

800 E. Sonterra Blvd., Suite 400 San Antonio, Texas 78258-3941 210-403-7300 210-403-7500 (Fax)

February 28, 2019

via Federal Express

Dr. Kirby Olson Major Source Program Manager New Mexico Environment Department Air Quality Bureau Permits Section 525 Camino de los Marquez, Suite 1 Santa Fe, New Mexico 87505-1816

### Subject: Application for Renewal of Title V Operating Permit No. P153-R3M1 Transwestern Pipeline Company, LLC Mountainair Compressor Station (Station No. 7) Agency Interest No. 1569

Dear Dr. Olson:

Transwestern Pipeline Company, LLC (Transwestern) is submitting, per 20.2.70.300.B(2) NMAC, the enclosed application for the renewal of its Title V operating permit for Mountainair Compressor Station (Station No. 7), which is located in Torrance County, New Mexico. The current operating permit for this facility is Permit No. P153-R3M1.

No physical changes have been made at the station since the current permit was issued. However, Transwestern is requesting that one change be made in the permit. Specifically, Transwestern requests that the performance testing frequency for the station's generator engines, Units 721 and 722, be reduced from quarterly to annually to be consistent with the requirements for the compressor engines, since no rules requiring quarterly testing are applicable to the engines. No other changes to the permit are requested. In addition, since no physical changes or changes to allowable emission limits are requested, neither modeling nor a modeling waiver is required to be submitted with this application, per New Mexico Environment Department guidance.

Enclosed are two copies of the permit application and two compact disks with electronic copies of the relevant files pertaining to the application. If you need additional information or have any questions, please contact me at 210-572-0504 or via e-mail at karl.huston@energytransfer.com. Thank you for your consideration of this application.

Sincerely,

Kail Huston

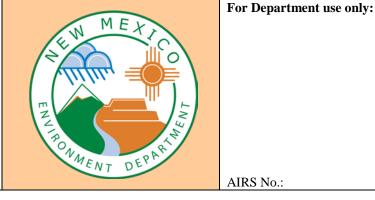
Karl Huston Environmental Permit Specialist Transwestern Pipeline Company, LLC

Enclosures

## **Mail Application To:**

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

Phone: (505) 476-4300 Fax: (505) 476-4375 www.env.nm.gov/aqb



AIRS No.:

# **Universal Air Quality Permit Application**

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

Use this application for: the initial application, modifications, technical revisions, and renewals. For technical revisions, complete Sections, 1-A, 1-B, 2-E, 3, 9 and any other sections that are relevant to the requested action; coordination with the Air Quality Bureau permit staff prior to submittal is encouraged to clarify submittal requirements and to determine if more or less than these sections of the application are needed. Use this application for streamline permits as well. For NOI applications, submit the entire UA1, UA2, and UA3 applications on a single CD (no copies are needed). For NOIs, hard copies of UA1, Tables 2A, 2D & 2F, Section 3 and the signed Certification Page are required.

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). □ Not Constructed □ Existing Permitted (or NOI) Facility □ Existing Non-permitted (or NOI) Facility Construction Status: 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 □ minor modification to a PSD source PSD Major Source: 
PSD major source (new) □ a PSD major modification

## **Acknowledgements:**

 $\sqrt{I}$  acknowledge that a pre-application meeting is available to me upon request.  $\sqrt{V}$  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).

 $\Box$  Check No.: (N/A) in the amount of (N/A)

 $\sqrt{I}$  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. □ This facility qualifies to receive assistance from the Small Business Environmental Assistance program (SBEAP) and qualifies for 50% of the normal application and permit fees. Enclosed is a check for 50% of the normal application fee which will be verified with the Small Business Certification Form for your company.

□ This facility qualifies to receive assistance from the Small Business Environmental Assistance Program (SBEAP) but does not qualify for 50% of the normal application and permit fees. To see if you qualify for SBEAP assistance and for the small business certification form go to https://www.env.nm.gov/aqb/sbap/small\_business\_criteria.html ).

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

# Section 1 – Facility Information

Sec	tion 1-A: Company Information	AI # if known (see 1 <sup>st</sup> 3 to 5 #s of permit IDEA ID No.): 1569	<mark>Updating</mark> Permit/NOI #: P153-R3M1		
1	Facility Name: Mountainair Compressor Station (Station No. 7)	Plant primary SIC Code (4 digits): 4922			
I		Plant NAIC code (6 digits): 486210			
a	Facility Street Address (If no facility street address, provide directions from head south on Hwy. 55 for 11.7 miles. Hwy. 55 turns left (east) at this poin road, which is gravel, and follow the main gravel road for 10.8 miles to co	nt and County Road goes			
2	Plant Operator Company Name: Transwestern Pipeline Company, LLC	Phone/Fax: 575-625-80	022/505-627-8172		
a	Plant Operator Address: 6381 Main Street, Roswell, NM 88201				

b	Plant Operator's New Mexico Corporate ID or Tax ID: 74-1294795 (Tax 1	ID)
3	Plant Owner(s) name(s): Transwestern Pipeline Company, LLC	Phone/Fax: 575-625-8022/505-627-8172
а	Plant Owner(s) Mailing Address(s): 6381 Main Street, Roswell, NM 8820	1
4	Bill To (Company): Transwestern Pipeline Company, LLC	Phone/Fax: 575-625-8022/505-627-8172
а	Mailing Address: 6381 Main Street, Roswell, NM 88201	E-mail: Larry.Campbell@energytransfer.com
5	√ Preparer: Karl Huston, Energy Transfer □ Consultant:	Phone/Fax: 210-572-0504/210-572-0504
a	Mailing Address: 800 East Sonterra Blvd., San Antonio, TX 78258	E-mail: Karl.Huston@energytransfer.com
6	Plant Operator Contact: Kyle Eddy	Phone/Fax: 505-847-2513
a	Address: PO Box 190, Mountainair, NM 87036	E-mail: kyle.eddy@energytransfer.com
7	Air Permit Contact: Larry Campbell	Title: Senior Environmental Specialist
a	E-mail: Larry.Campbell@energytransfer.com	Phone/Fax: 575-625-8022/505-627-8172
b	Mailing Address: Transwestern Pipeline Company, LLC, 6381 Main Stree	t, Roswell, NM 88201

## Section 1-B: Current Facility Status

1.a	Has this facility already been constructed? $\checkmark$ Yes $\Box$ No	1.b If yes to question 1.a, is it currently operating in New Mexico? $\sqrt{\text{Yes}} \square \text{No}$					
2	If yes to question 1.a, was the existing facility subject to a Notice of Intent (NOI) (20.2.73 NMAC) before submittal of this application? □ Yes √No	If yes to question 1.a, was the existing facility subject to a construction permit (20.2.72 NMAC) before submittal of this application? □ Yes √No					
3	Is the facility currently shut down? $\Box$ Yes $\sqrt{No}$	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 s	since 1972? √Yes □No					
5	If Yes to question 3, has this facility been modified (see 20.2.72.7.P NMAC) or the capacity increased since $\frac{8}{31}/1972$ ?						
6	Does this facility have a Title V operating permit (20.2.70 NMAC)? $\sqrt{\text{Yes } \Box \text{ No}}$	If yes, the permit No. is: P153-R3M1					
7	Has this facility been issued a No Permit Required (NPR)? $\Box$ Yes $\sqrt{No}$	If yes, the NPR No. is: N/A					
8	Has this facility been issued a Notice of Intent (NOI)? $\Box$ Yes $\sqrt{NO}$	If yes, the NOI No. is: N/A					
9	Does this facility have a construction permit (20.2.72/20.2.74 NMAC)? $\Box$ Yes $\sqrt{No}$	If yes, the permit No. is: N/A					
10	Is this facility registered under a General permit (GCP-1, GCP-2, etc.)? $\Box$ Yes $\sqrt{No}$	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	Hourly:         31.25 MMscf (MMscf – million standard cubic feet)         Daily		Daily: 750 MMscf	Annually: 273.75 Bscf (Bscf – billion standard cubic feet)					
b	Proposed	Hourly: 31.25 MMscf	Daily: 750 MMscf	Annually: 273.75 Bscf					
2	What is the	facility's maximum production rate, sp	pecify units (reference here and list capacities in	Section 20, if more room is required)					
a	Current	Hourly: 31.25 MMscf	Daily: 750 MMscf	Annually: 273.75 Bscf					
b	Proposed	Hourly: 31.25 MMscf	Daily: 750 MMscf	Annually: 273.75 Bscf					

## Section 1-D: Facility Location Information

1	Section: 3	Range: 6E	Township: 1-N	County: Torrance	Elevation (ft): 6,320					
2	UTM Zone: [	$\Box 12 \text{ or } \sqrt{13}$		Datum: √NAD 27 □NAD 8	33 □ WGS 84					
a	UTM E (in mete	rs, to nearest 10 meter	s): 380,700 m	UTM N (in meters, to nearest 10 meters):	3,800,570 m					
b	AND Latitude	(deg., min., sec.):	34° 20' 29.0"	Longitude (deg., min., sec.): -106°	17' 51.3"					
3	Name and zip of	code of nearest Ne	ew Mexico town: Mountair	nair, NM 87036						
4	Detailed Driving Instructions from nearest NM town (attach a road map if necessary): From Mountainair, NM, head south on Hwy 55 for 11.7 miles. Hwy. 55 turns left (east) at this point and the county road goes straight. Take the county road, which is gravel, and follow the main gravel road for 10.8 miles to the Compressor Station.									
5	The facility is	The facility is 12 (distance) miles south-southwest (direction) of Mountainair, NM (nearest town).								
6	Status of land a	at facility (check o	one): 🗸 Private 🛛 Indian/Pu	eblo □ Federal BLM □ Federal For	est Service   Other (specify)					
7			bes, and counties within a t be constructed or operated	en (10) mile radius (20.2.72.203.B.2 : None	NMAC) of the property on					
8	than 50 km (31	miles) to other st	ates, Bernalillo County, or	ich the facility is proposed to be cons a Class I area (see <u>www.env.nm.gov/aqb/</u> corresponding distances in kilometers	(modeling/class1areas.html)?					
9	Name nearest (	Class I area: Bose	ue del Apache National W	ildlife Refuge						
10	Shortest distant	ce (in km) from fa	acility boundary to the boundary	ndary of the nearest Class I area (to the	e nearest 10 meters): 80.47 km					
11				ions (AO is defined as the plant site in est residence, school or occupied struct						
12	<b>"Restricted A</b> continuous wal that would requ	lands, including mining overburden removal areas) to nearest residence, school or occupied structure: Approx. 4,828 meters         Method(s) used to delineate the Restricted Area: Continuous fencing         "Restricted Area" is an area to which public entry is effectively precluded. Effective barriers include continuous fencing, continuous walls, or other continuous barriers approved by the Department, such as rugged physical terrain with steep grade that would require special equipment to traverse. If a large property is completely enclosed by fencing, a restricted area within the property may be identified with signage only. Public roads cannot be part of a Restricted Area.								
13	Does the owne $\Box$ Yes $\sqrt{NG}$ A portable stat: one location or	r/operator intend to o ionary source is n that can be re-ins	to operate this source as a p ot a mobile source, such as talled at various locations,	oortable stationary source as defined i an automobile, but a source that can such as a hot mix asphalt plant that is	n 20.2.72.7.X NMAC? be installed permanently at s moved to different job sites.					
14			unction with other air regul nit number (if known) of th	ated parties on the same property? ne other facility? N/A	🖾 No 🗌 Yes					

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

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

## Section 1-F: Other Facility Information

1 Are there any current Notice of Violations (NOV), compliance orders, or any other compliance or enforcement issues related to this facility?  $\Box$  Yes  $\sqrt{No}$  If yes, specify:

а	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 c	or 1a above? 🗆 Yes	No If Y	es, provide the 1c & 1d info below:
с	Document Title: N/A	Date: N/A	-	nent # (or nd paragraph #): N/A
d	Provide the required text to be inserted in this permit: $N/A$			
2	Is air quality dispersion modeling or modeling waiver bein	g submitted with this	applicatio	n? □Yes √No
3	Does this facility require an "Air Toxics" permit under 20.	2.72.400 NMAC & 20	0.2.72.502	, Tables A and/or B? $\Box$ Yes $\sqrt{No}$
4	Will this facility be a source of federal Hazardous Air Poll	utants (HAP)? √Yes	□ No	
a	If Yes, what type of source? $\sqrt{\text{Major}}$ ( $\Box \ge 10$ tpy of an $\Box$ Minor ( $\Box < 10$ tpy of an $\Box$			tpy of any combination of HAPS) 5 tpy of any combination of HAPS)
5	Is any unit exempt under 20.2.72.202.B.3 NMAC? □ Yes	s √No		
	If yes, include the name of company providing commercial	l electric power to the	facility: _	
а	Commercial power is purchased from a commercial utility site for the sole purpose of the user.	company, which spe	cifically d	loes not include power generated on

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

□ I have filled out Section 18, "Addendum for Streamline Applications."  $\Box$  N/A (This is not a Streamline application.)

# **Section 1-H:** Current Title V Information - Required for all applications from TV Sources (Title V-source required information for all applications submitted pursuant to 20.2.72 NMAC (Minor Construction Permits), or

· ·		-	
20.2.74/20.2.79 NMAC (Majo	or PSD/NNSR applications), and/or	20.2.70 NMAC (Title V))	)

1	Responsible Official (R.O.) (20.2.70.300.D.2 NMAC): Clint Green		Phone: 713-989-7447				
а	R.O. Title: Vice President of Operations	R.O. e-mail: clint.g	green@energytransfer.com				
b	R. O. Address: 600 N Marienfeld St, Suite 700, Midland, TX 7970	1					
2	Alternate Responsible Official (20.2.70.300.D.2 NMAC): Dave Roybal		Phone: 575-347-6514				
а	A. R.O. Title: Director of Operations	A. R.O. e-mail: day	vid.roybal@energytransfer.com				
b	A. R. O. Address: 8501 Jefferson NE, Albuquerque, NM 87113						
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): None						
4	Name of Parent Company ("Parent Company" means the primary r permitted wholly or in part.): Energy Transfer	name of the organiza	tion that owns the company to be				
а	Address of Parent Company: 800 East Sonterra Blvd, San Antonio	, TX 78258					
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.): None						
6	Telephone numbers & names of the owners' agents and site contac Kyle Eddy: 505-847-2513	ts familiar with plan	t operations:				
7	Affected Programs to include Other States, local air pollution contribution Will the property on which the facility is proposed to be constructed states, local pollution control programs, and Indian tribes and pueb which ones and provide the distances in kilometers: Bernalillo Courapproximately 43 kilometers	d or operated be clo los (20.2.70.402.A.2	ser than 80 km (50 miles) from other and 20.2.70.7.B)? <b>Yes.</b> If yes, state				

## **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:

- 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 does not need to be 2-hole punched, but must be double sided. 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 on compact disk(s) (CD). For 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.
- 4) If air dispersion modeling is required by the application type, include the NMED Modeling Waiver OR one additional electronic copy of the air dispersion modeling including the input and output files. The dispersion modeling <u>summary report</u> <u>only</u> should be submitted as hard copy(ies) unless otherwise indicated by the Bureau. The complete dispersion modeling study, including all input/output files, should be submitted electronically as part of the electronic submittal.
- 5) If 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.

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

- 1) All required electronic documents shall be submitted in duplicate (2 separate CDs). 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 with the number of additional hard copies corresponding to the number of CD copies required. 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 3 electronic files (2 MSWord docs: Universal Application section 1 and Universal Application section 3-19) and 1 Excel file of the tables (Universal Application section 2) on the CD(s). 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 # (0 for original, 1, 2, etc.; which will help keep track of subsequent partial update(s) to the original submittal. The footer information should not be modified by the applicant.

## **Table of Contents**

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

## Table 2-A: Regulated Emission Sources

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

Unit Number <sup>1</sup>	Source Description	Make	Model #	Serial #	Manufact- urer's Rated Capacity <sup>3</sup> (Specify Units)	Requested Permitted Capacity <sup>3</sup> (Specify Units)	Date of Manufacture <sup>2</sup> Date of Construction/ Reconstruction <sup>2</sup>	Controlled by Unit # Emissions vented to Stack #	Source Classi- fication Code (SCC)	For Each Piece of Equipment, Check One	RICE Ignition Type (CI, SI, 4SLB, 4SRB, 2SLB) <sup>4</sup>	Replacing Unit No.
701	Compressor engine	Cooper- Bessemer	LSV16S G	6184	4,500 hp	4,500 hp	1960	None	20200- 254	√ Existing (unchanged)       □ To be Removed         □ New/Additional       □ Replacement Unit         □ To Be Modified       □ To be Replaced	SI, 4SLB	N/A
702	Compressor engine	Cooper- Bessemer	LSV16S G	6187	4,500 hp	4,500 hp	1960	None	20200- 254	✓ Existing (unchanged)       □ To be Removed         □ New/Additional       □ Replacement Unit         □ To be Modified       □ To be Replaced	SI, 4SLB	N/A
703	Compressor engine	Cooper- Bessemer	LSV16S G	7028	4,500 hp	4,500 hp	1967	None	20200- 254	<ul> <li>✓ Existing (unchanged)</li> <li>□ To be Removed</li> <li>□ New/Additional</li> <li>□ Replacement Unit</li> <li>□ To Be Modified</li> <li>□ To be Replaced</li> </ul>	SI, 4SLB	N/A
721	Generator engine	Ingersoll- Rand	PSVG6	6BPSC279	335 hp	335 hp	1960	None	20200- 253	✓ Existing (unchanged)       □ To be Removed         □ New/Additional       □ Replacement Unit         □ To Be Modified       □ To be Replaced	SI, 4SRB	N/A
722	Generator engine	Ingersoll- Rand	PSVG6	6BPSC278	335 hp	335 hp	1960	None	20200- 253	<ul> <li>✓ Existing (unchanged)</li> <li>□ To be Removed</li> <li>□ New/Additional</li> <li>□ Replacement Unit</li> <li>□ To Be Modified</li> <li>□ To be Replaced</li> </ul>	SI, 4SRB	N/A
T-006	Pipeline condensate storage tank	Unknown	N/A	N/A	22,636 gallons	22,636 gallons	12/31/1985	None	250101- 0030	<ul> <li>√ Existing (unchanged)</li> <li>□ To be Removed</li> <li>□ New/Additional</li> <li>□ Replacement Unit</li> <li>□ To Be Modified</li> <li>□ To be Replaced</li> </ul>	N/A	N/A
FUG	Fugitive VOC emissions	Unknown	N/A	N/A	N/A	N/A	1960	None	30600- 811	<ul> <li>✓ Existing (unchanged)</li> <li>□ To be Removed</li> <li>□ New/Additional</li> <li>□ Replacement Unit</li> <li>□ To Be Modified</li> <li>□ To be Replaced</li> </ul>	N/A	N/A
MIST	Mist Extractor	Unknown	N/A	N/A	1,100 gallons	1,100 gallons	1985	None MIST	N/A	<ul> <li>√ Existing (unchanged)</li> <li>□ To be Removed</li> <li>□ New/Additional</li> <li>□ Replacement Unit</li> <li>□ To Be Modified</li> <li>□ To be Replaced</li> </ul>	N/A	N/A
SSM/M	Startup, Shutdown, & Maintenance, and Malfunction	N/A	N/A	N/A	N/A	N/A	N/A N/A	N/A N/A		<ul> <li>√ Existing (unchanged)</li> <li>□ To be Removed</li> <li>□ New/Additional</li> <li>□ Replacement Unit</li> <li>□ To Be Modified</li> <li>□ To be Replaced</li> </ul>	N/A	N/A
										Existing (unchanged)       To be Removed         New/Additional       Replacement Unit         To Be Modified       To be Replaced         Existing (unchanged)       To be Removed		
										New/Additional       Replacement Unit         To be Modified       To be Replaced         Existing (unchanged)       To be Removed		
										New/Additional     Replacement Unit       To Be Modified     To be Replaced       Existing (unchanged)     To be Removed		
										New/Additional       Replacement Unit         To Be Modified       To be Replaced         Existing (unchanged)       To be Removed		
										New/Additional       Replacement Unit         To Be Modified       To be Replaced		

