuously.	Continuous gas flow monitoring with totalized flow rate measured once per 24 hr period
D. Data Collection Procedures	Record gas pressures daily.	Record totalized flow volume once per each 24 hr period (scf/day)
E. Averaging Period	N/A	Daily total gas flow to AGI compression system (scf/d)

C. Response to Excursion

Excursions of the AGI compressor injection pressure or flare system that monitors the presence of combustion or visual emissions will trigger an inspection, corrective action, and reporting. Maintenance personnel will inspect the compressor, injection well, or acid gas flare within 24 hours and make needed repairs or adjustments as soon as practicable.

Monitoring Approach Justification

I. Background

The amine still can generate greater than 100 tpy of H₂S, which has a NMAAQS and is regulated pursuant to CAA 111. Gases from the amine still vent (water, H₂S, VOC, CO₂) are routed to the AGI compression system or acid gas flare for destruction or injection. These units serve as control devices for the amine still vent.

Under CAM, the AGI and/or acid gas flare are pollutant-specific control devices for H₂S. Thus, CAM only applies to the devices as a control for H₂S.

II. Rationale for Selection of Performance Indicators

The destruction of H₂S is dependent upon combustion of process gas at the flare and/or proper operation of the AGI compression system. The monitoring approach for the acid gas flare is based on three primary indicators: presence of combustion at the flare; presence or absence of visible emissions; and compliance with measurement of process gas flow volume to ensure that the flare capacity is not exceeded. The monitoring approach for the AGI is based on two primary indicators: injection pressure and measurement of process gas flow volume.

III. Rationale for Selection of Indicator Ranges

Maintaining the AGI injection pressure in the ranges specified will indicate proper operation of the injection well for acid gas injection.

In accordance with 40 CFR 60.18, flares should be designed for and operated with no visible emissions, as determined by the methodology in this subpart.

In the case of ensuring proper operation of the flare, the presence of a flame to initiate or maintain combustion has only two states: a flame is present, or a flame is not present. By design, a well-maintained thermocouple-based alarm system will indicate accurately the state of combustion.

The operation of the flare as a control device is validated by adhering to the maximum tip velocity specifications identified in 40 CFR 60.18. Measurement of totalized flow volume will determine if the volumetric flow is in line with the design specifications, and compliance with 60.18 V_{max} (the maximum flare tip velocity) will ensure a H₂S destruction efficiency of 98%.

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

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

A compliance matrix detailing each of the requirements of NSR P123-R3 has been prepared and associated activities implemented. Please refer to the table below, which provides each actionable requirement, a description of how it is monitored, how recordkeeping is maintained, and associated reporting obligations for each detail.

<u>Unit</u>	<u>Requirement</u>	<u>Monitoring</u>	<u>Recordkeeping</u>	<u>Reporting</u>
Acid Gas Injection System	Monitor the pressure into the AGI well to ensure proper injection of the acid gas stream.	AGI Pressure monitored through Plant DCS.	Plant DCS/Historian	Not applicable
Acid Gas Injection System	Install, maintain, and operate AGI well with redundant compressors	Compressors are installed. Operations are monitored through the Plant DCS.	Plant DCS	Not applicable
Acid Gas Injection System	At all times, except during scheduled maintenance of a single compressor, the redundant compressor shall be available to inject gas into the AGI well.	Compressors are installed. Operations are monitored through the Plant DCS.	Plant DCS	Not applicable
Acid Gas Injection System	At all times a compression train shall be available to accept the entire acid gas stream during maintenance or failure of the operating compressor.	Compressors are installed. Operations are monitored through the Plant DCS.	Plant DCS	Not applicable
Acid Gas Injection System	Maintain a positive pressure differential between the Acid Gas Compressor discharge and the well head.	AGI Pressure monitored through Plant DCS. A check valve (unidirectional valve) prevents gas sent to the AGI well from moving backwards to compression.	Plant DCS	Not applicable
Acid Gas Injection System	Inspect and maintain the AGI Well	Scheduled Maintenance Work Orders	Scheduled Maintenance Work Orders	Not applicable
Acid Gas Injection System	The AGI compressors shall be maintained and inspected in accordance with the manufacturer's recommendations.	Scheduled Maintenance Work Orders	Scheduled Maintenance Work Orders	Not applicable
Amine System	Acid Gas Flare is to be used only during an upset of the AGI system.	The Plant DCS records times and conditions when gas is routed to acid gas flare. Cygnet records flare volumes.	Plant DCS/Historian, Cygnet, Enviance	Excess Emission Event Reporting, Air Emissions Inventory
Amine System	Amine unit and associated equipment must achieve a continuous and permanent daily rolling annual average of 100% control efficiency in reducing SO ₂ Emissions.	The facility is designed to extract and reinject SO ₂ from the inlet gas stream.	Post-amine system gas analysis, Plant DCS/Historian	Excess Emission Event Reporting, Air Emissions Inventory