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

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

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

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

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

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

Unit Number	Second Description	Manufacturer	Model No.	Max Capacity	List Specific 20.2.72.202 NMAC Exemption (e.g. 20.2.72.202.B.5)	Date of Manufacture /Reconstruction <sup>2</sup>	For Fosh Disso of Equipment Check One		
Unit Number	Source Description	Manufacturer	Serial No.	Capacity Units	Insignificant Activity citation (e.g. IA List Item #1.a)	Date of Installation /Construction <sup>2</sup>	For Each Piece of Equipment, Check Onc		
LOADING	Loading pipeline liquids into	N1/A	N/A	Unknown	List of Insignificant Activities	N/A	✓ Existing (unchanged) □ To be Removed ○ New/Additional □ Replacement Unit		
LUADING	tanker trucks	N/A	N/A		1.a.	N/A	New/Additional     Replacement Unit       To Be Modified     To be Replaced		
T-011	Oily westswater storage tenk	N/A	N/A	8,820	List of Insignificant Activities		<ul> <li>√ Existing (unchanged)</li> <li>□ To be Removed</li> <li>□ New/Additional</li> <li>□ Replacement Unit</li> </ul>		
1-011	Oily wastewater storage tank	N/A	N/A	N/A	1.a.	1996	□ To Be Modified □ To be Replaced		
<b>T</b> 012	<b>T 1 1 1 1 1 1 1</b>	<b>NT/A</b>	N/A	5,250	List of Insignificant Activities		✓ Existing (unchanged) □ To be Removed		
T-012	Lube oil storage tank	N/A	N/A	gallons	1.a.	1959	<ul> <li>New/Additional</li> <li>To Be Modified</li> <li>To be Replaced</li> </ul>		
<b>T</b> 012		<b>NT/A</b>	N/A	5,250	List of Insignificant Activities		✓ Existing (unchanged) □ To be Removed		
T-013	Lube oil storage tank	N/A	N/A	gallons	1.a.	1959	<ul> <li>New/Additional</li> <li>To Be Modified</li> <li>To be Replaced</li> </ul>		
<b>T</b> 014		27/4	N/A	2,500	List of Insignificant Activities		✓ Existing (unchanged) □ To be Removed		
T-014	Glycol storage tank	N/A	N/A	gallons	1.a.	1959	<ul> <li>New/Additional</li> <li>Replacement Unit</li> <li>To Be Modified</li> <li>To be Replaced</li> </ul>		
			N/A	5,880	List of Insignificant Activities		$$ Existing (unchanged) $\Box$ To be Removed		
T-015	Used oil storage tank	N/A	N/A	gallons	1.a.	1996	<ul> <li>New/Additional</li> <li>To Be Modified</li> <li>To be Replaced</li> </ul>		
			N/A	2,443	List of Insignificant Activities		$$ Existing (unchanged) $\square$ To be Removed		
T-016	Gear oil storage tank	Gear oil storage tank N/A	N/A	gallons	1.a.	1959	<ul> <li>New/Additional</li> <li>Replacement Unit</li> <li>To Be Modified</li> <li>To be Replaced</li> </ul>		
							□ Existing (unchanged) □ To be Removed		
							<ul> <li>New/Additional</li> <li>Replacement Unit</li> <li>To Be Modified</li> <li>To be Replaced</li> </ul>		
							□ Existing (unchanged) □ To be Removed		
							<ul> <li>New/Additional</li> <li>To Be Modified</li> <li>To be Replaced</li> </ul>		
							□ Existing (unchanged) □ To be Removed		
							<ul> <li>New/Additional</li> <li>Replacement Unit</li> <li>To Be Modified</li> <li>To be Replaced</li> </ul>		
							□ Existing (unchanged) □ To be Removed		
							<ul> <li>New/Additional</li> <li>To Be Modified</li> <li>To be Replaced</li> </ul>		
							□ Existing (unchanged) □ To be Removed		
							<ul> <li>New/Additional</li> <li>Replacement Unit</li> <li>To Be Modified</li> <li>To be Replaced</li> </ul>		
							□ Existing (unchanged) □ To be Removed		
							<ul> <li>New/Additional</li> <li>To Be Modified</li> <li>To be Replaced</li> </ul>		

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

<sup>2</sup> Specify date(s) required to determine regulatory applicability.

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

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

Control Equipment Unit No.	Control Equipment Description	Date Installed	Controlled Pollutant(s)	Controlling Emissions for Unit Number(s) <sup>1</sup>	Efficiency (% Control by Weight)	Method used to Estimate Efficiency
N/A	Oxidation catalyst	5/22/2013	Carbon monoxide (CO)	721	93%	Vendor Specification
N/A	Oxidation catalyst	5/22/2013	CO	722	93%	Vendor Specification
<sup>1</sup> List each con	trol device on a separate line. For each control device, list all en	nission units c	controlled by the control device.		-	

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

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

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

Lu:4 No	N	Ox	C	0	V	C	SC	Ox	TS	SP <sup>1</sup>	PM	[ <b>10</b> <sup>1</sup>	PM	2.5 <sup>1</sup>	Н	$_{2}S$	Le	ead
Unit No.	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr
701	165.3	724.2	16.5	72.4	9.91	43.5	0.021	0.091	0.35	1.54	0.35	1.54	0.35	1.54				
702	165.3	724.2	16.5	72.4	9.91	43.5	0.021	0.091	0.35	1.54	0.35	1.54	0.35	1.54				
703	165.3	724.2	16.5	72.4	9.91	43.5	0.021	0.091	0.35	1.54	0.35	1.54	0.35	1.54				
721	20.20	90.9	6.75	30.4	0.40	1.80	0.0015	0.0066	0.050	0.22	0.050	0.22	0.050	0.22				
722	20.20	)0.)	6.75	50.4	0.40	1.00	0.0015	0.0000	0.050	0.22	0.050	0.22	0.050	0.22				
T-006 <sup>2</sup>	-	-	-	-	6.22	27.20	-	-	-	-	-	-	-	-				
MIST <sup>2</sup>					0.22	27.20	-	-	-	-	-	-	-	-				
FUG	-	-	-	-	0.69	3.04	-	-	-	-	-	-	-	-				
SSM/M	-	-	-	-	N/A	10.0	-	-	-	-	-	-	-	-	-	-	-	-
Totals	516.1	2,263.5	56.3	247.6	37.0	172.5	0.06	0.28	1.10	4.84	1.10	4.84	1.10	4.84				

<sup>1</sup> Condensable Particulate Matter: Include condensable particulate matter emissions for PM10 and PM2.5 if the source is a combustion source. Do not include condensable particulate matter for TSP unless TSP is set equal to PM10 and PM2.5.

 $^{2}$  Emissions for the pipeline liquids tank (Unit No. T-006) and the mist extractor (Unit No. MIST) are aggregated into a collective total for both units.

## Table 2-E: Requested Allowable Emissions

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

Unit No.	N	Ox	C	0	V	DC	SC	Dx	TS	SP <sup>1</sup>	PM	[10 <sup>1</sup>	PM	2.5 <sup>1</sup>	Н	$_2S$	Le	ead
Unit No.	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr
701	165.3	724.19	16.5	72.40	9.91	43.5	0.072	0.32	0.35	1.54	0.35	1.54	0.35	1.54				
702	165.3	724.19	16.5	72.40	9.91	43.5	0.072	0.32	0.35	1.54	0.35	1.54	0.35	1.54				
703	165.34	724.19	16.5	72.40	9.91	43.5	0.072	0.32	0.35	1.54	0.35	1.54	0.35	1.54				
721	20.20	90.90	6.75	30.38	0.40	1.80	0.00515	0.023	0.050	0.22	0.050	0.22	0.050	0.22				
722	20.20	90.90	6.75	30.38	0.40	1.80	0.00515	0.023	0.050	0.22	0.050	0.22	0.050	0.22				
T-006 <sup>2</sup>	-	-	-	-	6.22	27.20	-	-	-	-	-	-	-	-				
MIST <sup>2</sup>					0.22	27.20	-	-	-	-	-	-	-	-				
FUG	-	-	-	-	0.69	3.04	-	-	-	-	-	-	-	-				
SSM/M	-	-	-	-	N/A	10.0	-	-	-	-	-	-	-	-	-	-	-	-
Totals	536.42	2,263.5	63.09	247.6	37.44	172.5	0.23	0.97	1.15	4.84	1.15	4.84	1.15	4.84				

<sup>1</sup>Condensable Particulate Matter: Include condensable particulate matter emissions for PM10 and PM2.5 if the source is a combustion source. Do not include condensable particulate matter for TSP unless TSP is set equal to PM10 and PM2.5.

<sup>2</sup> Emissions for the pipeline liquids tank (Unit No. T-006) and the mist extractor (Unit No. MIST) are aggregated into a collective total for both units.

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

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

All applications for facilities that have emissions during routine our predictable startup, shutdown or scheduled maintenance  $(SSM)^1$ , including NOI applications, must include in this table the Maximum Emissions during routine or predictable startup, shutdown and scheduled maintenance (20.2.7 NMAC, 20.2.72.203.A.3 NMAC, 20.2.73.200.D.2 NMAC). In Section 6 and 6a, provide emissions calculations for all SSM emissions reported in this table. Refer to "Guidance for Submittal of Startup, Shutdown, Maintenance Emissions in Permit Applications (https://www.emi.emissions.com/commit/applications.provide in this table. Refer to "Guidance for Submittal of Startup, Shutdown, Maintenance Emissions in Permit Applications (https://www.emi.emissions.com/commit/applications.provide in the stable in the

Unit No.	N	ov/aqb/per Ox	C	<b>CO</b>	VO	C	S	Ox	TS	$SP^2$	PM	<b>I10<sup>2</sup></b>	PM	$(2.5^2)$	Н	$I_2S$	Le	ead
Unit No.	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr
										1								
				1														
Totals																		

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

<sup>1</sup>Condensable Particulate Matter: Include condensable particulate matter emissions for PM10 and PM2.5 if the source is a combustion source. Do not include condensable particulate matter for TSP unless TSP is set equal to PM10 and PM2.5.

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

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

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

	Serving Unit	N	Ox	C	0	V	C	S	Ox	T	SP	PN	110	PM	12.5	$\Box$ H <sub>2</sub> S or	r 🗆 Lead
Stack No.	Number(s) from Table 2-A	lb/hr	ton/yr	lb/hr	ton/yr												
																	-
,	Totals:																

## **Table 2-H: Stack Exit Conditions**

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

Stack	Serving Unit Number(s)	Orientation (H-Horizontal	Rain Caps	Height Above	Temp.	Flow	v Rate	Moisture by	Velocity	Inside
Number	from Table 2-A	V=Vertical)	(Yes or No)	Ground (ft)	( <b>F</b> )	(acfs)	(dscfs)	Volume (%)	(ft/sec)	Diameter (ft)
701	701	V	No	44	875	476		0.0	151.5	2.0
702	702	V	No	44	875	476		0.0	151.5	2.0
703	703	V	No	44	875	476		0.0	151.5	2.0
721	721	V	No	27	1,000	76		0.0	96.8	1.0
722	722	V	No	27	1,000	76		0.0	96.8	1.0

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

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

	Unit No.(s)	Total		Formal	dehyde	Acetale √ HAP o	lehyde	Ben	zene	Acro √ HAP o			hanol or 🗆 TAP	Name	Pollutant e Here or 🗆 TAP	Name	Pollutant Here or 🗆 TAP	Name Here	Pollutant e D r D <b>TAP</b>
		lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr
701	701	2.44	10.69	1.86	8.15	0.29	1.29	0.020	0.070	0.18	0.79	0.088	0.39						
702	702	2.44	10.69	1.86	8.15	0.29	1.29	0.020	0.070	0.18	0.79	0.088	0.39						
703	703	2.44	10.69	1.86	8.15	0.29	1.29	0.020	0.070	0.18	0.79	0.088	0.39						
721	721	0.078	0.34	0.052	0.23	0.0070	0.030	0.0040	0.020	0.0070	0.030	0.0077	0.030						
722	722	0.078	0.54	0.052	0.25	0.0070	0.050	0.0040	0.020	0.0070	0.030	0.0077	0.050						
-																			
-																			
Tot	als:	7.39	32.4	5.63	24.7	0.88	3.90	0.06	0.23	0.55	2.40	0.27	1.20						

## Table 2-J: Fuel

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

	Fuel Type (low sulfur Diesel,	Fuel Source: purchased commercial, pipeline quality natural gas, residue		Specif	fy Units		
Unit No.	ultra low sulfur diesel, Natural Gas, Coal,)	gas, raw/field natural gas, resolute (e.g. SRU tail gas) or other	Lower Heating Value	Hourly Usage	Annual Usage	% Sulfur	% Ash
701	Natural Gas	Pipeline-quality natural gas	970 Btu/scf	34.53 Mscf	302.5 MMscf	Negligible	0.0
702	Natural Gas	Pipeline-quality natural gas	970 Btu/scf	34.53 Mscf	302.5 MMscf	Negligible	0.0
703	Natural Gas	Pipeline-quality natural gas	970 Btu/scf	34.53 Mscf	302.5 MMscf	Negligible	0.0
721	Natural Gas	Pipeline-quality natural gas	970 Btu/scf	2,463 Mscf	11.08 MMscf	Negligible	0.0
722	Natural Gas	Pipeline-quality natural gas	970 Btu/scf	2,463 Mscf	11.08 MMscf	Negligible	0.0

## Table 2-K: Liquid Data for Tanks Listed in Table 2-L

For each tank, list the liquid(s) to be stored in each tank. If it is expected that a tank may store a variety of hydrocarbon liquids, enter "mixed hydrocarbons" in the Composition column for that tank and enter the corresponding data of the most volatile liquid to be stored in the tank. If tank is to be used for storage of different materials, list all the materials in the "All Calculations" attachment, run the newest version of TANKS on each, and use the material with the highest emission rate to determine maximum uncontrolled and requested allowable emissions rate. The permit will specify the most volatile category of liquids that may be stored in each tank. Include appropriate tank-flashing modeling input data. Use additional sheets if necessary. Unit and stack numbering must correspond throughout the application package.

					Vapor	Average Stor	age Conditions	Max Storag	ge Conditions
Tank No.	SCC Code	Material Name	Composition	Liquid Density (lb/gal)	Molecular Weight (lb/lb*mol)	Temperature (°F)	True Vapor Pressure (psia)	Temperature (°F)	True Vapor Pressure (psia)
T-006	2501010030	Pipeline condensate	Mixed hydrocarbons	5.6	69	58.54	2.85	65.66	3.30
T-011		Oily wastewater	Water, small amount of engine oil	8.3	50	58.54	<0.1 mm Hg	65.66	<0.1 mm Hg
T-012		Lube oil	Engine lubricating oil	7.3	50	58.54	<0.1 mm Hg	65.66	<0.1 mm Hg
T-013		Lube oil	Engine lubricating oil	7.3	50	58.54	<0.1 mm Hg	65.66	<0.1 mm Hg
T-014		Glycol	Ethylene glycol	9.3	62.1	58.54	0.0050	65.66	0.0093
T-015		Used oil	Used engine oil	7.3	50	58.54	<0.1 mm Hg	65.66	<0.1 mm Hg
T-016		Gear oil	Gear oil	7.3	50	58.54	<0.1 mm Hg	65.66	<0.1 mm Hg
MIST		Waste Oils	Pipeline liquid mixed with compressor oils	5.6	85	67.08	3.50	80.8	4.43

## Table 2-L: Tank Data

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

Tank No.	Date Installed	Materials Stored		Roof Type (refer to Table 2-	Сар	acity	Diameter (M)	Vapor Space		blor ble VI-C)	Paint Condition (from Table	Annual Throughput	Turn- overs
			LR below)	LR below)	(bbl)	( <b>M</b> <sup>3</sup> )	(112)	(M)	Roof	Shell	VI-C)	(gal/yr)	(per year)
T-006	12/31/1985	Pipeline condensate	N/A	FX	539		4.72	Varies	WH	WH	Good	15,330	0.72
T-011	1996	Oily wastewater	N/A	FX	210		10	Varies	WH	WH	Good	Varies	Varies
T-012	1959	Lube oil	N/A	FX	125		1.83	Varies	WH	WH	Good	Varies	Varies
T-013	1959	Lube oil	N/A	FX	125		1.83	Varies	WH	WH	Good	Varies	Varies
T-014	1959	Glycol	N/A	FX	60		1.83	Varies	WH	WH	Good	15,000	6
T-015	1996	Used oil	N/A	FX	140		3.05	Varies	WH	WH	Good	Varies	Varies
T-016	1959	Gear oil	N/A	FX	58		1.83	Varies	WH	WH	Good	Varies	Varies
MIST	1985	Waste Oils	N/A	FX	26		0.9144	Varies	BL	BL	Good	500	13.90
							1						

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

Roof Type	Seal Type, We	elded Tank Seal Type	Seal Type, Rive	ted Tank Seal Type	Roof, Shell Color	Paint Condition
FX: Fixed Roof	Mechanical Shoe Seal	Liquid-mounted resilient seal	Vapor-mounted resilient seal	Seal Type	WH: White	Good
IF: Internal Floating Roof	A: Primary only	A: Primary only	A: Primary only	A: Mechanical shoe, primary only	AS: Aluminum (specular)	Poor
EF: External Floating Roof	B: Shoe-mounted secondary	B: Weather shield	B: Weather shield	B: Shoe-mounted secondary	AD: Aluminum (diffuse)	
P: Pressure	C: Rim-mounted secondary	C: Rim-mounted secondary	C: Rim-mounted secondary	C: Rim-mounted secondary	LG: Light Gray	
					MG: Medium Gray	
Note: $1.00 \text{ bbl} = 0.159 \text{ M}$	$1^3 = 42.0 \text{ gal}$				BL: Black	
					OT: Other (specify)	

	Materi	al Processed		Μ	laterial Produced		
Description	Chemical Composition	Phase (Gas, Liquid, or Solid)	Quantity (specify units)	Description	Chemical Composition	Phase	Quantity (specify units)
Pipeline-quality natural gas	Methane, ethane, nitrogen	Gas	Varies	Not applicable			

## Table 2-N: CEM Equipment

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

Stack No.	Pollutant(s)	Manufacturer	Model No.	Serial No.	Sample Frequency	Averaging Time	Range	Sensitivity	Accuracy

## Table 2-O: Parametric Emissions Measurement Equipment

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

Unit No.	Parameter/Pollutant Measured	Location of Measurement	Unit of Measure	Acceptable Range	Frequency of Maintenance	Nature of Maintenance	Method of Recording	Averaging Time

## Table 2-P: Greenhouse Gas Emissions

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

		CO <sub>2</sub> ton/yr	N <sub>2</sub> O ton/yr	CH <sub>4</sub> ton/yr	SF <sub>6</sub> ton/yr	<b>PFC/HFC</b> ton/yr <sup>2</sup>					<b>Total</b> <b>GHG</b> Mass Basis ton/yr <sup>4</sup>	<b>Total</b> <b>CO<sub>2</sub>e</b> ton/yr <sup>5</sup>
Unit No.	GWPs <sup>1</sup>	1	298	25	22,800	footnote 3						
721	mass GHG	18,046	0.034	0.34	0	0					18,046	
/21	CO <sub>2</sub> e	18,046	10.14	8.50	0	0						18,064
702	mass GHG	18,046	0.034	0.34	0	0					18,046	
	CO <sub>2</sub> e	18,046	10.14	8.50	0	0						18,064
703	mass GHG	18,046	0.034	0.34	0	0					18,046	
703	CO <sub>2</sub> e	18,046	10.14	8.50	0	0						18,064
	mass GHG	1,323	0.002	0.02	0	0					1,323	
722	CO <sub>2</sub> e	1,323	0.74	0.62	0	0						1,324
T-006	mass GHG	0	0	28.61	0	0					28.6	
1-000	CO <sub>2</sub> e	0	0	715.18	0	0						715.18
SSM/M	mass GHG	9.07	0	155.19	0	0					164.27	
221/1/1	CO <sub>2</sub> e	9.07	0	3,880	0	0						3,889
	mass GHG											
	CO <sub>2</sub> e											
	mass GHG											
	CO <sub>2</sub> e											
	mass GHG											
	CO <sub>2</sub> e											
	mass GHG											
	CO <sub>2</sub> e											
	mass GHG											
	CO <sub>2</sub> e											
	mass GHG											
	CO <sub>2</sub> e											
	mass GHG											
	CO <sub>2</sub> e											
	mass GHG											
	CO <sub>2</sub> e											
	mass GHG											
	CO2e											
T-4-1	mass GHG	55,470	0.10	184.8	0	0					55,653.9	
Total	CO <sub>2</sub> e	55,470	31.16	4,621	0	0						60,120.2

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

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

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

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

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

# Section 3

# **Application Summary**

The <u>Application Summary</u> 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).

**Routine or predictable emissions during Startup, Shutdown, and Maintenance (SSM):** 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.

#### Facility Description:

Transwestern Pipeline Company, LLC (TWP) owns and operates the Mountainair Compressor Station (Station No. 7), which is located in Torrance County, New Mexico. This facility is a natural gas compressor station with a Standard Industry Classification code of 4922. The station is equipped with three 4,500-horsepower (hp) Cooper-Bessemer LSV-16SG compressor engines and two 334-hp Ingersoll-Rand PSVG-6 generator engines. The compressor engines drive three Cooper Bessemer RGF24 compressors. The station is also equipped with miscellaneous equipment including a condensate tank and lube oil tanks, and various piping components provide sources of fugitive emissions. The two generator engines (Units 721 and 722) provide electric power to the station, as the station does not purchase electric power.

#### Type of Permit Application:

This permit application is for the renewal of the station's current New Mexico Environment Department (NMED)-issued Title V operating permit (Permit No. P153-R3M1), which expires on March 10, 2020. This application is submitted in accordance with 20.2.70.300.B.(2) NMAC. There have been no other air quality permits issued by NMED for Mountainair Compressor station under 20.2.72 NMAC, so this application is submitted as a straightforward renewal of the station's operating permit.

#### Proposed changes:

There have been no changes to the facility that have affected its operations since the current permit was issued. Since the last renewal of Operating Permit No. P153, a modification was made to the permit to increase the level of volatile organic compound (VOC) startup, shutdown, maintenance, and malfunction (SSM/M) emissions allowed under the permit to 10 tons per year (tpy), as allowed by NMED guidance. This modification was issued on September 16, 2016, as Permit No. P153-R3M1, and TWP requests that the VOC limit of 10 tpy be maintained with this renewal.

In this renewal, TWP proposes one change to the permit. Specifically, TWP requests that the frequency of required performance testing conducted for the generator engines, Units 721 and 722, be reduced from quarterly to annually. These engines are subject to 40 Code of Federal Regulations Part 63, Subpart ZZZZ, which required an initial performance test on each engine, but does not require routine subsequent testing. Therefore, TWP suggests that annual performance testing would be sufficient to demonstrate compliance with allowable emission limits for each engine. This proposed change is discussed further in Section 20.

Transwestern Pipeline Company, LLC

## Routine or predictable emissions during Startup, Shutdown, and Maintenance (SSM):

In this application, a quantity of SSM/M emissions, all as volatile organic compounds, has been included in the appropriate tables. This quantity is unchanged from the level specified in the permit modification issued as Permit No. P153-R3M1 on September 26, 2016. Predictable SSM emissions include emissions from pigging operations, compressor blowdowns, and planned facility shutdowns. Malfunction emissions include unplanned compressor blowdowns and emergency facility shutdowns. In addition, as indicated in Section 14 of this application, TWP has developed a plan to mitigate SSM emissions during startups, shutdowns, and emergencies, and a plan to minimize emissions during routine or predictable startups, shutdowns, and scheduled maintenance through work practices and good air pollution control practices; these plans are maintained at the site.

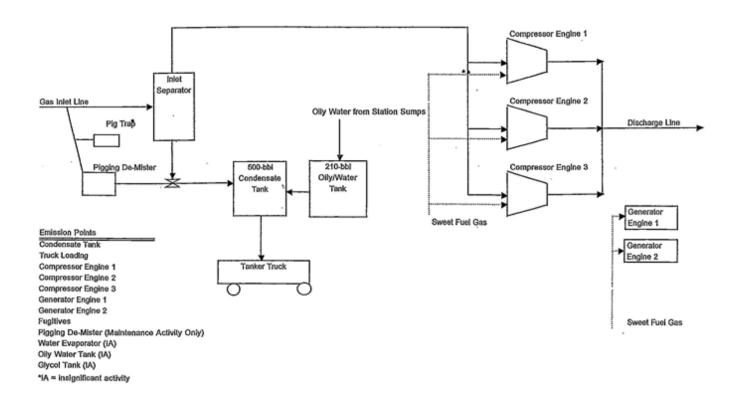
Note that all SSM/M emissions represented at the station are as VOC. All natural gas that is moved through or combusted at the station is pipeline-quality natural gas that is limited by a Federal Energy Regulatory Commission tariff to less than 0.25 grain of hydrogen sulfide ( $H_2S$ ) per 100 cubic feet of gas, which results in negligible emissions. A typical gas analysis, which is presented in Section 7, shows no presence of  $H_2S$ . Thus, uncontrolled venting, blowdown, or pigging emissions of  $H_2S$  are less than 0.1 pound per hour and less than 0.44 tpy.

# **Section 4**

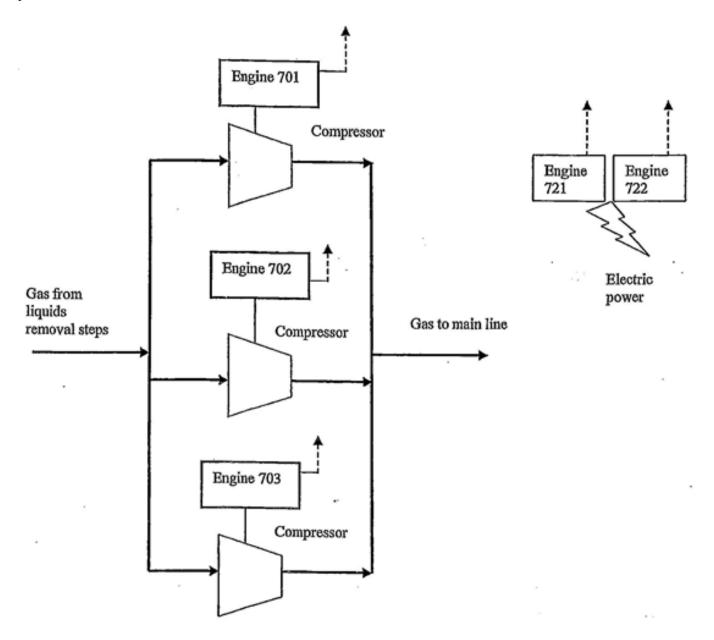
## **Process Flow Sheet**

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

A process flow diagram for the Mountainair Compressor Station is provided below. A more detailed diagram of the gas compressors that are located after the liquids removal equipment (i.e., inlet separator) is provided on the following page.



A process flow diagram for natural gas flowing through the Mountainair Compressor Station compressor engines following the removal of liquids is provided below, together with a depiction of the use of generator engines 721 and 722 to provide electric power to the station.



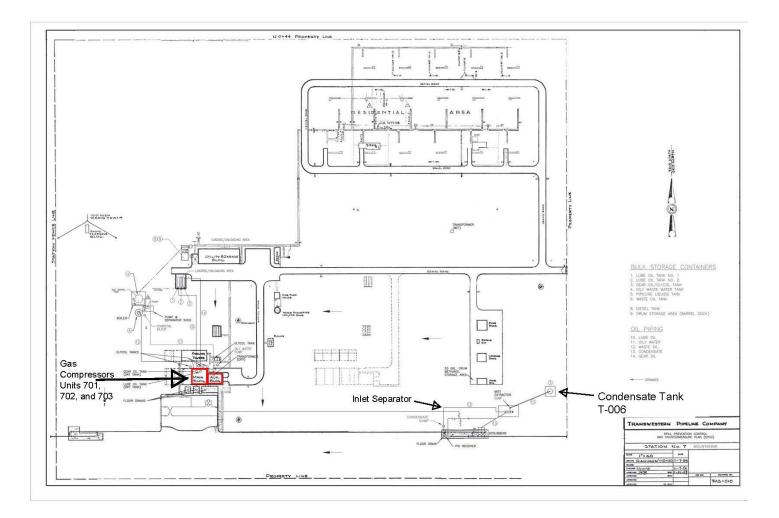
# **Section 5**

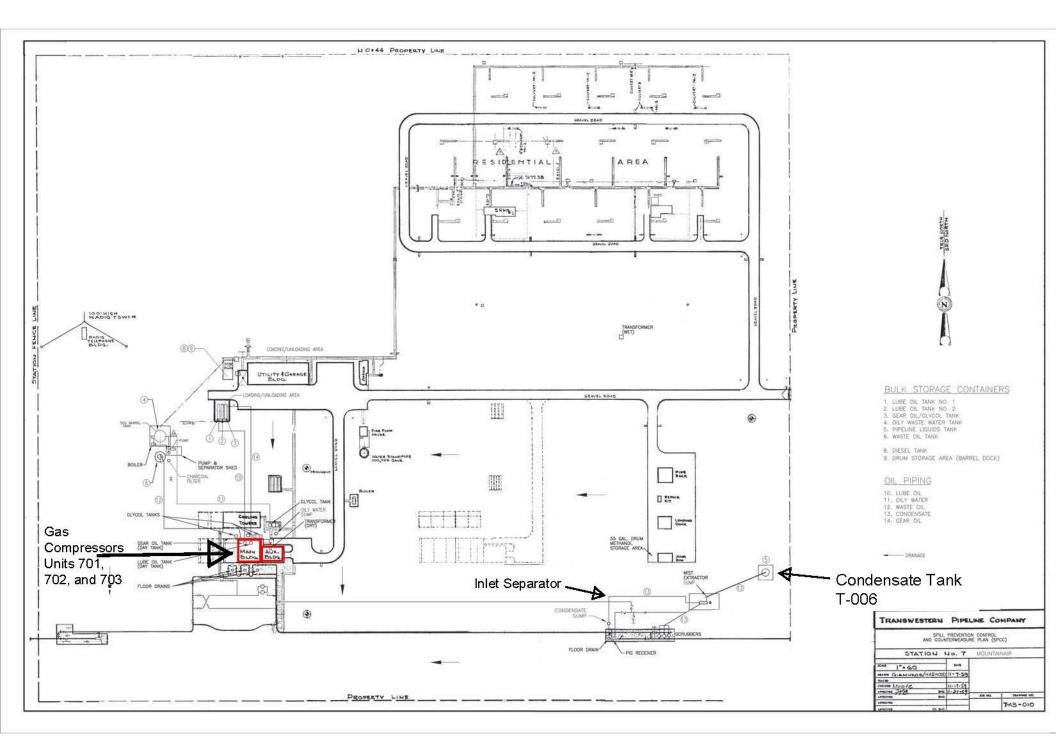
# **Plot Plan Drawn To Scale**

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

A plot plan drawn to scale is shown below. A larger version of this plot plan is included on the following page.

Mountainair Compressor Station





# **Section 6**

# **All Calculations**

<u>Show all calculations</u> 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 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

Transwestern Pipeline Company, LLC

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.

All calculations of emissions from Mountainair Compressor Station No. 7 are shown in the tables following Section 6a. A summary of emissions from the entire facility is also presented.

Emissions from the engines at the station are calculated in the same manner as in the most recent permit modification application submitted in support of Permit No. P153-R3M1. No changes to calculated emissions are presented. Emission factors for oxides of nitrogen, carbon monoxide, and volatile organic compounds (VOC) for the engines were derived from vendor data and modified to include a conservative safety factor. Emission factors for sulfur dioxide, particulate matter, and hazardous air pollutants were taken from U.S. Environmental Protection Agency (EPA) AP-42.

Note that Transwestern Pipeline Corporation does not take credit for the reduction in emissions achieved by the oxidation catalysts that were installed on Units 721 and 722, which are four-stroke, rich-burn generator engines. These control devices were installed to meet a requirement of 40 CFR 63 Subpart ZZZZ rather than to reduce emissions from levels currently specified under this permit.

As in previous permit applications for this station, tank-flashing emissions are calculated using the Vasquez-Beggs Gas/Oil Correlation Method; calculations are included in this section. The emissions are estimated using the maximum pipeline pressure expected at the station and assuming one barrel per day of pipeline condensate is collected. As very little condensate is collected along the pipeline, this assumption overestimates the amount of liquid that drops out at the station. The flashing emissions occur at the pipeline liquids tank when pressurized liquids from the pipeline are subjected to a reduction in pressure to atmospheric pressure (at the tank).

Startup, shutdown, maintenance (SSM), and malfunction (SSM/M) emissions calculations are included in the emissions calculations. As in the most recent permit modification application, TWP is requesting that the allowable SSM/M emissions at the station be maintained at 10 tons per year of VOC, as allowed by NMED guidance. Note that VOCs are the only regulated pollutants released as SSM/M emissions. Calculations of emissions from various types of SSM/M activities at the station that show the basis for the requested cap are presented in this section.

There are two categories of SSM emissions: blowdowns of gas for safety and operational reasons and gas released during pipeline pig runs that are conducted to clean the pipeline. The emission calculations in this application are based on a conservative number of release events in the two categories described above. The blowdown category consists of two subcategories: (1) compressor blowdowns and (2) complete station blowdowns of all gas-containing equipment. The latter type of release is called an "Emergency Shut Down" (ESD) even though some such releases are done for maintenance activities rather than for safety emergencies. Data presented for SSM emissions include the number of each type of event and the VOC emissions associated with them.

# Section 6.a

## **Green House Gas Emissions**

(Submitting under 20.2.70, 20.2.72 20.2.74 NMAC)

**Title V (20.2.70 NMAC), Minor NSR (20.2.72 NMAC), and PSD (20.2.74 NMAC)** applicants must estimate and report greenhouse gas (GHG) emissions to verify the emission rates reported in the public notice, determine applicability to 40 CFR 60 Subparts, and to evaluate Prevention of Significant Deterioration (PSD) applicability. GHG emissions that are subject to air permit regulations consist of the sum of an aggregate group of these six greenhouse gases: carbon dioxide (CO<sub>2</sub>), nitrous oxide (N<sub>2</sub>O), methane (CH<sub>4</sub>), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF<sub>6</sub>).

## **Calculating GHG Emissions:**

1. Calculate the ton per year (tpy) GHG mass emissions and GHG CO<sub>2</sub>e emissions from your facility.

**2.** GHG mass emissions are the sum of the total annual tons of greenhouse gases without adjusting with the global warming potentials (GWPs). GHG CO<sub>2</sub>e emissions are the sum of the mass emissions of each individual GHG multiplied by its GWP found in Table A-1 in 40 CFR 98 <u>Mandatory Greenhouse Gas Reporting</u>.

3. Emissions from routine or predictable start up, shut down, and maintenance must be included.

**4.** Report GHG mass and GHG CO<sub>2</sub>e emissions in Table 2-P of this application. Emissions are reported in <u>short</u> 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  $\Box$  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 <u>Mandatory Green House Gas Reporting</u> except that tons should be reported in short tons rather than in metric tons for the purpose of PSD applicability.

• API Compendium of Greenhouse Gas Emissions Methodologies for the Oil and Natural Gas Industry. August 2009 or most recent version.

• Sources listed on EPA's NSR Resources for Estimating GHG Emissions at http://www.epa.gov/nsr/clean-air-act-permitting-greenhouse-gases:

#### **Global Warming Potentials (GWP):**

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

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

#### Metric to Short Ton Conversion:

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

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

## SUMMARY OF MAXIMUM EMISSIONS

### Maximum Annual Emissions

Unit						Emis	ssions Summ	ary (ton	s/year)			
ID	Unit Description	NOx	СО	VOC	РМ	SO <sub>2</sub>	Acetaldehyde	Acrolein	Benzene	Formaldehyde	Methanol	HAPs
701	Cooper Bessemer LSV16SG	724.2	72.4	43.5	1.5	0.09	1.29	0.79	0.07	8.15	0.39	10.7
702	Cooper Bessemer LSV16SG	724.2	72.4	43.5	1.5	0.09	1.29	0.79	0.07	8.15	0.39	10.7
703	Cooper Bessemer LSV16SG	724.2	72.4	43.5	1.5	0.09	1.29	0.79	0.07	8.15	0.39	10.7
721/722	Ingersoll Rand PSVG-6	90.9	30.4	1.8	0.22	0.007	0.03	0.03	0.02	0.23	0.03	0.35
121/122	Ingersoll Rand PSVG-6	30.3	50.4	1.0	0.22	0.007	0.00	0.05	0.02	0.25	0.00	0.00
T-006	Condensate Storage Tank	-	-	27.2	-	-	-	-	-	-	-	0.00
LOADING	Truck Loading	-	-	0.022	-	-	-	-	-	-	-	0.00
FUG	Site Fugitives	-	-	3.04	-	-	-	-	-	-	-	0.00
	Startup, Shutdown,											
SSM/M	Maintenance, and Malfunction	-	-	10.0	-	-	-	-	-	-	-	0.00
	Total:	2,263.5	247.6	172.6	4.84	0.28	3.90	2.41	0.22	24.67	1.19	32.4

### **Maximum Hourly Emissions**

Unit						Emissi	ions Summa	ry (poun	ds/hour)			
ID	Unit Description	NOx	СО	VOC	РМ	SO <sub>2</sub>	Acetaldehyde	Acrolein	Benzene	Formaldehyde	Methanol	HAPs
701	Cooper Bessemer LSV16SG	165.3	16.5	9.9	0.35	0.021	0.29	0.18	0.015	1.86	0.088	2.44
702	Cooper Bessemer LSV16SG	165.3	16.5	9.9	0.35	0.021	0.29	0.18	0.015	1.86	0.088	2.44
703	Cooper Bessemer LSV16SG	165.3	16.5	9.9	0.35	0.021	0.29	0.18	0.015	1.86	0.088	2.44
721	Ingersoll Rand PSVG-6	20.2	6.8	0.40	0.049	0.0015	0.007	0.007	0.0040	0.052	0.0077	0.08
722	Ingersoll Rand PSVG-6	20.2	6.8	0.40	0.049	0.0015	0.007	0.007	0.0040	0.052	0.0077	0.08
T-006	Condensate Storage Tank	-	-	6.22	-	-	-	-	-	-	-	0.00
LOADING	Truck Loading	-	-	26.62	-	-	-	-	-	-	-	0.00
FUG	Site Fugitives	-	-	0.69	-	-	-	-	-	-	-	0.00
SSM/M	Startup, Shutdown, Maintenance, and Malfunction	-	-	-	-	-	-	-	-	-	-	0.00
	Total:	536.42	63.1	64.1	1.2	0.07	0.90	0.56	0.05	5.68	0.28	7.47

#### NATURAL GAS-FIRED PIPELINE COMPRESSOR ENGINE MAXIMUM EMISSIONS

#### Criteria Pollutants - Maximum Hourly and Annual Emissions

UNIT	RATED		TOTAL	Engine	Heat		EMISSION FACTORS/HOURLY EMISSIONS						ANNUAL EMISSIONS				
I.D.	HORSE-	ENGINE	ANNUAL	Fuel Use	Rate		(lb/hr)		(Ib/MM	lBtu)	(lb/	/hr)			(tons/year	)	
#	POWER	TYPE <sup>1,2</sup>	HOURS	(Btu/(hp-hr))	(MMBtu/yr)	NOx <sup>3</sup>	CO <sup>3</sup>	VOC <sup>3</sup>	PM10 <sup>4.5</sup>	SO2 <sup>6</sup>	PM10	SO2	NOx	СО	VOC	PM10	SO2
701	4,500	4SLB	8,760	7,827	308,540	165.34	16.53	9.909	0.009987	0.000588	0.3518	0.0207	724.19	72.40	43.5	1.54	0.091
702	4,500	4SLB	8,760	7,827	308,540	165.34	16.53	9.909	0.009987	0.000588	0.3518	0.0207	724.19	72.40	43.5	1.54	0.091
703	4,500	4SLB	8,760	7,827	308,540	165.34	16.53	9.909	0.009987	0.000588	0.3518	0.0207	724.19	72.40	43.5	1.54	0.091
721/722	335	4SRB	9,000	7,500	22,613	20.20	6.75	0.40	0.01941	0.000588	0.0488	0.00148	90.90	30.38	1.80	0.22	0.0066
												TOTAL:	2,263.5	247.6	132.3	4.84	0.28

#### Hazardous Air Pollutants Emission Factors (lb/MMBtu)<sup>7</sup>

Pollutant	4SLB	4SRB
Acetaldehyde	0.00836	0.00279
Acrolein	0.00514	0.00263
Benzene	0.00044	0.00158
Formaldehyde	0.05280	0.02050
Methanol	0.00250	0.00306
Total HAP	0.06924	0.03056

#### Hazardous Air Pollutant (HAP) Maximum Hourly Emissions (pounds/year)

UNIT I.D. #		HAPs								
	Acetaldehyde	Acrolein	Benzene	Formaldehyde	Methanol	Total HAP				
701	0.294	0.18	0.02	1.86	0.088	2.44				
702	0.294	0.18	0.02	1.86	0.088	2.44				
703	0.294	0.18	0.02	1.86	0.088	2.44				
721/722	0.007	0.007	0.004	0.052	0.008	0.08				
TOTAL:	0.89	0.55	0.05	5.63	0.27	7.39				

#### Hazardous Air Pollutant (HAP) Maximum Annual Emissions (tons/year)

UNIT I.D. #		HAPs								
	Acetaldehyde	Acrolein	Benzene	Formaldehyde	Methanol	Total HAP				
701	1.29	0.79	0.07	8.15	0.39	10.68				
702	1.29	0.79	0.07	8.15	0.39	10.68				
703	1.29	0.79	0.07	8.15	0.39	10.68				
721/722	0.03	0.03	0.02	0.23	0.03	0.35				
TOTAL:	3.90	2.41	0.22	24.67	1.19	32.39				

NOTES:

(1) Compressor engines 701, 702, and 703 are four-stroke, lean-burn (4SLB) Cooper-Bessemer model LSV16SG engines.