Amine System	Inspect amine units and associated control equipment to ensure they are controlling as required and operated in accordance with manufacturers operating procedures.	Operations are monitored continuously through the Plant DCS and operator's daily inspections.	Plant DCS, Scheduled Maintenance Work Orders	Not applicable
Amine System	Total sulfur extended gas analysis to measure mercaptans	An extended gas analysis using ASTM D5504 is run monthly.	Retain Gas Analyses	Not applicable
Compressors	Compressor rod packing changeouts must be completed every 3 years for units subject to OOOOa.	Compressor overhauls are managed through Scheduled Maintenance Work Orders. These are set on a 3-year cycle.	Scheduled Maintenance Work Orders	OOOOa Reporting to EPA
Emissions Limits	Facility is limited to 0.2 TPY VOC SSM (Acid Gas Flare), 9.4 TPY VOC SSM (Low Pressure Inlet Flare), and 11.8 TPY VOC SSM (High Pressure Inlet Flare).	Plant DCS, Cygnet	Plant DCS, Cygnet, Enviance	Not applicable
Emissions Limits	Facility is limited to 10 TPY VOC Malfunction Limit.	Plant DCS, Cygnet	Plant DCS, Cygnet, Enviance	Not applicable
Engines	All lean burn engines must have oxidation catalyst	Pre-Startup Safety review, Engine Testing Reports	Engine Testing Reports	Not applicable
Engines	Maintain Units in accordance with manufacturers recommended maintenance including replacement of oxygen sensors in unit with oxygen based controllers.	Scheduled Maintenance Work Orders	Scheduled Maintenance Work Orders	Not applicable
Engines	Initial compliance tests shall be conducted within sixty days after the units achieve the maximum normal production rate.	Startup date, Engine Testing Reports	Startup date, Engine Testing Reports	Not applicable
Engines	PEA Testing required quarterly. JJJJ can be used to satisfy one quarterly.	Stack testing schedule, Engine Testing Reports	Engine Testing Reports	Not applicable
Facility	Daily Throughput Limit 165 MMSCFD	Cygnet	Cygnet	Not applicable
Facility	Inlet Extended Analysis	Inlet Extended Gas Analysis	Inlet Extended Gas Analysis	Not applicable
Facility	Fuel Sulfur levels must not be greater than 5 gr/100 scf.	The gas sulfur content at the amine treatment outlet (source of fuel gas) is continuously monitored to ensure natural gas will meet delivery specifications.	Plant DCS	Not applicable
Flares	Flares must be operated with a flame present at all time and no visible emissions. Continuously monitor presence of a flare pilot flame using a thermocouple or an equivalent device.	Pilot light presence and flaring are continuously monitored through the Plant DCS.	Plant DCS/Historian	Not applicable
Flares	Method 22 visible emission monitoring event to demonstrate compliance with the no visible emission standard.	A Method 22 Test is conducted annually.	Method 22 Test Report	Not applicable