(2) Generator engines 721 and 722 are four-stroke, rich-burn (4SRB) Ingersoll-Rand model PSVG-6 engines.

(3) Emission Factors (lb/hr) for NOx, CO, and VOCs for all engines are from the current permit (P153R2) limits (unchanged from previous Operating Permit application).

(4) 100% of Total Outlet particulate is assumed to be PM10. Emission factors for PM10 for all engines are taken from AP-42, Section 3.2 (July 2000).

(5) Emission factors for PM10 for all engines are taken by adding the filterable and condensable PM factors from Tables 3.2-2 (for 4SLB engines) and Table 3.2-3 (for 4SRB engines).

(6) Emission factors for SO2 for all engines are taken from AP-42 Tables 3.2-2 (for 4SLB engines) and Table 3.2-3 (for 4SRB engines).

(7) Hazardous air pollutant emission factors (in lb/MMBtu) for all engines are from AP-42 Table 3.2-2 for the 4SLB engines and from Table 3.2-3 for 4SRB engines.

## VOC STORAGE TANK EMISSIONS

		Tank Volume	Throughput	VOC Em	nissions
Unit ID	Contents	(gal)	(gal/yr)	(pounds/year)	(ton/year)
T-006	Condensate	22,636	15,330	1,380.49	0.69
MIST	Condensate/Oils	1,100	15,330	658.93	0.33
T-014	Ethylene glycol	2,500	15,000	0.23	0.00012
			TOTAL:	2,039.65	1.02

Notes:

(1) Emissions were calculated using U.S. EPA TANKS 4.09d software.

(2) For calculation purposes, condensate and condensate/oils were both assumed to be gasoline with a Reid Vapor Pressure of 6.0 pounds per square inch.

## Company Name: TRANSWESTERN PIPELINE COMPANY, LLC Facility Name: Mountainair Compressor Station No. 7 Title V Renewal for Operating Permit No. P-153-R3M1

#### TANK FLASHING EMISSIONS

This calculation presents flashing emissions generated from pipeline liquids entering either the pipeline liquids tank or the mist extractor. Total emissions from the pipeline liquids tank and mist extractor are presented below the flashing emissions calculation. Volatile Organic Compound Emission Calculation for Flashing

#### Vasquez - Beggs Solution Gas/Oil Ratio Correlation Method

(For Estimating VOC Flashing Emissions, Using Stock Tank Gas-Oil Ratios For Crude Oil Facilities)

#### **INPUTS:**

Stock Tank API Gravity	58	API
Separator Pressure (psig)	1008	Р
Separator Temperature (°F)	70	Ti
Separator Gas Gravity at Initial Condition	1.18	SGi
Stock Tank Barrels of Oil per day (BOPD)	1.000	Q
Stock Tank Gas Molecular Weight	44	MW
Fraction VOC (C3+) of Stock Tank Gas	0.95	VOC
Atmospheric Pressure (psia)	14.7	Patm

16	>API>	58	°API
50	>P+Patm>	5250	(psia)
70	> Ti >	295	(° <b>F</b> )
0.56	>SGi>	1.18	(MW/28.97)
None	>Q >	None	(BOPD)
18	>MW>	125	(lb/lb-mole)
0.5	>Voc>	1.00	Fraction
20	> <b>R</b> s >	2070	(scf/STB)

#### SGx = Dissolved gas gravity at 100 psig = SGi [1.0+0.00005912\*API\*Ti\*Log(Pi/114.7)]

SGx = 1.45

#### Rs = $(C1 * SGx * Pi^C2) \exp((C3 * API) / (Ti + 460))$

Where:	Rs	Gas/Oil Ratio of liquid at pressure of interest						
	SGx	Dissolved gas gravity at 100 psig						
	Pi	Pressure of initial condition (psia)						
	API	API Gravity of liquid hydrocarbon at final condition						
	Ti	Temperature of initial condition (F)						
		Constants						
		°API Gravity						
	$^{\circ}\text{APTI} \rightarrow$	< 30	>= 30	Given °API				
	C1	0.0362	0.0178	0.0178				
	C2	1.0937	1.187	1.187				
	C3	25.724	23.931	23.931				
Rs =	1322.68	scf/bbl	for P + Patr	<i>n</i> =	1022.7			

THC = Rs \* Q \* MW \* 1/385 scf/lb-mole \* 365 D/Yr \* 1 ton/2000 lb.s

THC	Total Hydrocarbon (tons/year)	
Rs	Solution Gas/Oil Ratio (scf/STB)	
Q	Oil Production Rate (bbl/day)	
MW 385	Molecular Weight of Stock Tank Gas (lb/lb-mole)	
385	Volume of 1 lb-mole of gas at 14.7 psia and 68 F (WAQS&R Std Cond)	

THC = 27.6 TPY

#### VOC = THC \* Frac. of C3+ in the Stock Tank Vapor

VOC = 26.21 TPY from "FLASHING" of oil from pressurized sump to separator at ambient temp., pressure

#### Working and Breathing Losses (from EPA TANKS 4.09d software output) from Pipeline Liquids Tank (T-006) and Mist Extractor (MIS

_	T-006	MIST	Total
Working Losses (lb/yr):	71.69	87.25	158.94
Breathing Losses (lb/yr):	1308.81	571.68	1880.49
TANKS Total (lb/yr):	1380.50	658.93	2039.43
TANKS Total (tpv):	0.69	0.33	1.02

#### Total Emissions from Tank (Unit No. T-006) and Mist Extractor (MIST)

Total Tank Emissions: 27.23 tpy (sum of Flashing and TANKS total emissions)

#### TRANSWESTERN PIPELINE COMPANY, LLC Mountainair Compressor Station No. 7 Title V Renewal for Operating Permit No. P-153-R3M1

#### LOADING EMISSIONS

Emissions from loading condensate from the condensate tank to trucks for off-site removal are estimated using Equation 1 from AP-42 Chapter 5.2, Transportation And Marketing Of Petroleum Liquids, June 2008.

VOC Emissions =  $12.46^{(S*P*M/T)*L}$  (Equation 1) where S, P, M, T, and L are define in the table below.

#### ANNUAL EMISSIONS

	Product (1)	(M) Molecular Weight (Ib/Ib-mol)	(T) Average Temp. (deg R) (2)	(P) Average Vapor Pressure (psia) (2)	(S) Saturation Factor (3)	(L) Annual Throughput (1,000 gallons/year) (4)	Loading VOC Emissions (tons/year)
LOADING	Condensate	69	518.2	2.8464	0.60	15.33	0.022

#### HOURLY EMISSIONS

	Product (1)	(M) Molecular Weight (Ib/Ib-mol)	(T) Minimum Temp. (deg R) (2)	(P) Maximum Vapor Pressure (psia) (2)	Saturation	(L) Maximum Hourly Throughput (1,000 gallons/hour) (5)	Loading VOC Emissions (pounds/hour)
LOADING	Condensate	69	511.1	3.2971	0.60	8.00	26.6

Notes:

(1) Condensate is assumed to be 100 percent VOC.

(2) Average temperature and pressure, maximum pressure, and minimum temperature are taken from TANKS output.

(3) Saturation factor is the factor for submerged loading, dedicated normal service.

#### TRANSWESTERN PIPELINE COMPANY, LLC Mountainair Compressor Station No. 7 Title V Renewal for Operating Permit No. P-153-R3M1

#### PIPING COMPONENT FUGITIVE EMISSIONS

#### Source ID: FUG

		EMISSION	ANNUAL	PERCENT	V		S
COMPONENT	COUNT	FACTOR	HOURS	VOC	HOURLY	ANNUAL	ANNUAL
		(pound/hour/component)			(pound/hour)	(pounds/year)	(tons/year)
VALVES (vapor)	459	0.00992	8,760	10%	0.4553	3,988.7	1.99
FLANGES (vapor)	1,928	0.00086	8,760	10%	0.1658	1,452.3	0.73
PUMPS (light liquid)	2	0.0287	8,760	100%	0.0574	502.8	0.25
COMPRESSORS (vapor)		0.0194	8,760	10%	0.0058	51.0	0.03
RELIEF VALVES (vapor)	5	0.0194	8,760	10%	0.0097	85.0	0.04
				TOTAL:	0.6940	6,079.8	3.04

Notes:

(1) VOC Emissions do not include methane or ethane. The percent VOC is conservatively estimated.

(2) Flange count is estimated based on CMA guidelines of 4.2 flanges per valve.

(3) Emission factors are from p. 2-15, Table 2-4, of EPA-453/R-95-017, Protocol for Equipment Leak Emission Estimates, November 1995.

#### BASIS OF ESTIMATED STARTUP, SHUTDOWN, MAINTENANCE, AND MALFUNCTION (SSM/M) EMISSIONS

#### Methodology:

VOC Emissions (tpy) = Volume (scf) \* VOC Weight % \* (MW / 379 scf/lb-mole) \* (1 ton / 2,000 lb) , where

- VOC volatile organic compounds
- tpy tons per year
- scf standard cubic feet

MW - molecular weight of released gas, in lb/lb-mole

lb - pound

VOC Weight % and Molecular Weight of Gas are taken from the gas analysis.

#### Calculations:

		VOC		Permittable		Nonpermittable
	Volume	Emissions	Number of	(SSM <sup>2</sup> ) VOC	Estimated	(Malfunction-M <sup>3</sup> )
	per Release <sup>1</sup>	per Release	Permitted	Emissions	Number Not	VOC Emissions
Type of Natural Gas Release	(scf)	(tons)	Releases	(tpy)	Permitted	(tpy)
Pig Runs <sup>4</sup>	40,000	0.052	48	2.48	0	0.00
Compressor Blowdowns <sup>5</sup>	11,000	0.014	288	4.09	72	1.023
Scheduled Emergency Shut Downs <sup>6</sup>	450,000	0.582	2	1.16	2	1.163
			TOTAL:	7.74		2.19

Total VOC Emissions from SSM/M Events = 9.92 equested emissions are rounded to SSM/M cap allowed by NMED: **10.0**  tons/year tons/vear

Example Emissions Calculation (for Pig Runs):

VOC Emissions per Release = Volume per Release \* VOC Weight % \* MW / 379 scf/lb-mole \* (1 ton/2,000 lb)

= 40000 scf \* 0.0559 \* 17.51 lb/lb-mole/(379 scf/lb-mole) \* 1 ton/2,000 lb)

0.052 tpy

#### Notes:

<sup>1</sup> Volume per release is based on engineering estimates and rounded up. Engineering estimates are the following: 38,692 scf for each pig run (rounded up to 40,000 scf)

10,834 scf for each compressor blowdown (rounded up to 11,000 scf)

=

433,355 scf for each scheduled emergency shut down (rounded up to 450,000 scf)

<sup>2</sup> SSM - Startup, shutdown, and maintenance

<sup>3</sup> M - Malfunction

<sup>4</sup> Assumes up to four pig runs per month.

<sup>5</sup> Assumes eight planned and two unplanned (malfunction) blowdowns per month for each of the three compressors

<sup>6</sup> Assumes two planned shutdowns and two unplanned (malfunction) emergency shutdowns per year.

## TRANSWESTERN PIPELINE COMPANY, LLC Mountainair Compressor Station No. 7 Title V Renewal for Operating Permit No. P-153-R3M1

## **Greenhouse Gas Emission Calculations**

GHG	Emission Factor <sup>1</sup> kg/MMBtu	GWP <sup>2</sup>
CO <sub>2</sub>	53.06	1
CH <sub>4</sub>	0.001	25
N <sub>2</sub> O	0.0001	298

Notes:

<sup>1</sup> Emission factors from Tables C-1 and C-2 of 40 CFR Part 98, Subpart C

<sup>2</sup> GWP - Global Warming Potential, taken from Table A-1 to 40 CFR Part 98, Subpart A

		Maximum Annual Fuel Use	CO <sub>2</sub>	N <sub>2</sub> O	CH₄	Total
Stack ID	Description	(MMBtu/yr)		Mass Emissi	ons (tons/yea	ar)
701	Solar Centaur T-7000	308,540	18,046	0.034	0.34	18,046
702	Solar Centaur T-7000	308,540	18,046	0.034	0.34	18,046
703	Solar Centaur T-7000	308,540	18,046	0.034	0.34	18,046
721/722	Solar Centaur T-7000	22,613	1,323	0.002	0.02	1,323
T-006	Condensate Tank	NA	0.0	0.0	28.61	28.6
SSM/M	Startup, Shutdown, Maintenance and Malfunction	NA	9.07	0.0	155.19	164.27
		TOTAL:	55,469	0.10	185	55,654

			CO <sub>2</sub>	N <sub>2</sub> O	CH₄	Total
		GWP:	1	298	25	-
Stack ID	Description			CO2e Emissi	ons (tons/yea	ar)
701	Solar Centaur T-7000		18,046	10.14	8.50	18,064
702	Solar Centaur T-7000		18,046	10.14	8.50	18,064
703	Solar Centaur T-7000		18,046	10.14	8.50	18,064
721/722	Solar Centaur T-7000		1,323	0.74	0.62	1,324
T-006	Condensate Tank		0.0	0.0	715.18	715.18
SSM/M	Startup, Shutdown, Maintenance and Malfunction		9.07	0.0	3,880	3,889
		TOTAL:	55,469	31.1	4,621	60,121

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

# Identification

Identification	
User Identification:	T-006 (Condensate)
City:	Mountainair
State:	New Mexico
Company:	Transwestern Pipeline Company, LLC
Type of Tank:	Vertical Fixed Roof Tank
Description:	Mountainair Compressor Station - Condensate Tank
Tank Dimensions	
Shell Height (ft):	17.00
Diameter (ft):	15.50
Liquid Height (ft) :	15.00
Avg. Liquid Height (ft):	8.00
Volume (gallons):	21,172.77
Turnovers:	0.72
Net Throughput(gal/yr):	15,330.00
Is Tank Heated (y/n):	Ν
Paint Characteristics	
Shell Color/Shade:	White/White
Shell Condition	Good
Roof Color/Shade:	White/White
Roof Condition:	Good
Roof Characteristics	
Туре:	Cone
Height (ft)	0.00
Slope (ft/ft) (Cone Roof)	0.06
Breather Vent Settings	
Vacuum Settings (psig):	-0.03
Pressure Settings (psig)	0.03

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

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

## T-006 (Condensate) - Vertical Fixed Roof Tank Mountainair, New Mexico

			ily Liquid So perature (de		Liquid Bulk Temp	Vapo	or Pressure	(psia)	Vapor Mol.	Liquid Mass	Vapor Mass	Mol.	Basis for Vapor Pressure
Mixture/Component	Month	Avg.	Min.	Max.	(deg F)	Avg.	Min.	Max.	Weight.	Fract.	Fract.	Weight	Calculations
Gasoline (RVP 6)	All	58.54	51.41	65.66	56.17	2.8464	2.4472	3.2971	69.0000			92.00	Option 4: RVP=6, ASTM Slope=3

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

## T-006 (Condensate) - Vertical Fixed Roof Tank Mountainair, New Mexico

Annual Emission Calcaulations	
Standing Losses (Ib):	1,308.8071
Vapor Space Volume (cu ft):	1,728.6931
Vapor Density (lb/cu ft):	0.0353
Vapor Space Expansion Factor:	0.1399
Vented Vapor Saturation Factor:	0.4198
Tank Vapor Space Volume:	
Vapor Space Volume (cu ft):	1,728.6931
Tank Diameter (ft):	15.5000
Vapor Space Outage (ft):	9.1615
Tank Shell Height (ft):	17.0000
Average Liquid Height (ft):	8.0000
Roof Outage (ft):	0.1615
Roof Outage (Cone Roof)	
Roof Outage (ft):	0.1615
Roof Height (ft):	0.0000
Roof Slope (ft/ft):	0.0625
Shell Radius (ft):	7.7500
Vapor Density	
Vapor Density (lb/cu ft):	0.0353
Vapor Molecular Weight (lb/lb-mole): Vapor Pressure at Daily Average Liquid	69.0000
Surface Temperature (psia):	2.8464
Daily Avg. Liquid Surface Temp. (deg. R):	518.2062
Daily Average Ambient Temp. (deg. F): Ideal Gas Constant R	56.1542
(psia cuft / (lb-mol-deg R)):	10.731
Liquid Bulk Temperature (deg. R):	515.8442
Tank Paint Solar Absorptance (Shell):	0.1700
Tank Paint Solar Absorptance (Roof): Daily Total Solar Insulation	0.1700
Factor (Btu/sqft day):	1,765.3167
Vapor Space Expansion Factor	
Vapor Space Expansion Factor:	0.1399
Daily Vapor Temperature Range (deg. R):	28.5089
Daily Vapor Pressure Range (psia):	0.8498
Breather Vent Press. Setting Range(psia): Vapor Pressure at Daily Average Liquid	0.0600
Surface Temperature (psia): Vapor Pressure at Daily Minimum Liquid	2.8464
Surface Temperature (psia): Vapor Pressure at Daily Maximum Liquid	2.4472
Surface Temperature (psia):	3.2971
Daily Avg. Liquid Surface Temp. (deg R):	518.2062
Daily Min. Liquid Surface Temp. (deg R):	511.0790
Daily Max. Liquid Surface Temp. (deg R):	525.3334
Daily Ambient Temp. Range (deg. R):	27.9250
Vented Vapor Saturation Factor	
Vented Vapor Saturation Factor: Vapor Pressure at Daily Average Liquid:	0.4198
Surface Temperature (psia):	2.8464
Vapor Space Outage (ft):	9.1615

# TANKS 4.0 Report

Working Losses (lb): Vapor Molecular Weight (lb/lb-mole): Vapor Pressure at Daily Average Liguid	71.6858 69.0000
Surface Temperature (psia):	2.8464
Annual Net Throughput (gal/yr.): Annual Turnovers:	15,330.0000 0.7240
Turnover Factor:	1.0000
Maximum Liquid Volume (gal):	21,172.7700
Maximum Liquid Height (ft): Tank Diameter (ft):	15.0000 15.5000
Working Loss Product Factor:	1.0000
Total Losses (lb):	1,380.4929

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

# Emissions Report for: Annual

T-006 (Condensate) - Vertical Fixed Roof Tank Mountainair, New Mexico

	Losses(lbs)					
Components	Working Loss	Breathing Loss	Total Emissions			
Gasoline (RVP 6)	71.69	1,308.81	1,380.49			

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

#### Identification

User Identification:	MIST Extractor
City:	Mountainair
State:	New Mexico
Company:	Transwestern Pipeline Company, LLC
Type of Tank:	Horizontal Tank
Description:	Mountainair Compressor Station - Mist Extractor Separator

#### **Tank Dimensions**

Shell Length (ft):		31.00
Diameter (ft):		3.00
Volume (gallons):		1,100.00
Turnovers:		13.94
Net Throughput(gal/yr):		15,330.00
Is Tank Heated (y/n):	N	
Is Tank Underground (y/n):	Ν	

#### Paint Characteristics

Shell Color/Shade: Shell Condition	Gray/Medium Good	
Breather Vent Settings Vacuum Settings (psig):		-0.03

Pressure Settings (psig)

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

0.03

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

#### MIST Extractor - Horizontal Tank Mountainair, New Mexico

		Daily Liquid Surf. Temperature (deg F)			Liquid Bulk Temp Vapor Pressure (psia)			Vapor Liquid Mol. Mass		Vapor Mass	Mol.	Basis for Vapor Pressure	
Mixture/Component	Month	Avg.	Min.	Max.	(deg F)	Avg.	Min.	Max.	Weight.	Fract.	Fract.	Weight	Calculations
Gasoline (RVP 6)	Jan	53.71	44.35	63.07	59.23	2.5705	2.0980	3.1265	69.0000			92.00	Option 4: RVP=6, ASTM Slope=3
Gasoline (RVP 6)	Feb	57.85	46.68	69.01	59.23	2.8055	2.2086	3.5280	69.0000			92.00	Option 4: RVP=6, ASTM Slope=3
Gasoline (RVP 6)	Mar	62.95	49.55	76.34	59.23	3.1190	2.3512	4.0794	69.0000			92.00	Option 4: RVP=6, ASTM Slope=3
Gasoline (RVP 6)	Apr	69.11	53.17	85.06	59.23	3.5352	2.5414	4.8236	69.0000			92.00	Option 4: RVP=6, ASTM Slope=3
Gasoline (RVP 6)	May	74.53	57.29	91.76	59.23	3.9367	2.7733	5.4672	69.0000			92.00	Option 4: RVP=6, ASTM Slope=3
Gasoline (RVP 6)	Jun	79.59	61.66	97.52	59.23	4.3451	3.0374	6.0742	69.0000			92.00	Option 4: RVP=6, ASTM Slope=3
Gasoline (RVP 6)	Jul	80.54	64.10	96.99	59.23	4.4255	3.1932	6.0161	69.0000			92.00	Option 4: RVP=6, ASTM Slope=3
Gasoline (RVP 6)	Aug	78.26	63.11	93.42	59.23	4.2349	3.1293	5.6368	69.0000			92.00	Option 4: RVP=6, ASTM Slope=3
Gasoline (RVP 6)	Sep	73.33	59.67	86.99	59.23	3.8449	2.9143	5.0029	69.0000			92.00	Option 4: RVP=6, ASTM Slope=3
Gasoline (RVP 6)	Oct	66.30	54.13	78.48	59.23	3.3403	2.5937	4.2527	69.0000			92.00	Option 4: RVP=6, ASTM Slope=3
Gasoline (RVP 6)	Nov	58.56	48.62	68.50	59.23	2.8476	2.3039	3.4916	69.0000			92.00	Option 4: RVP=6, ASTM Slope=3
Gasoline (RVP 6)	Dec	53.62	44.87	62.37	59.23	2.5659	2.1225	3.0823	69.0000			92.00	Option 4: RVP=6, ASTM Slope=3

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

#### MIST Extractor - Horizontal Tank Mountainair, New Mexico

Month:	January	February	March	April	May	June	July	August	September	October	November	December
Standing Losses (lb):	20.1266	24.6235	38.2127	53.1848	70.2161	82.9278	80.8250	69.1240	51.5822	38.2630	23.8773	18.7192
Vapor Space Volume (cu ft):	139.5708	139.5708	139.5708	139.5708	139.5708	139.5708	139.5708	139.5708	139.5708	139.5708	139.5708	139.5708
Vapor Density (Ib/cu ft):	0.0322	0.0349	0.0384	0.0430	0.0474	0.0518	0.0527	0.0506	0.0464	0.0408	0.0353	0.0321
Vapor Space Expansion Factor:	0.1740	0.2211	0.2872	0.3785	0.4497	0.5143	0.4794	0.4219	0.3468	0.2741	0.1979	0.1621
Vented Vapor Saturation Factor:	0.8303	0.8176	0.8013	0.7806	0.7616	0.7433	0.7397	0.7481	0.7659	0.7902	0.8154	0.8306
Tank Vapor Space Volume:												
Vapor Space Volume (cu ft):	139.5708	139.5708	139.5708	139.5708	139.5708	139.5708	139.5708	139.5708	139.5708	139.5708	139.5708	139.5708
Tank Diameter (ft):	3.0000	3.0000	3.0000	3.0000	3.0000	3.0000	3.0000	3.0000	3.0000	3.0000	3.0000	3.0000
Effective Diameter (ft):	10.8845	10.8845	10.8845	10.8845	10.8845	10.8845	10.8845	10.8845	10.8845	10.8845	10.8845	10.8845
Vapor Space Outage (ft):	1.5000	1.5000	1.5000	1.5000	1.5000	1.5000	1.5000	1.5000	1.5000	1.5000	1.5000	1.5000
Tank Shell Length (ft):	31.0000	31.0000	31.0000	31.0000	31.0000	31.0000	31.0000	31.0000	31.0000	31.0000	31.0000	31.0000
Vapor Density												
Vapor Density (lb/cu ft):	0.0322	0.0349	0.0384	0.0430	0.0474	0.0518	0.0527	0.0506	0.0464	0.0408	0.0353	0.0321
Vapor Molecular Weight (lb/lb-mole):	69.0000	69.0000	69.0000	69.0000	69.0000	69.0000	69.0000	69.0000	69.0000	69.0000	69.0000	69.0000
Vapor Pressure at Daily Average Liquid												
Surface Temperature (psia):	2.5705	2.8055	3.1190	3.5352	3.9367	4.3451	4.4255	4.2349	3.8449	3.3403	2.8476	2.5659
Daily Avg. Liquid Surface Temp. (deg. R):	513.3754	517.5161	522.6180	528.7836	534.1959	539.2606	540.2118	537.9329	532.9993	525.9743	518.2270	513.2920
Daily Average Ambient Temp. (deg. F):	34.2500	39.9500	46.8000	55.2000	64.1500	74.1500	78.4500	75.8000	68.5500	57.0000	44.2500	35.3000
Ideal Gas Constant R												
(psia cuft / (lb-mol-deg R)):	10.731	10.731	10.731	10.731	10.731	10.731	10.731	10.731	10.731	10.731	10.731	10.731
Liquid Bulk Temperature (deg. R):	518.9042	518.9042	518.9042	518.9042	518.9042	518.9042	518.9042	518.9042	518.9042	518.9042	518.9042	518.9042
Tank Paint Solar Absorptance (Shell):	0.6800	0.6800	0.6800	0.6800	0.6800	0.6800	0.6800	0.6800	0.6800	0.6800	0.6800	0.6800
Daily Total Solar Insulation	1,017.1676	4 004 4400	1.709.7680	2,169.4923	2,443.9308	2.567.6661	2,392.5331	2,185.3558	1.860.7886	1,499.1008	1.101.2442	915.6412
Factor (Btu/sqft day):	1,017.1070	1,321.1123	1,709.7660	2,109.4923	2,443.9306	2,507.0001	2,392.5331	2,165.3556	1,000.7000	1,499.1008	1,101.2442	915.0412
Vapor Space Expansion Factor												
Vapor Space Expansion Factor:	0.1740	0.2211	0.2872	0.3785	0.4497	0.5143	0.4794	0.4219	0.3468	0.2741	0.1979	0.1621
Daily Vapor Temperature Range (deg. R):	37.4389	44.6660	53.5780	63.7711	68.9244	71.7124	65.7858	60.6172	54.6534	48.7029	39.7597	35.0018
Daily Vapor Pressure Range (psia):	1.0284	1.3194	1.7282	2.2822	2.6939	3.0367	2.8229	2.5075	2.0887	1.6590	1.1877	0.9597
Breather Vent Press. Setting Range(psia):	0.0600	0.0600	0.0600	0.0600	0.0600	0.0600	0.0600	0.0600	0.0600	0.0600	0.0600	0.0600
Vapor Pressure at Daily Average Liquid												
Surface Temperature (psia):	2.5705	2.8055	3.1190	3.5352	3.9367	4.3451	4.4255	4.2349	3.8449	3.3403	2.8476	2.5659
Vapor Pressure at Daily Minimum Liquid	0.0000	0.0000	0.0540	0 5 4 4 4	0 7700	0.0074	0.4000	0.4000	0.0440	0 5007	0 0000	0 4005
Surface Temperature (psia):	2.0980	2.2086	2.3512	2.5414	2.7733	3.0374	3.1932	3.1293	2.9143	2.5937	2.3039	2.1225
Vapor Pressure at Daily Maximum Liquid	2 1005	2 5 2 0 0	4.0704	4 0000	E 4670	6 0740	6.0161	5 6269	F 0020	4 0507	2 4046	2 0022
Surface Temperature (psia):	3.1265	3.5280	4.0794	4.8236	5.4672	6.0742	6.0161	5.6368	5.0029	4.2527	3.4916	3.0823
Daily Avg. Liquid Surface Temp. (deg R): Daily Min. Liquid Surface Temp. (deg R):	513.3754 504.0156	517.5161 506.3497	522.6180 509.2235	528.7836 512.8409	534.1959 516.9648	539.2606 521.3325	540.2118 523.7654	537.9329 522.7786	532.9993 519.3359	525.9743 513.7986	518.2270 508.2871	513.2920 504.5415
Daily Min. Liquid Surface Temp. (deg R):	504.0156	528.6826	536.0125	544.7264	551.4270	521.3325	523.7654	553.0872	546.6626	538.1500	528.1669	522.0424
Daily Ambient Temp. Range (deg. R):	25.1000	27.1000	29.2000	31.2000	31.1000	31.7000	28.1000	26.4000	26.7000	28.0000	26.1009	24.4000
Daily Ambient Temp. Range (deg. R).	25.1000	27.1000	29.2000	31.2000	31.1000	31.7000	28.1000	20.4000	20.7000	28.0000	20.1000	24.4000
Vented Vapor Saturation Factor												
Vented Vapor Saturation Factor:	0.8303	0.8176	0.8013	0.7806	0.7616	0.7433	0.7397	0.7481	0.7659	0.7902	0.8154	0.8306
Vapor Pressure at Daily Average Liquid:												
Surface Temperature (psia):	2.5705	2.8055	3.1190	3.5352	3.9367	4.3451	4.4255	4.2349	3.8449	3.3403	2.8476	2.5659
Vapor Space Outage (ft):	1.5000	1.5000	1.5000	1.5000	1.5000	1.5000	1.5000	1.5000	1.5000	1.5000	1.5000	1.5000
Working Losses (Ib):	5.3948	5.8881	6.5460	7.4195	8.2621	9.1193	9.2880	8.8879	8.0695	7.0104	5.9764	5.3852
Vapor Molecular Weight (lb/lb-mole):	69.0000	69.0000	69.0000	69.0000	69.0000	69.0000	69.0000	69.0000	69.0000	69.0000	69.0000	69.0000
Vapor Pressure at Daily Average Liquid												
Surface Temperature (psia):	2.5705	2.8055	3.1190	3.5352	3.9367	4.3451	4.4255	4.2349	3.8449	3.3403	2.8476	2.5659
Net Throughput (gal/mo.):	1,277.5000	1,277.5000	1,277.5000	1,277.5000	1,277.5000	1,277.5000	1,277.5000	1,277.5000	1,277.5000	1,277.5000	1,277.5000	1,277.5000
Annual Turnovers:	13.9364	13.9364	13.9364	13.9364	13.9364	13.9364	13.9364	13.9364	13.9364	13.9364	13.9364	13.9364
Turnover Factor:	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000

# TANKS 4.0 Report

Tank Diameter (ft):	3.0000	3.0000	3.0000	3.0000	3.0000	3.0000	3.0000	3.0000	3.0000	3.0000	3.0000	3.0000
Working Loss Product Factor:	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total Losses (lb):	25.5214	30.5117	44.7587	60.6043	78.4782	92.0471	90.1130	78.0119	59.6517	45.2734	29.8537	24.1044

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

Emissions Report for: January, February, March, April, May, June, July, August, September, October, November, December

MIST Extractor - Horizontal Tank Mountainair, New Mexico

	Losses(lbs)								
Components	Working Loss	Breathing Loss	Total Emissions						
Gasoline (RVP 6)	87.25	571.68	658.93						

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

#### Identification

User Identification:	T-014 (Glycol)
City:	Mountainair
State:	New Mexico
Company:	Transwestern Pipeline Company, LLC
Type of Tank:	Horizontal Tank
Description:	Mountainair Compressor Station - Ethylene Glycol Tank

Tank Dimensions		
Shell Length (ft):		12.00
Diameter (ft):		6.00
Volume (gallons):		2,500.00
Turnovers:		6.00
Net Throughput(gal/yr):		15,000.00
Is Tank Heated (y/n):	Ν	
Is Tank Underground (y/n):	N	

#### Paint Characteristics

Shell Color/Shade:	White/White	
Shell Condition	Good	
Breather Vent Settings Vacuum Settings (psig):		-0.03
Pressure Settings (psig)		0.03

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

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

## T-014 (Glycol) - Horizontal Tank Mountainair, New Mexico

	Daily Liquid Surf. Temperature (deg F)		Liquid Bulk Temp Vapor Pressure (psia)				Vapor Mol.	Liquid Mass	Vapor Mass	Mol.	Basis for Vapor Pressure		
Mixture/Component	Month	Avg.	Min.	Max.	(deg F)	Avg.	Min.	Max.	Weight.	Fract.	Fract.	Weight	Calculations
Ethylene Glycol	Jan	47.89	42.17	53.62	56.17	0.0010	0.0010	0.0010	62.0700			62.07	Option 1: VP40 = .001 VP50 = .001
Ethylene Glycol	Feb	50.81	44.36	57.26	56.17	0.0010	0.0010	0.0010	62.0700			62.07	Option 1: VP50 = .001 VP60 = .001
Ethylene Glycol	Mar	54.35	47.06	61.64	56.17	0.0010	0.0010	0.0025	62.0700			62.07	Option 1: VP50 = .001 VP60 = .001
Ethylene Glycol	Apr	58.66	50.46	66.86	56.17	0.0010	0.0010	0.0072	62.0700			62.07	Option 1: VP50 = .001 VP60 = .001
Ethylene Glycol	May	62.97	54.46	71.47	56.17	0.0037	0.0010	0.0100	62.0700			62.07	Option 1: VP60 = .001 VP70 = .01
Ethylene Glycol	Jun	67.53	58.77	76.29	56.17	0.0078	0.0010	0.0100	62.0700			62.07	Option 1: VP60 = .001 VP70 = .01
Ethylene Glycol	Jul	69.19	61.28	77.09	56.17	0.0093	0.0022	0.0100	62.0700			62.07	Option 1: VP60 = .001 VP70 = .01
Ethylene Glycol	Aug	67.74	60.39	75.10	56.17	0.0080	0.0014	0.0100	62.0700			62.07	Option 1: VP60 = .001 VP70 = .01
Ethylene Glycol	Sep	64.12	57.10	71.14	56.17	0.0047	0.0010	0.0100	62.0700			62.07	Option 1: VP60 = .001 VP70 = .01
Ethylene Glycol	Oct	58.55	51.73	65.37	56.17	0.0010	0.0010	0.0058	62.0700			62.07	Option 1: VP50 = .001 VP60 = .001
thylene Glycol	Nov	52.41	46.40	58.41	56.17	0.0010	0.0010	0.0010	62.0700			62.07	Option 1: VP50 = .001 VP60 = .001
Ethylene Glycol	Dec	48.22	42.74	53.70	56.17	0.0010	0.0010	0.0010	62.0700			62.07	Option 1: VP40 = .001 VP50 = .001