Flares	Inspect to ensure flare is operating in accordance with manufacturers specification. Document name of person performing inspection, results of all equipment inspected and any maintenance or repairs needed for the flares to be compliant. Maintain a copy of the manufacturer's recommendations.	Operator Routine Duties include a daily visual inspection of the flare equipment. In combination with the Plant DCS continuous monitoring and Scheduled Maintenance Work Orders, this ensures proper operation.	Scheduled Maintenance Work Orders	Not applicable
Flares	Continuously monitor the flare flow rate. Pilot, purge, and assist gas should be monitored using a gas flow meter or determined using manufacturers specifications or engineering estimates.	Flare gas meters continuously record gas volumes.	Cygnat, Plant DCS/Historian	Excess Emission Event Reporting, Air Emissions Inventory
Flares	Perform a flare gas analysis to include H ₂ S, Total Sulfur, VOC, and Heating Value.	Flare Gas Analyses are completed annually.	Gas Analysis	Not applicable
Flares	Flow meters and in flow monitors (spectrometer, H ₂ S analyzers, etc) shall be calibrated in accordance with manufacturers specifications.	Flow meters and instrumentation are maintained per the Scheduled Maintenance Work Orders.	Scheduled Maintenance Work Orders	Not applicable
Heaters	Inspection shall meet those recommended by the manufacturer. At a minimum inspection shall include the following: Check indicators to verify oxygen levels are sufficient for combustion (i.e. blue colored steady flame). Inspection of unit housing for cracks or worn parts.	Facility operations are monitored daily through Operator Routine Duties and Plant DCS. Any issues are documented, and repairs tracked through the Scheduled Maintenance Work Orders.	Scheduled Maintenance Work Orders	Not applicable

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

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

Frontier Field Services, LLC will continue to be in compliance with requirements for which it is in compliance at the time of permit application. Frontier Field Services, LLC will comply with other applicable requirements as they come into effect during the permit term.

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

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

Frontier Field Services, LLC proposes annual submission of compliance aligned with the permit approval date.

19.5 - Stratospheric Ozone and Climate Protection

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

1. Does your facility have any air conditioners or refrigeration equipment that uses CFCs, HCFCs or other ozone-depleting substances? ☐ Yes ☒ No
 2. Does any air conditioner(s) or any piece(s) of refrigeration equipment contain a refrigeration charge greater than 50 lbs? ☐ Yes ☒ No
(If the answer is yes, describe the type of equipment and how many units are at the facility.)
 3. Do your facility personnel maintain, service, repair, or dispose of any motor vehicle air conditioners (MVACs) or appliances ("appliance" and "MVAC" as defined at 82. 152)? ☐ Yes ☒ No
 4. Cite and describe which Title VI requirements are applicable to your facility (i.e. 40 CFR Part 82, Subpart A through G.) N/A
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19.6 - Compliance Plan and Schedule

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

A. Description of Compliance Status: (20.2.70.300.D.11.a NMAC)

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

There are no sources at the Maljamar Gas Plant that are not in compliance with the requirements.

B. Compliance plan: (20.2.70.300.D.11.B NMAC)

A narrative description of the means by which your facility will achieve compliance with applicable requirements with which it is not in compliance at the time you submit your permit application package.

There are no sources at the Maljamar Gas Plant that are not in compliance with the requirements.

C. Compliance schedule: (20.2.70.300D.11.c NMAC)

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

There are no sources at the Maljamar Gas Plant that are not in compliance with the requirements.

D. Schedule of Certified Progress Reports: (20.2.70.300.D.11.d NMAC)

A proposed schedule for submission to the department of certified progress reports must also be included in the compliance schedule. The proposed schedule must call for these reports to be submitted at least every six (6) months.

There are no sources at the Maljamar Gas Plant that are not in compliance with the requirements.

E. Acid Rain Sources: (20.2.70.300.D.11.e NMAC)

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

NOTE: The Acid Rain program has additional forms. See 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**.

The Dagger Draw Gas Plant is not an acid rain source.

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

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

The RMP was last submitted to EPA 03/21/2022.

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

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

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

NOT APPLICABLE

19.9 - Responsible Official

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

Darin B. Kennard
Vice President & General Manager

Durango Midstream LLC
10077 Grogans Mill Road – Suite 300
The Woodlands, Texas 77380

Direct: (346) 351-2790
Mobile: (832) 388-8338
Email: DKennard@durangomidstream.com
DurangoMidstream.com

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 provided.

Section 22: Certification

Company Name: Frontier Field Services, LLC

I, Darin B. Kennard, 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 _____, 2023, upon my oath or affirmation, before a notary of the State of

New Mexico.

*Signature

Date

Darin B. Kennard
Printed Name

Vice President and General Manager
Title

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

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

_____ day of _____, _____.

Notary's Signature

Date

Notary's Printed Name

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