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

## T-014 (Glycol) - Horizontal Tank Mountainair, New Mexico

Month:	January	February	March	April	May	June	July	August	September	October	November	December
Standing Losses (lb):	0.0031	0.0031	0.0039	0.0043	0.0166	0.0344	0.0376	0.0301	0.0166	0.0036	0.0031	0.0029
Vapor Space Volume (cu ft):	216.1096	216.1096	216.1096	216.1096	216.1096	216.1096	216.1096	216.1096	216.1096	216.1096	216.1096	216.1096
Vapor Density (Ib/cu ft):	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0001	0.0001	0.0001	0.0000	0.0000	0.0000
Vapor Space Expansion Factor:	0.0402	0.0456	0.0519	0.0588	0.0609	0.0623	0.0555	0.0515	0.0494	0.0481	0.0420	0.0382
Vented Vapor Saturation Factor:	0.9998	0.9998	0.9998	0.9998	0.9994	0.9988	0.9985	0.9987	0.9993	0.9998	0.9998	0.9998
Tank Vapor Space Volume:												
Vapor Space Volume (cu ft):	216.1096	216.1096	216.1096	216.1096	216.1096	216.1096	216.1096	216.1096	216.1096	216.1096	216.1096	216.1096
Tank Diameter (ft):	6.0000	6.0000	6.0000	6.0000	6.0000	6.0000	6.0000	6.0000	6.0000	6.0000	6.0000	6.0000
Effective Diameter (ft):	9.5770	9.5770	9.5770	9.5770	9.5770	9.5770	9.5770	9.5770	9.5770	9.5770	9.5770	9.5770
Vapor Space Outage (ft):	3.0000	3.0000	3.0000	3.0000	3.0000	3.0000	3.0000	3.0000	3.0000	3.0000	3.0000	3.0000
Tank Shell Length (ft):	12.0000	12.0000	12.0000	12.0000	12.0000	12.0000	12.0000	12.0000	12.0000	12.0000	12.0000	12.0000
Vapor Density												
Vapor Density (lb/cu ft):	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0001	0.0001	0.0001	0.0000	0.0000	0.0000
Vapor Molecular Weight (lb/lb-mole):	62.0700	62.0700	62.0700	62.0700	62.0700	62.0700	62.0700	62.0700	62.0700	62.0700	62.0700	62.0700
Vapor Pressure at Daily Average Liquid Surface Temperature (psia):	0.0010	0.0010	0.0010	0.0010	0.0037	0.0078	0.0093	0.0080	0.0047	0.0010	0.0010	0.0010
Daily Avg. Liquid Surface Temp. (deg. R):	507.5636	510.4798	514.0158	518.3292	522.6357	527.2019	528.8587	527.4145	523.7886	518.2208	512.0765	507.8892
Daily Average Ambient Temp. (deg. F):	34.2500	39.9500	46.8000	55.2000	64.1500	74.1500	78.4500	75.8000	68.5500	57.0000	44.2500	35.3000
Ideal Gas Constant R	54.2500	55.5500	40.0000	33.2000	04.1000	74.1500	10.4000	75.0000	00.0000	57.0000	44.2300	55.5000
(psia cuft / (lb-mol-deg R)):	10.731	10.731	10.731	10.731	10.731	10.731	10.731	10.731	10.731	10.731	10.731	10.731
Liquid Bulk Temperature (deg. R):	515.8442	515.8442	515.8442	515.8442	515.8442	515.8442	515.8442	515.8442	515.8442	515.8442	515.8442	515.8442
Tank Paint Solar Absorptance (Shell):	0.1700	0.1700	0.1700	0.1700	0.1700	0.1700	0.1700	0.1700	0.1700	0.1700	0.1700	0.1700
Daily Total Solar Insulation												
Factor (Btu/sqft day):	1,017.1676	1,321.1123	1,709.7680	2,169.4923	2,443.9308	2,567.6661	2,392.5331	2,185.3558	1,860.7886	1,499.1008	1,101.2442	915.6412
Vapor Space Expansion Factor												
Vapor Space Expansion Factor:	0.0402	0.0456	0.0519	0.0588	0.0609	0.0623	0.0555	0.0515	0.0494	0.0481	0.0420	0.0382
Daily Vapor Temperature Range (deg. R):	22.9137	25.8005	29.1625	32.7908	34.0251	35.0461	31.6205	29.4103	28.0814	27.2957	24.0339	21.9265
Daily Vapor Pressure Range (psia):	0.0000	0.0000	0.0015	0.0062	0.0090	0.0090	0.0078	0.0086	0.0090	0.0048	0.0000	0.0000
Breather Vent Press. Setting Range(psia): Vapor Pressure at Daily Average Liguid	0.0600	0.0600	0.0600	0.0600	0.0600	0.0600	0.0600	0.0600	0.0600	0.0600	0.0600	0.0600
Surface Temperature (psia):	0.0010	0.0010	0.0010	0.0010	0.0037	0.0078	0.0093	0.0080	0.0047	0.0010	0.0010	0.0010
Vapor Pressure at Daily Minimum Liquid	0.0010	0.0010	0.0010	0.0010	0.0037	0.0070	0.0095	0.0000	0.0047	0.0010	0.0010	0.0010
Surface Temperature (psia):	0.0010	0.0010	0.0010	0.0010	0.0010	0.0010	0.0022	0.0014	0.0010	0.0010	0.0010	0.0010
Vapor Pressure at Daily Maximum Liquid												
Surface Temperature (psia):	0.0010	0.0010	0.0025	0.0072	0.0100	0.0100	0.0100	0.0100	0.0100	0.0058	0.0010	0.0010
Daily Avg. Liquid Surface Temp. (deg R):	507.5636	510.4798	514.0158	518.3292	522.6357	527.2019	528.8587	527.4145	523.7886	518.2208	512.0765	507.8892
Daily Min. Liquid Surface Temp. (deg R):	501.8352	504.0297	506.7251	510.1315	514.1295	518.4404	520.9536	520.0619	516.7682	511.3969	506.0680	502.4076
Daily Max. Liquid Surface Temp. (deg R):	513.2920	516.9299	521.3064	526.5269	531.1420	535.9634	536.7638	534.7670	530.8089	525.0448	518.0850	513.3709
Daily Ambient Temp. Range (deg. R):	25.1000	27.1000	29.2000	31.2000	31.1000	31.7000	28.1000	26.4000	26.7000	28.0000	26.1000	24.4000
Vented Vapor Saturation Factor												
Vented Vapor Saturation Factor:	0.9998	0.9998	0.9998	0.9998	0.9994	0.9988	0.9985	0.9987	0.9993	0.9998	0.9998	0.9998
Vapor Pressure at Daily Average Liquid:												
Surface Temperature (psia):	0.0010	0.0010	0.0010	0.0010	0.0037	0.0078	0.0093	0.0080	0.0047	0.0010	0.0010	0.0010
Vapor Space Outage (ft):	3.0000	3.0000	3.0000	3.0000	3.0000	3.0000	3.0000	3.0000	3.0000	3.0000	3.0000	3.0000
	0.0515	0.00/5	0.00/0	0.00/5	0.0005		0.04=1	0.04/-		0.00/0	0.00/5	0.00115
Working Losses (Ib):	0.0018	0.0018	0.0018	0.0018	0.0068	0.0144	0.0171	0.0147	0.0087	0.0018	0.0018	0.0018
Vapor Molecular Weight (lb/lb-mole): Vapor Pressure at Daily Average Liguid	62.0700	62.0700	62.0700	62.0700	62.0700	62.0700	62.0700	62.0700	62.0700	62.0700	62.0700	62.0700
Surface Temperature (psia):	0.0010	0.0010	0.0010	0.0010	0.0037	0.0078	0.0093	0.0080	0.0047	0.0010	0.0010	0.0010
Net Throughput (gal/mo.):	1,250.0000	1,250.0000	1,250.0000	1,250.0000	1,250.0000	1,250.0000	1,250.0000	1,250.0000	1.250.0000	1,250.0000	1,250.0000	1.250.0000
Annual Turnovers:	6.0000	6.0000	6.0000	6.0000	6.0000	6.0000	6.0000	6.0000	6.0000	6.0000	6.0000	6.0000
Turnover Factor:	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000

# TANKS 4.0 Report

Tank Diameter (ft):	6.0000	6.0000	6.0000	6.0000	6.0000	6.0000	6.0000	6.0000	6.0000	6.0000	6.0000	6.0000
Working Loss Product Factor:	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total Losses (Ib):	0.0049	0.0050	0.0058	0.0061	0.0233	0.0488	0.0548	0.0449	0.0253	0.0054	0.0049	0.0048

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

Emissions Report for: January, February, March, April, May, June, July, August, September, October, November, December

T-014 (Glycol) - Horizontal Tank Mountainair, New Mexico

	Losses(lbs)			
Components	Working Loss	Breathing Loss	Total Emissions	
Ethylene Glycol	0.07	0.16	0.23	

# 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 <u>and</u> 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.
- $\sqrt{10}$  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.

Information used to determine emissions follows this page and includes the following:

- Excerpts from U.S. EPA AP-42, *Compilation of Air Pollutant Emission Factors*, Section 3.2 (July 2000), which presents emission factors for natural gas-fired reciprocating engines.
- A gas analysis for the inlet gas to the station, which is used in the calculation of SSM/M emissions. This analysis is the same analysis used in previous permit applications. Since the gas flowing through the station is pipeline-quality natural gas, which does not significantly vary in composition over time, this gas analysis continues to be representative for the purpose of estimating emissions.
- Excerpts from EPA-453/R-95-017, *Protocol for Equipment Leak Emission Estimates*, November 1995. Emission factors for calculations of fugitive emissions were taken from this document.

	Pollutant	Emission Factor (lb/MMBtu) <sup>b</sup> (fuel input)	Emission Factor Rating	
	Criteria Pollutants and Greenhouse	e Gases		
	NO <sub>x</sub> <sup>c</sup> 90 - 105% Load	4.08 E+00	В	
	NO <sub>x</sub> <sup>c</sup> <90% Load	8.47 E-01	В	
	CO <sup>c</sup> 90 - 105% Load	3.17 E-01	С	
	CO <sup>c</sup> <90% Load	5.57 E-01	В	
	CO <sub>2</sub> <sup>d</sup>	1.10 E+02	А	
→	SO <sub>2</sub> <sup>e</sup>	5.88 E-04	А	
	TOC <sup>f</sup>	1.47 E+00	А	
	Methane <sup>g</sup>	1.25 E+00	С	
	VOC <sup>h</sup>	1.18 E-01	С	
	PM10 (filterable) <sup>i</sup>	7.71 E-05	D	
→	PM2.5 (filterable) <sup>i</sup>	7.71 E-05	D	0.0000771
→	PM Condensable <sup>j</sup>	9.91 E-03	D	+ 0.00991
	Trace Organic Compounds			0.0099871 (Total PM)
	1,1,2,2-Tetrachloroethane <sup>k</sup>	<4.00 E-05	E	(*******
	1,1,2-Trichloroethane <sup>k</sup>	<3.18 E-05	E	
	1,1-Dichloroethane	<2.36 E-05	Е	
	1,2,3-Trimethylbenzene	2.30 E-05	D	
	1,2,4-Trimethylbenzene	1.43 E-05	С	
	1,2-Dichloroethane	<2.36 E-05	E	
	1,2-Dichloropropane	<2.69 E-05	Е	
	1,3,5-Trimethylbenzene	3.38 E-05	D	
	1,3-Butadiene <sup>k</sup>	2.67E-04	D	
	1,3-Dichloropropene <sup>k</sup>	<2.64 E-05	Е	
	2-Methylnaphthalene <sup>k</sup>	3.32 E-05	С	
	2,2,4-Trimethylpentane <sup>k</sup>	2.50 E-04	С	
	Acenaphthene <sup>k</sup>	1.25 E-06	С	

# Table 3.2-2. UNCONTROLLED EMISSION FACTORS FOR 4-STROKE LEAN-BURN ENGINES<sup>a</sup> (SCC 2-02-002-54)

	Pollutant	Emission Factor (lb/MMBtu) <sup>b</sup> (fuel input)	Emission Factor Rating
	Acenaphthylene <sup>k</sup>	5.53 E-06	С
$\longrightarrow$	Acetaldehyde <sup>k,1</sup>	8.36 E-03	А
$\longrightarrow$	Acrolein <sup>k,l</sup>	5.14 E-03	А
$\longrightarrow$	Benzene <sup>k</sup>	4.40 E-04	А
	Benzo(b)fluoranthenek	1.66 E-07	D
	Benzo(e)pyrene <sup>k</sup>	4.15 E-07	D
	Benzo(g,h,i)perylenek	4.14 E-07	D
	Biphenyl <sup>k</sup>	2.12 E-04	D
	Butane	5.41 E-04	D
	Butyr/Isobutyraldehyde	1.01 E-04	С
	Carbon Tetrachloride <sup>k</sup>	<3.67 E-05	Е
	Chlorobenzene <sup>k</sup>	<3.04 E-05	Е
	Chloroethane	1.87 E-06	D
	Chloroform <sup>k</sup>	<2.85 E-05	Е
	Chrysene <sup>k</sup>	6.93 E-07	С
	Cyclopentane	2.27 E-04	С
	Ethane	1.05 E-01	С
	Ethylbenzene <sup>k</sup>	3.97 E-05	В
	Ethylene Dibromide <sup>k</sup>	<4.43 E-05	Е
	Fluoranthene <sup>k</sup>	1.11 E-06	С
	Fluorene <sup>k</sup>	5.67 E-06	С
$\longrightarrow$	Formaldehyde <sup>k,1</sup>	5.28 E-02	А
$\longrightarrow$	Methanol <sup>k</sup>	2.50 E-03	В
	Methylcyclohexane	1.23 E-03	С
	Methylene Chloride <sup>k</sup>	2.00 E-05	С
	n-Hexane <sup>k</sup>	1.11 E-03	С
	n-Nonane	1.10 E-04	С

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

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

### Table 3.2-2. UNCONTROLLED EMISSION FACTORS FOR <u>4-STROKE LEAN-BURN</u> ENGINES (Continued)

<sup>a</sup> Reference 7. Factors represent uncontrolled levels. For NO<sub>x</sub>, CO, and PM10, "uncontrolled" means no combustion or add-on controls; however, the factor may include turbocharged units. For all other pollutants, "uncontrolled" means no oxidation control; the data set may include units with control techniques used for NOx control, such as PCC and SCR for lean burn engines, and PSC for rich burn engines. Factors are based on large population of engines. Factors are for engines at all loads, except as indicated. SCC = Source Classification Code. TOC = Total Organic Compounds. PM-10 = Particulate Matter ≤ 10 microns (µm) aerodynamic diameter. A "<" sign in front of a factor means that the corresponding emission factor is based on one-half of the method detection limit.</li>
<sup>b</sup> Emission factors were calculated in units of (lb/MMBtu) based on procedures in EPA Method 19. To convert from (lb/MMBtu) to (lb/10<sup>6</sup> scf), multiply by the heat content of the fuel. If the heat content is not available, use 1020 Btu/scf. To convert from (lb/MMBtu) to (lb/hp-hr) use the following equation:

lb/hp-hr = (lb/MMBtu) (heat input, MMBtu/hr, (1/operating HP, 1/hp)

<sup>c</sup> Emission tests with unreported load conditions were not included in the data set.

- <sup>d</sup> Based on 99.5% conversion of the fuel carbon to  $CO_2$ .  $CO_2$  [lb/MMBtu] =
- (3.67)(% CON)(C)(D)(1/h), where  $\% \text{CON} = \text{percent conversion of fuel carbon to CO}_2$ , C = carbon content of fuel by weight (0.75), D = density of fuel, 4.1 E+04 lb/10<sup>6</sup> scf, and

h = heating value of natural gas (assume 1020 Btu/scf at  $60^{\circ}$ F).

- Based on 100% conversion of fuel sulfur to SO<sub>2</sub>. Assumes sulfur content in natural gas of  $2,000 \text{ gr}/10^6 \text{scf.}$
- Emission factor for TOC is based on measured emission levels from 22 source tests.
- <sup>g</sup> Emission factor for methane is determined by subtracting the VOC and ethane emission factors from the TOC emission factor. Measured emission factor for methane compares well with the calculated emission factor, 1.31 lb/MMBtu vs. 1.25 lb/MMBtu, respectively.
- $^{\rm h}$  VOC emission factor is based on the sum of the emission factors for all speciated organic compounds less ethane and methane.
- Considered  $\leq 1 \ \mu m$  in aerodynamic diameter. Therefore, for filterable PM emissions, PM10(filterable) = PM2.5(filterable).
- <sup>j</sup> PM Condensable = PM Condensable Inorganic + PM-Condensable Organic
- Hazardous Air Pollutant as defined by Section 112(b) of the Clean Air Act.
- For lean burn engines, aldehyde emissions quantification using CARB 430 may reflect interference with the sampling compounds due to the nitrogen concentration in the stack. The presented emission factor is based on FTIR measurements. Emissions data based on CARB 430 are available in the background report.

## Table 3.2-3. UNCONTROLLED EMISSION FACTORS FOR <u>4-STROKE RICH-BURN</u> ENGINES<sup>a</sup> (SCC 2-02-002-53)

	Pollutant	Emission Factor (lb/MMBtu) <sup>b</sup> (fuel input)	Emission Factor Rating	
	Criteria Pollutants and Greenhous			
	NO <sub>x</sub> <sup>c</sup> 90 - 105% Load	2.21 E+00	А	
	NO <sub>x</sub> <sup>c</sup> <90% Load	2.27 E+00	С	
	CO <sup>c</sup> 90 - 105% Load	3.72 E+00	А	
	CO <sup>c</sup> <90% Load	3.51 E+00	С	
	CO <sub>2</sub> <sup>d</sup>	1.10 E+02	А	
-₽	SO <sub>2</sub> <sup>e</sup>	5.88 E-04	А	
	TOC <sup>f</sup>	3.58 E-01	С	
	Methane <sup>g</sup>	2.30 E-01	С	
	VOC <sup>h</sup>	2.96 E-02	С	
→	PM10 (filterable) <sup>i,j</sup>	9.50 E-03	Е	
-₽	PM2.5 (filterable) <sup>j</sup>	9.50 E-03	Е	0.00950
→	PM Condensable <sup>k</sup>	9.91 E-03	Е	<u>+0.00991</u>
	Trace Organic Compounds			0.01941 (Total PM
	1,1,2,2-Tetrachloroethane <sup>1</sup>	2.53 E-05	С	Emission Factor)
	1,1,2-Trichloroethane <sup>1</sup>	<1.53 E-05	Е	
	1,1-Dichloroethane	<1.13 E-05	Е	
	1,2-Dichloroethane	<1.13 E-05	Е	
	1,2-Dichloropropane	<1.30 E-05	Е	
	1,3-Butadiene <sup>l</sup>	6.63 E-04	D	
	1,3-Dichloropropene <sup>1</sup>	<1.27 E-05	Е	
-₽	Acetaldehyde <sup>l,m</sup>	2.79 E-03	С	
→	Acrolein <sup>l,m</sup>	2.63 E-03	С	
→	Benzene <sup>1</sup>	1.58 E-03	В	
	Butyr/isobutyraldehyde	4.86 E-05	D	
	Carbon Tetrachloride <sup>1</sup>	<1.77 E-05	E	

Pollutant	Emission Factor (lb/MMBtu) <sup>b</sup> (fuel input)	Emission Factor Rating
Chlorobenzene <sup>l</sup>	<1.29 E-05	Е
Chloroform <sup>1</sup>	<1.37 E-05	Е
Ethane <sup>n</sup>	7.04 E-02	С
Ethylbenzene <sup>l</sup>	<2.48 E-05	Е
Ethylene Dibromide <sup>1</sup>	<2.13 E-05	Е
Formaldehyde <sup>1,m</sup>	2.05 E-02	А
Methanol <sup>1</sup>	3.06 E-03	D
Methylene Chloride <sup>1</sup>	4.12 E-05	С
Naphthalene <sup>1</sup>	<9.71 E-05	Е
PAH <sup>l</sup>	1.41 E-04	D
Styrene <sup>1</sup>	<1.19 E-05	Е
Toluene <sup>1</sup>	5.58 E-04	А
Vinyl Chloride <sup>1</sup>	<7.18 E-06	Е
Xylene <sup>l</sup>	1.95 E-04	А

Table 3.2-3. UNCONTROLLED EMISSION FACTORS FOR 4-STROKE RICH-BURN ENGINES (Concluded)

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

<sup>b</sup> Emission factors were calculated in units of (lb/MMBtu) based on procedures in EPA Method 19. To convert from (lb/MMBtu) to (lb/ $10^6$  scf), multiply by the heat content of the fuel. If the heat content is not available, use 1020 Btu/scf. To convert from (lb/MMBtu) to (lb/hp-hr) use the following equation:

lb/hp-hr = db/MMBtu, heat input, MMBtu/hr, d/operating HP, 1/hp

<sup>c</sup> Emission tests with unreported load conditions were not included in the data set. <sup>d</sup> Based on 99.5% conversion of the fuel carbon to  $CO_2$ .  $CO_2$  [lb/MMBtu] =

(3.67)(% CON)(C)(D)(1/h), where  $\% \text{CON} = \text{percent conversion of fuel carbon to CO}_2$ ,

C = carbon content of fuel by weight (0.75), D = density of fuel, 4.1 E+04  $lb/10^6$  scf, and h = heating value of natural gas (assume 1020 Btu/scf at 60°F).

- <sup>e</sup> Based on 100% conversion of fuel sulfur to SO<sub>2</sub>. Assumes sulfur content in natural gas of 2,000  $\text{gr/10}^6$  scf.
- <sup>f</sup> Emission factor for TOC is based on measured emission levels from 6 source tests.
- <sup>g</sup> Emission factor for methane is determined by subtracting the VOC and ethane emission factors from the TOC emission factor.
- <sup>h</sup> VOC emission factor is based on the sum of the emission factors for all speciated organic compounds. Methane and ethane emissions were not measured for this engine category.
- <sup>i</sup> No data were available for uncontrolled engines. PM10 emissions are for engines equipped with a PCC.
- <sup>j</sup> Considered  $\leq 1 \ \mu m$  in aerodynamic diameter. Therefore, for filterable PM emissions, PM10(filterable) = PM2.5(filterable).
- <sup>k</sup> No data were available for condensable emissions. The presented emission factor reflects emissions from 4SLB engines.
- <sup>1</sup> Hazardous Air Pollutant as defined by Section 112(b) of the Clean Air Act.
- <sup>m</sup> For rich-burn engines, no interference is suspected in quantifying aldehyde emissions. The presented emission factors are based on FTIR and CARB 430 emissions data measurements.
- $^{\rm n}\,$  Ethane emission factor is determined by subtracting the VOC emission factor from the NMHC emission factor.

### TRANSWESTERN PIPELINE COMPANY, LLC Mountainair Compressor Station No. 7 Title V Renewal for Operating Permit No. P-153-R3M1

## Gas Analysis

Component	Mole %	Molecular Weight (lb/lb-mole)	MOL % X MW X (100/Total Mol%)	Weight %	ppmv (Ci)	Adjusted wt%
NITROGEN	0.487	28.01	13.65	0.78	4,874	0.00
CO <sub>2</sub>	2.020	44.01	88.89	5.08	20,197	0.00
METHANE	94.756	16.04	1,520.17	86.83	947,558	92.23
ETHANE	1.003	30.07	30.15	1.72	10,026	1.83
PROPANE	0.752	44.09	33.17	1.89	7,524	2.01
N-BUTANE	0.305	58.12	17.70	1.01	3,045	1.07
ISO-BUTANE	0.302	58.12	17.57	1.00	3,023	1.07
<b>ISO-PENTANE</b>	0.101	72.14	7.26	0.41	1,007	0.44
PENTANE	0.101	72.14	7.28	0.42	1,009	0.44
H <sub>2</sub> S	0.000	34.08	0.00	0.00	0	0.00
HEXANES+	0.174	86.17	14.97	0.85	1,737	0.91
TOTALS	100.0		1,750.81	100.0	1,000,000	100.0

VOC wt%=	5.59%	
Methane wt% =	86.83%	
Ethane wt% =	1.72%	
Molecular Weight of Gas =	17.51	lb/lb-mol
Molecular Weight of Nonmethane VOC =	0.98	lb/lb-mol
Heat Content =	1,044	Btu/scf

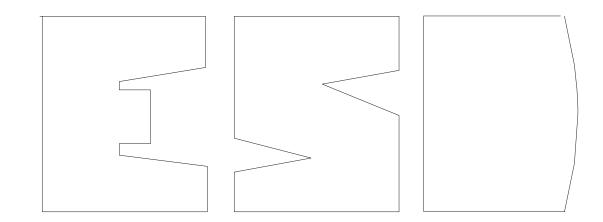
United States Environmental Protection Agency Office of Air Quality Planning and Standards Research Triangle Park NC 27711

EPA-453/R-95-017 November 1995

Air



# **Protocol for Equipment Leak** Emission Estimates



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

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

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

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

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

	<u>Emissic</u>	on Factor
Service	kg/hr/source	lb/hr/source
	<u>Va</u>	lves
Gas	4.50E-03	9.92E-03
Heavy Oil	8.40E-06	1.85E-05
Light Oil	2.50E-03	5.51E-03
Water/Oil	9.80E-05	2.16E-04
	<u>Pump</u>	<u>p Seals</u>
Gas	2.40E-03	5.29E-03
Heavy Oil	NA	NA
Light Oil	1.30E-02	2.87E-02
Water/Oil	2.40E-05	5.29E-05
Others (compressors, dra	ains, meters, pressure	e relief valves, relief valves, vents
Gas	8.80E-03	1.94E-02
Heavy Oil	3.20E-05	7.05E-05
Light Oil	7.50E-03	1.65E-02
Water/Oil	1.40E-02	3.09E-02
	<u>Conn</u>	<u>iectors</u>
Gas	2.00E-04	4.41E-04
Heavy Oil	7.50E-06	1.65E-05
Light Oil	2.10E-04	4.63E-04
Water/Oil	1.10E-04	2.43E-04
	<u>Fla</u>	nges
Gas	3.90E-04	8.60E-04
Heavy Oil	3.90E-07	8.60E-07
Light Oil	1.10E-04	2.43E-04
Water/Oil	2.90E-06	6.39E-06
		nded lines
Gas	2.00E-03	4.41E-03
Heavy Oil	1.40E-04	3.09E-04
Light Oil	1.40E-03	3.09E-03
Water/Oil	2.50E-04	5.51E-04

## **Oil and Gas Production Operations Average Emission Factors**

From Table 2-4, p. 2-15, of EPA-453/R-95-017, *Protocol for Equipment Leak Emission Estimates.* November 1995

# Section 8

# Map(s)

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

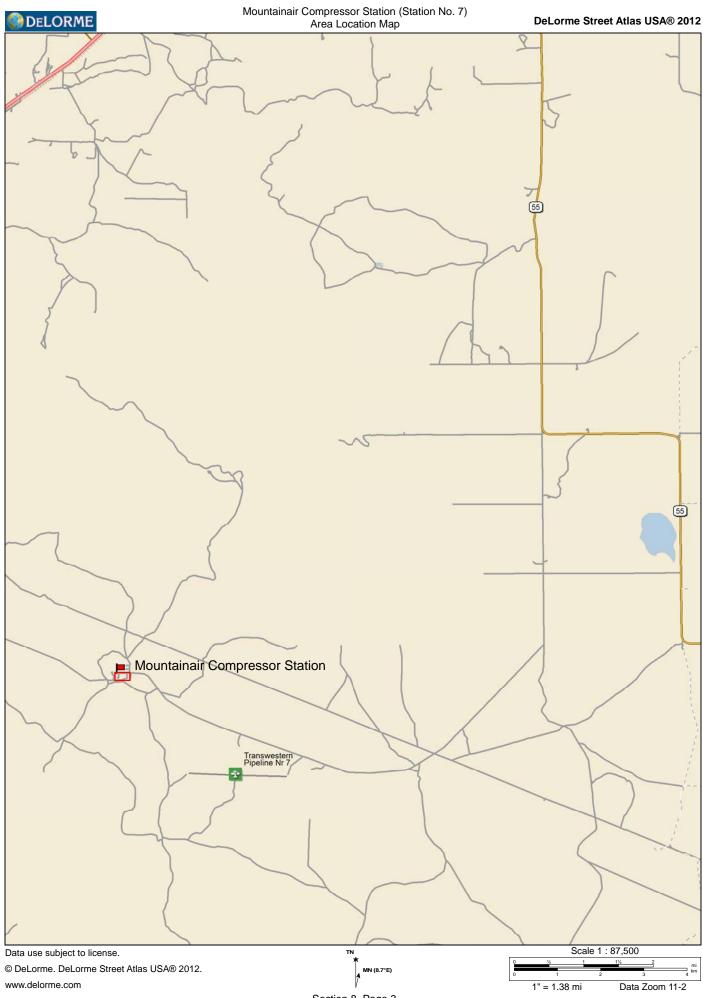
The UTM or Longitudinal coordinate system on both axes	An indicator showing which direction is north
A minimum radius around the plant of 0.8km (0.5 miles)	Access and haul roads
Topographic features of the area	Facility property boundaries
The name of the map	The area which will be restricted to public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

Three maps showing the location of the Mountainair Compressor Station are included following this page. These maps include the following:

- General Location Map (Page 2)
- Area Location Map (Page 3)
- Topographical Location Map (Page 4)



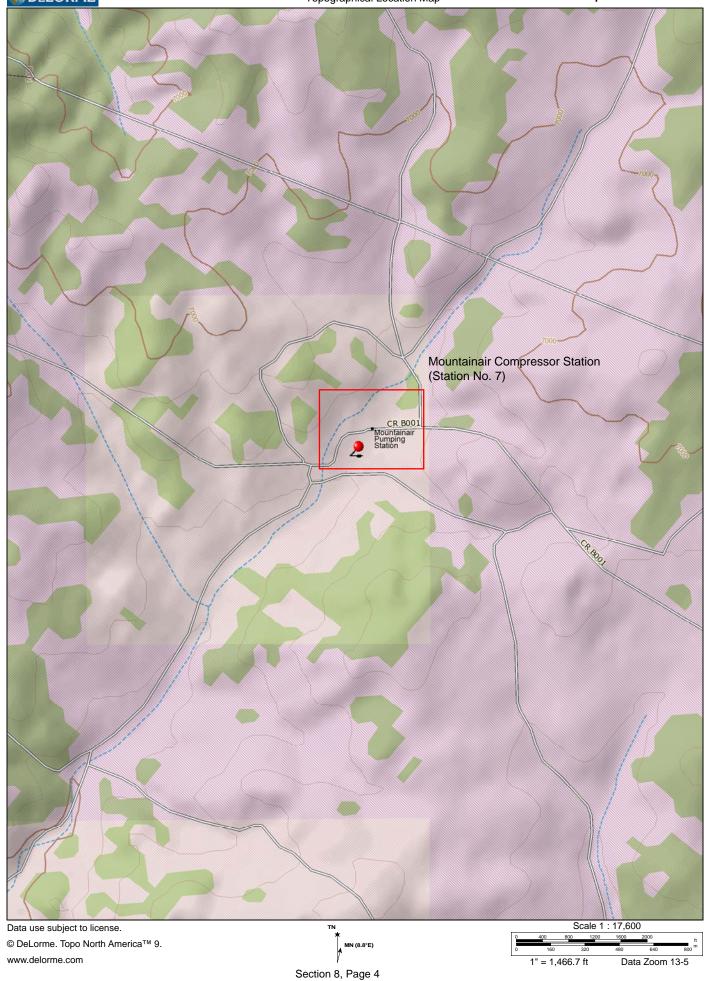
Section 8, Page 2



Section 8, Page 3



#### Mountainair Compressor Station (Station No. 7) Topographical Location Map



# Section 9

# **Proof of Public Notice**

(for NSR applications submitting under 20.2.72 or 20.2.74 NMAC) (This proof is required by: 20.2.72.203.A.14 NMAC "Documentary Proof of applicant's public notice")

✓ I have read the AQB "Guidelines for Public Notification for Air Quality Permit Applications" This document provides detailed instructions about public notice requirements for various permitting actions. It also provides public notice examples and certification forms. Material mistakes in the public notice will require a re-notice before issuance of the permit.

Unless otherwise allowed elsewhere in this document, the following items document proof of the applicant's Public Notification. Please include this page in your proof of public notice submittal with checkmarks indicating which documents are being submitted with the application.

New Permit and Significant Permit Revision public notices must include all items in this list.

Technical Revision public notices require only items 1, 5, 9, and 10.

Per the Guidelines for Public Notification document mentioned above, include:

- 1.  $\Box$  A copy of the certified letter receipts with post marks (20.2.72.203.B NMAC)
- 2. A list of the places where the public notice has been posted in at least four publicly accessible and conspicuous places, including the proposed or existing facility entrance. (e.g: post office, library, grocery, etc.)
- 3.  $\Box$  A copy of the property tax record (20.2.72.203.B NMAC).
- 4.  $\Box$  A sample of the letters sent to the owners of record.
- 5.  $\Box$  A sample of the letters sent to counties, municipalities, and Indian tribes.
- 6.  $\Box$  A sample of the public notice posted and a verification of the local postings.
- 7.  $\Box$  A table of the noticed citizens, counties, municipalities and tribes and to whom the notices were sent in each group.
- 8. 🗆 A copy of the public service announcement (PSA) sent to a local radio station and documentary proof of submittal.
- 9.  $\Box$  A copy of the <u>classified or legal</u> ad including the page header (date and newspaper title) or its affidavit of publication stating the ad date, and a copy of the ad. When appropriate, this ad shall be printed in both English and Spanish.
- 10.  $\Box$  A copy of the <u>display</u> ad including the page header (date and newspaper title) or its affidavit of publication stating the ad date, and a copy of the ad. When appropriate, this ad shall be printed in both English and Spanish.
- 11. A map with a graphic scale showing the facility boundary and the surrounding area in which owners of record were notified by mail. This is necessary for verification that the correct facility boundary was used in determining distance for notifying land owners of record.

Public Notice by an applicant is required only if the permit application is being submitted under 20.2.72 NMAC. This operating permit renewal application is being submitted under 20.2.70 NMAC, so Transwestern Pipeline Company, LLC has performed no public notice in conjunction with preparation of this application. No changes to the station's operations are requested in this permit renewal application.

### Written Description of the Routine Operations of the Facility

<u>A written description of the routine operations of the facility</u>. 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.

Natural gas enters the station via pipeline and passes through an inlet separator/scrubber, where small amounts of entrained liquids that may have accumulated from along the pipeline are removed from the gas stream. These pipeline liquids are stored in the condensate storage tank and removed from the station via tanker trucks, as necessary. Alternatively to the use of the condensate storage tank, a mist extractor located following the inlet separator is used to collect entrained liquids from the pipeline and the extracted liquids are transferred from the mist extractor to trucks for removal from the station, as necessary. After passing through the separator and, if present, the mist extractor, the natural gas is compressed by three natural gas-powered drivers (compressors). Following compression, the gas exits the station and is directed back into the pipeline at a higher pressure. Two electric generators operate to provide power to the site at all times, as the site does not purchase power from the utility grid.

## 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, <u>Single Source Determination Guidance</u>, 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):

Mountainair Compressor Station sources.

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

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

√ Yes □ No

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

 $\sqrt{\text{Yes}}$   $\Box$  No

<u>Contiguous or Adjacent</u>: Surrounding or associated sources are contiguous or adjacent with this source.

 $\sqrt{\text{Yes}}$   $\Box$  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, <u>does not</u> constitute the entire source for 20.2.70, 20.2.72, 20.2.73, or 20.2.74 NMAC applicability purposes (A permit may be issued for a portion of a source). The entire source consists of the following facilities or emissions sources (list and describe):

Section 12.A

**PSD** Applicability Determination for All Sources

(Submitting under 20.2.72, 20.2.74 NMAC)

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

- A. This facility is:
  - **a minor PSD source before and after this modification (if so, delete C and D below).**
  - □ a major PSD source before this modification. This modification will make this a PSD minor source.
  - $\sqrt{}$  an existing PSD Major Source that has never had a major modification requiring a BACT analysis.
  - □ an existing PSD Major Source that has had a major modification requiring a BACT analysis
  - □ a new PSD Major Source after this modification.
- B. This facility is not one of the listed 20.2.74.501 Table I PSD Source Categories. The "project" emissions for this modification are not significant, as they represent no increase from currently authorized levels. The "project" emissions listed below do only result from changes described in this permit application, thus there are no emissions from other revisions or modifications, past or future to this facility. Also, this project does note result in "de-bottlenecking" or other associated emissions resulting in higher emissions. The project emissions (before netting) for this project are as follows [see Table 2 in 20.2.74.502 NMAC for a complete list of significance levels]:
  - a. NOx: 0.0 TPY
  - b. CO: 0.0 TPY
  - c. VOC: **0.0** TPY
  - d. SOx: 0.0 TPY
  - e. TSP (PM): 0.0 TPY
  - f. **PM10: 0.0 TPY**
  - g. PM2.5: 0.0 TPY
  - h. Fluorides: 0.0 TPY
  - i. Lead: 0.0 TPY
  - j. Sulfur compounds (listed in Table 2): 0.0 TPY
  - k. GHG: 0.0 TPY
- C. Netting is not required, as this project is not significant.
- D. **BACT** is **not required for this modification.** Torrance County is an attainment area with respect to the national ambient air quality standards, but Transwestern is neither constructing a new major stationary source at the facility nor undertaking a project that involves "a physical change or change in the method of operation."
- E. If this is an existing PSD major source, or any facility with emissions greater than 250 TPY (or 100 TPY for 20.2.74.501 Table 1 PSD Source Categories), determine whether any permit modifications are related, or could be considered a single project with this action, and provide an explanation for your determination whether a PSD modification is triggered.

Since no changes have been made to the station, a PSD modification has not been triggered.

### **Determination of State & Federal Air Quality Regulations**

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

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

#### **Required Information for Specific Equipment:**

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

#### **Required Information for Regulations that Apply to the Entire Facility:**

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

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

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

#### **Regulatory Citations for Emission Standards:**

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

#### Federally Enforceable Conditions:

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

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

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

### Table of Applicable STATE REGULATIONS:

		Applies?	Unit(s)	
STATE REGU- LATIONS CITATION	Title	Applies: Enter Yes or No	or Facility	JUSTIFICATION: (You may delete instructions or statements that do not apply in the justification column to shorten the document.)
20.2.1 NMAC	General Provisions	Yes	Facility	General Provisions apply to Notice of Intent, Construction, and Title V permit applications. This application is for a Title V permit renewal; therefore, this regulation applies.
20.2.3 NMAC	Ambient Air Quality Standards NMAAQS	No	N/A	Per 20.2.3.9 NMAC, the requirements of this part are not applicable requirements under 20.2.70 NMAC, which is the rule under which this application is submitted.
20.2.7 NMAC	Excess Emissions	Yes	Facility	This facility is a Title V facility with individual pieces of equipment that are subject to emissions limits in a permit or numerical emissions standards in a federal or state regulations. Therefore, this regulation applies.
20.2.33 NMAC	Gas Burning Equipment - Nitrogen Dioxide	No	N/A	This facility does not have new gas burning equipment ( <b>external combustion</b> <b>emission sources, such as gas fired boilers and heaters</b> ) having a heat input of greater than 1,000,000 million British Thermal Units per year per unit. This facility has existing gas burning equipment having a heat input of greater than 1,000,000 million British Thermal Units per year per unit, but this equipment is internal combustion equipment (engines), not external combustion equipment. Therefore, this regulation does not apply.
				Note: "New gas burning equipment" means gas burning equipment, the construction or modification of which is commenced after February 17, 1972.
20.2.34 NMAC	Oil Burning Equipment: NO <sub>2</sub>	No	N/A	This regulation does not apply to internal combustion equipment such as engines. It only applies to external combustion equipment such as heaters or boilers. This facility has 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 could apply to existing (prior to July 1, 1974) or new (on or after July 1, 1974) natural gas processing plants that use a Sulfur Recovery Unit to reduce sulfur emissions. See 'Guidance and Clarification Regarding Applicability of 20.2.35 NMAC' located with the Air Quality Bureau's Permit Section website guidance documents.
20.2.37 and 20.2.36 NMAC	Petroleum Processing Facilities and Petroleum Refineries	N/A	N/A	These regulations were repealed by the Environmental Improvement Board. If you had equipment subject to 20.2.37 NMAC before the repeal, your combustion emission sources are now subject to 20.2.61 NMAC.
20.2.38 NMAC	Hydrocarbon Storage Facility	No	N/A	This regulation could apply to storage tanks at petroleum production facilities, processing facilities, tanks batteries, or hydrocarbon storage facilities.
<u>20.2.39</u> 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.
20.2.61.109 NMAC	Smoke & Visible Emissions	Yes	701, 702, 703, 721, 722	This regulation that limits opacity to 20% applies to Stationary Combustion Equipment, such as engines, boilers, heaters, and flares unless your equipment is subject to another state regulation that limits particulate matter such as 20.2.19 NMAC (see 20.2.61.109 NMAC). The specified units are engines that are Stationary Combustion Equipment subject to this regulation.
20.2.70 NMAC	Operating Permits	Yes	Facility	The facility is major for NOx, CO, Formaldehyde (as a single hazardous air pollutant (HAP)), and total HAPs, and has a current operating permit. Therefore, this regulation applies.
20.2.71 NMAC	Operating Permit Fees	Yes	Facility	This facility is subject to 20.2.70 NMAC and is, in turn, subject to 20.2.71 NMAC. Transwestern Pipeline Company, LLC (TWP) has paid emission fees annually.
20.2.72 NMAC	Construction Permits	Yes	Facility	The facility is potentially subject to this regulation since it has a potential emission rate of greater than 25 tpy for one or more pollutants subject to a federal or state standard, but to the best of TWP knowledge, the station has not been issued a

STATE REGU- LATIONS CITATION	Title	Applies? Enter Yes or No	Unit(s) or Facility	JUSTIFICATION: (You may delete instructions or statements that do not apply in the justification column to shorten the document.)
				permit under 20.2.72 NMAC.
20.2.73 NMAC	NOI & Emissions Inventory Requirements	Yes	Facility	All facilities that are a Title V Major Source as defined at 20.2.70.7.R NMAC, are subject to Emissions Inventory Reporting. Since this facility is a Title V major source, this regulation applies.
20.2.74 NMAC	Permits – Prevention of Significant Deterioration (PSD)	Yes	Facility	<ul> <li>This facility is PSD major as defined by the following:</li> <li>20.2.74.7.AG(2) A stationary source not listed in Table 1 of this Part (20.2.74.501 NMAC) and which emits or has the potential to emit stack emissions of two hundred fifty (250) tons per year or more of any regulated pollutant. Emissions of NOx at the station exceed 250 tons per year; thus, the site is a PSD major source.</li> <li>20.2.74.200.7.AG(5) The fugitive emissions of a stationary source are not included in determining for any of the purposes of this section whether it is a major stationary source, since the source does not belong to one of the stationary source categories found in Table 1 of this Part (20.2.74.501 NMAC) or any other stationary source category which, as of August 7, 1980, is being regulated under section 111 or 112 of the Act.</li> </ul>
20.2.75 NMAC	Construction Permit Fees	No	N/A	This application is not submitted pursuant to 20.2.72, 20.2.73, 20.2.74, and/or 20.2.79 NMAC. Therefore, this regulation is not applicable.
20.2.77 NMAC	New Source Performance	No	None	This facility is a stationary source that is potentially subject to the requirements of 40 CFR Part 60, but no requirements of 40 CFG Part 60 apply to the station. Therefore, this regulation is not applicable.
20.2.78 NMAC	Emission Standards for HAPS	No	None	This facility does not emit hazardous air pollutants that are subject to the requirements of 40 CFR Part 61. Therefore, this regulation is not applicable.
20.2.79 NMAC	Permits – Nonattainment Areas	No	N/A	This facility is not located in a nonattainment area. Therefore, this regulation is not applicable.
20.2.80 NMAC	Stack Heights	No	N/A	This permit application is a Title V renewal application. Therefore, this regulation is not applicable.
20.2.82 NMAC	MACT Standards for source categories of HAPS	Yes	721, 722	This regulation applies to all sources emitting hazardous air pollutants that are subject to the requirements of 40 CFR Part 63. The specified units are subject to 40 CFR Part 63, Subpart ZZZZ. Therefore, this regulation applies.

### Table of Applicable FEDERAL REGULATIONS:

FEDERAL REGU- LATIONS CITATION	Title	Applies? Enter Yes or No	Unit(s) or Facility	JUSTIFICATION:
40 CFR 50	NAAQS	Yes	Facility	This rule applies if the facility is subject to 20.2.70, 20.2.72, 20.2.74, and/or 20.2.79 NMAC. Since the facility is specifically subject to 20.2.70 NMAC, this rule applies.
NSPS 40 CFR 60, Subpart A	General Provisions	No	None	This facility is a stationary source that is potentially subject to the requirements of 40 CFR Part 60, but no requirements of 40 CFG Part 60 apply to the station. Therefore, this subpart is not applicable.
NSPS 40 CFR60.40a, Subpart Da	Subpart Da, Performance Standards for Electric Utility Steam Generating Units	No	N/A	The station does not have any electric utility steam generating units.
NSPS 40 CFR60.40b Subpart Db	Electric Utility Steam Generating Units	No	N/A	The station does not have any electric utility steam generating units.
40 CFR 60.40c, Subpart Dc	Standards of Performance for Small Industrial- Commercial- Institutional Steam Generating Units	No	N/A	The station does not have any electric utility steam generating units.
NSPS 40 CFR 60, Subpart Ka	Standards of Performance for Storage Vessels for Petroleum Liquids for which Construction, or Modification Commenced After May 18, 1978, and Prior to July 23, 1984	No	N/A	No storage tank at the station has a storage capacity greater than 151,416 liters (40,000 gallons). Therefore, this rule is not applicable.
NSPS 40 CFR 60, Subpart Kb	Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced After July 23, 1984	No	N/A	This station has one storage vessel, emission unit T-006, with a capacity greater than or equal to 75 cubic meters (m <sup>3</sup> ) (472 barrels) that is used to store volatile organic liquids (VOL) for which construction commenced after July 23, 1984. However, per 40 CFR 60.110b(d) this subpart does not apply to the following: (4) Vessels with a design capacity less than or equal to 1,589.874 m <sup>3</sup> (10,000 barrels) used for petroleum or condensate stored, processed, or treated prior to custody transfer. Therefore, this rule is not applicable.
NSPS 40 CFR 60.330 Subpart GG	Stationary Gas Turbines	No	N/A	This station does not have any stationary gas turbines.
NSPS 40 CFR 60, Subpart KKK	Leaks of VOC from <b>Onshore</b> <b>Gas Plants</b>	No	N/A	This station is not an onshore gas plant.

FEDERAL REGU- LATIONS CITATION	Title	Applies? Enter Yes or No	Unit(s) or Facility	JUSTIFICATION:
NSPS 40 CFR Part 60 Subpart LLL	Standards of Performance for <b>Onshore Natural</b> <b>Gas Processing</b> : SO <sub>2</sub> Emissions	No	N/A	This station is not an onshore natural gas processing plant.
NSPS 40 CFR Part 60 Subpart OOOO	Standards of Performance for Crude Oil and Natural Gas Production, Transmission, and Distribution for which construction, modification or reconstruction commenced after August 23, 2011 and before September 18, 2015	No	N/A	The rule applies to "affected" facilities that are constructed, modified, or reconstructed after Aug 23, 2011 (40 CFR 60.5365): gas wells, including fractured and hydraulically refractured wells, centrifugal compressors, reciprocating compressors, pneumatic controllers, certain equipment at natural gas processing plants, sweetening units at natural gas processing plants, and storage vessels. If there is a standard or other requirement, then the facility is an "affected facility." Currently there are standards for: gas wells (60.5375); centrifugal compressors (60.5380); reciprocating compressors (60.5385): controllers (60.5390); storage vessels (60.5395); equipment leaks (60.5400); sweetening units (60.5405). The station does not have any facilities that were constructed, modified, or reconstructed after the applicability date. Therefore, this rule is not applicable.
NSPS 40 CFR Part 60 Subpart OOOOa	Standards of Performance for Crude Oil and Natural Gas Facilities for which Construction, Modification or Reconstruction Commenced After September 18, 2015	No	N/A	See 60.536 EPA Guidance Page: <u>https://www3.epa.gov/airquality/oilandgas/0a</u> No potentially affected facilities at the station were constructed, modified, or reconstructed after September 18, 2015. Therefore, this regulation is not applicable.
NSPS 40 CFR 60 Subpart IIII	Standards of performance for Stationary Compression Ignition Internal Combustion Engines	No	N/A	See 60.4200 and EPA Region 1's Reciprocating Internal Combustion Guidance website.
NSPS 40 CFR Part 60 Subpart JJJJ	Standards of Performance for Stationary Spark Ignition Internal Combustion Engines	No	N/A	This rule applies to engines constructed after June 12, 2006. None of the engines at this station was constructed after that date.
NSPS 40 CFR 60 Subpart TTTT	Standards of Performance for Greenhouse Gas Emissions for Electric Generating Units	No	N/A	This station is not an electric generating unit. Therefore, this rule is not applicable.
NSPS 40 CFR 60 Subpart UUUU	Emissions Guidelines for Greenhouse Gas Emissions and Compliance Times for Electric Utility Generating Units	No	N/A	This station is not an electric generating unit. Therefore, this rule is not applicable.

FEDERAL REGU- LATIONS CITATION	Title	Applies? Enter Yes or No	Unit(s) or Facility	JUSTIFICATION:	
NSPS 40 CFR 60, Subparts WWW, XXX, Cc, and Cf	Standards of performance for Municipal Solid Waste (MSW) Landfills	No	N/A	This station is not a municipal solid waste landfill. Therefore, this rule is not applicable.	
NESHAP 40 CFR 61 Subpart A	General Provisions	No	None	This subpart applies to the owner or operator of any stationary source for which a standard is prescribed under this part. No subpart of 40 CFR 61 applies to this station. Therefore, this subpart does not apply.	
NESHAP 40 CFR 61 Subpart E	National Emission Standards for <b>Mercury</b>	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. The station does not have any sources affected by this subpart; therefore, it does not apply.	
NESHAP 40 CFR 61 Subpart V	National Emission Standards for <b>Equipment Leaks</b> (Fugitive Emission Sources)	No	N/A	The provisions of this subpart apply to each of the following sources that are intended to operate in volatile hazardous air pollutant (VHAP) service: pumps, compressors, pressure relief devices, sampling connection systems, open-ended valves or lines, valves, connectors, surge control vessels, bottoms receivers, and control devices or systems required by this subpart. VHAP service means a piece of equipment either contains or contacts a fluid (liquid or gas) that is at least 10 percent by weight of VHAP. VHAP means a substance regulated under this subpart for which a standard for equipment leaks of the substance has been promulgated. Benzene is a VHAP (See 40 CFR 61 Subpart J). Link to 40 CFR 61 Subpart V.	
МАСТ				The station does not have any sources that are affected by this regulation.	
40 CFR 63, Subpart A	General Provisions	Yes	Facility	This subpart applies if any other Subpart in 40 CFR 63 applies. Since 40 CFR 63 applies to the station, this subpart is also applicable.	
MACT 40 CFR 63.760 Subpart HH	Oil and Natural Gas Production Facilities	No	N/A	This station is not subject to the requirements of 40 CFR 63 Subpart HH. It is an Oil and Natural Gas Production Facility and does not have any dehydrators	
MACT 40 CFR 63 Subpart HHH	Natural Gas Transmission and Storage Facilities	No	N/A	This subpart applies to owners and operators of natural gas transmission and storage facilities that transport or store natural gas prior to entering the pipeline to a local distribution company or to a final end user (if there is no local distribution company), and that are major sources of hazardous air pollutants (HAP) emissions as defined in §63.1271. No dehydrators are operated at this station. Therefore, this subpart is not applicable.	
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 subpart applies to boilers and process heaters. The station does not have any sources of this type; therefore, this subpart is not applicable.	
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 subpart applies to coal or oil-fired electric utility steam generating units. The station does not have any sources of this type; therefore, this subpart is not applicable.	

FEDERAL REGU- LATIONS CITATION	Title	Applies? Enter Yes or No	Unit(s) or Facility	JUSTIFICATION:	
	National Emissions Standards for			Facilities are subject to this subpart if they own or operate a stationary RICE, except if the stationary RICE is being tested at a stationary RICE test cell/stand. The electric generator engines, Units 721 and 722, at this station are stationary RICE that are subject to this rule. Therefore, this subpart is applicable.	
MACT 40 CFR 63 Subpart ZZZZ	Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines ( <b>RICE</b> <b>MACT</b> )	Yes	721, 722	Units 721 and 722 are existing four-stroke, rich-burn engines of less than 500 horsepower operating at a major source of HAP. They are required to be operated with an oxidative catalyst to control formaldehyde, per §63.6602 and Table 2c.11 to Subpart ZZZZ and are subject to the operational limits of §63.6625(h). Each engine was subject to initial performance testing and reporting requirements of §63.6612, §63.6620, and §63.6645; all of these requirements have been met. The engines are subject to recordkeeping and reporting requirements contained in §63.6655 and §63.6645, respectively.	
	Compliance			This regulation applies only to Title V Major Sources.	
40 CFR 64	Assurance Monitoring	No	N/A	Emissions for Units 701, 702, and 703 are major sources of NOx in and of themselves, but none of the units uses a control device to comply with the permit limit. Therefore, this regulation is not applicable.	
40 CFR 68	Chemical Accident Prevention	No	N/A	The facility does not maintain more than a threshold quantity of any regulated substance under this part, as determined by §68.115; therefore, this rule is not applicable.	
Title IV – Acid Rain 40 CFR 72	Acid Rain	No	N/A	This station does not generate commercial electric power or electric power for sale. Therefore, this regulation is not applicable.	
Title IV – Acid Rain 40 CFR 73	<b>Sulfur Dioxide</b> Allowance Emissions	No	N/A	This station does not generate commercial electric power or electric power for sale. Therefore, this regulation is not applicable.	
Title IV-Acid Rain 40 CFR 75	Continuous Emissions Monitoring	Emissions No N/A Instation does not generate commercial el sale. Therefore, this regulation is not application		This station does not generate commercial electric power or electric power for sale. Therefore, this regulation is not applicable.	
Title IV – Acid Rain 40 CFR 76			This station does not generate commercial electric power or electric power for sale. Therefore, this regulation is not applicable.		
				EPA Guidance Page for 40 CFR 82: <u>https://www.epa.gov/section608</u> 40 CFR 82 may apply if you:	
	Protection of <b>Stratospheric</b> <b>Ozone</b>	No	N/A	(40 CFR 82.1 and 82.100) produce, transform, destroy, import or export a controlled substance or import or export a controlled product;	
				(40 CFR 82.30) if you perform service on a motor vehicle for consideration when this service involves the refrigerant in the motor vehicle air conditioner;	
Title VI –				(40 CFR 82.80) if you are a department, agency, and instrumentality of the United States subject to Federal procurement requirements;	
40 CFR 82				(82.150) if you service, maintain, or repair appliances, dispose of appliances, refrigerant reclaimers, <b>if you are an owner or operator of an appliance</b> , if you are a manufacturer of appliances or of recycling and recovery equipment, if you are an approved recycling and recovery equipment testing organization, and/or if you sell or offer for sell or purchase class I or class I refrigerants.	
				<b>Note:</b> Owners and operators of appliances subject to 40 CFR 82.150 Recycling and Emissions Reduction have recordkeeping and reporting requirements even if the owner/operator is not performing the actual work.	
				Not applicable. None of the above items applies at the station.	

### **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 <u>Operational Plan to Mitigate Emissions During Startups</u>, <u>Shutdowns</u>, <u>and Emergencies</u> 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 <u>Operational Plan to Mitigate Source Emissions</u> <u>During Malfunction, Startup, or Shutdown</u> 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.
- $\sqrt{\text{Title V}}$  (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.

Transwestern Pipeline Company, LLC (TWP) has developed an operational plan to mitigate emissions during startups, shutdowns, and emergencies and maintains this plan on site.

TWP has established and implemented a plan to minimize emissions during routine or predictable startups, shutdowns, and scheduled maintenance through work practice standards and good air pollution control practices, and TWP maintains this plan on site.

## **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: <a href="https://www.env.nm.gov/aqb/permit/aqb\_pol.html">https://www.env.nm.gov/aqb/permit/aqb\_pol.html</a>. 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.

Transwestern Pipeline Company, LLC is not requesting any alternative operating scenarios with this application.

## Section 16 Air Dispersion Modeling

- 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 (<u>http://www.env.nm.gov/aqb/permit/app\_form.html</u>) 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.	Х
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.	Х

### 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.

Air dispersion modeling was performed for this station for the Title V permit renewal application, dated June 2003, for Permit No. P153. No modifications have been made to the station that affect the modeled emissions sources, and no new sources or SSM emissions are included with this application. Therefore, per guidance provided by the Air Quality Bureau to Transwestern Pipeline Company, LLC, modeling is not required for this permit renewal.

## **Compliance Test History**

(Submitting under 20.2.70, 20.2.72, 20.2.74 NMAC)

Existing permit conditions require annual performance testing on each engine if the engine operates for a specified minimum amount of time during the compliance period (each year). All required testing has been conducted. Whenever testing was not conducted during a given year, it was because the specified minimum amount of operating time was not reached during that year. The following table provides recent compliance test history over the past several years for each of the engines at Mountainair Compressor Station.

Unit No.	Test Description	Test Date
0111110.		10/13/2015
	Tested with portable analyzer to verify compliance with NOx and CO	03/29/2016
701	emission limits.	04/20/2017
	chilission mints.	06/06/2018
		10/13/2015
	Tested with portable analyzer to verify compliance with NOx and CO	03/29/2016
702	emission limits.	04/20/2017
	chilission mints.	06/06/2018
		No testing was
		required in 2015 due
		to low operating
703	Tested with portable analyzer to verify compliance with NOx and CO	times.
705	emission limits.	03/23/2016
		04/20/2017
		06/06/2018
		03/26/15, 06/24/15,
		9/24/15, 12/15/15
		03/23/16, 6/22/16,
	Tested with portable analyzer to verify compliance with NOx and CO	9/22/16, 12/19/16
721	emission limits.	03/02/17, 04/20/17,
		08/31/17, 11/30/17
		03/01/18, 06/06/18,
		08/30/18, 11/28/18
		03/26/15, 06/24/15,
		9/24/15, 12/15/15
		03/23/16, 6/22/16,
700	Tested with portable analyzer to verify compliance with NOx and CO	9/22/16, 12/19/16
722	emission limits.	03/02/17, 04/20/17,
		08/31/17, 11/30/17
		03/01/18, 06/06/18,
		08/30/18, 11/28/181

### **Compliance Test History Table**

### **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 <u>http://www.env.nm.gov/aqb/index.html</u>. Sources that are subject to both the Title V and Acid Rain regulations are encouraged to submit both applications simultaneously.
- \* Any source in a source category designated by the EPA Administrator ("Administrator"), in whole or in part, by regulation, after notice and comment.

This station is a major source as defined in 20.2.70 NMAC and this application is a Title V permit renewal application. Therefore, this section is completed.

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

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

As mentioned in Section 13, this station's emission units that emit NOx at levels that exceed major source thresholds in and of themselves do not use a control device to comply with an emission limit. Therefore, 40 CFR 64 does not apply to the engines listed in this permit application.

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

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

The most recent Compliance Certification, submitted under a cover letter dated May 7, 2018, indicated that the station was in compliance with all permit conditions as of April 30, 2018. No changes to the compliance status have occurred since that date through the submittal date of this application.

### **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.

Transwestern Pipeline Company, LLC will continue to comply with all applicable requirements at this station. In addition, TWP will also comply in a timely manner with any new applicable requirements when 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.

Transwestern will submit semiannual monitoring reports twice per year and an annual compliance certification once per year to the NMED.

### 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).

- Does your facility have any air conditioners or refrigeration equipment that uses CFCs, HCFCs or other ozonedepleting substances?
   ✓ Yes □ No
- 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.)

This station is subject to 40 CFR 82, Subpart F in the event that a unit containing refrigerants must be disposed. The facility does not service, perform maintenance, or repair such units. The station is in compliance with Clean Air Act Title VI, Sections 608 and 609, and will continue to comply with the requirements of these sections.

### **19.6** - Compliance Plan and Schedule

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

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

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

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

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

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

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

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

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

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

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

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

All emission units are in compliance with applicable requirements. Therefore, no compliance plan is required or included with this application.

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

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

This station is not subject to the requirements contained in this regulation.

#### **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)? **Yes.** 

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

The station is approximately 58 km (36 miles) from Bernalillo County and 43 km (27 miles) from Isleta Indian Reservation.

### **19.9 - Responsible Official**

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

The Responsible Official for this station is Mr. Dave Roybal.

### **Other Relevant Information**

<u>Other relevant information</u>. 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.

As discussed in the proposed changes portion of Section 3 of this application, Transwestern Pipeline Company, LLC (TWP) requests that the frequency of performance testing conducted for the two generator engines, Units 721 and 722, be reduced from quarterly to annually. This change would align the testing frequency of these engines with the testing frequency required for the compressor engines, Units 701, 702, and 703. The generator engines are subject to 40 CFR Part 63, Subpart ZZZZ, which required that an initial performance test be conducted. (The initial performance tests were conducted.) However, this rule does not require routine subsequent performance testing. Therefore, since the required testing frequency for Units 701, 702, and 703 is annually, TWP proposes that annual testing is appropriate for Units 721 and 722, as well, and respectively requests that NMED consider this change in the renewal of this permit.

Relevant excerpts from the current permit regarding testing frequency of all engines at the station are provided below. A proposed change to text in the permit that reflects the change suggested by TWP is indicated in "track changes" format to highlight the change. Specifically, note the proposed change to Section **A201 Engines**, B. **Monitoring** (1.a).

### A201 Engines

B. Periodic Emissions Testing (Units 701, 702, 703, 721, & 722)

**Monitoring:** The permittee shall test using a portable analyzer or EPA Reference Methods subject to the requirements and limitations of Section B108, General Monitoring Requirements. For periodic testing of NOx and CO, emissions tests shall be carried out as described below.

Test results that demonstrate compliance with the CO emission limits shall also be considered to demonstrate compliance with the VOC emission limits.

For units with g/hp-hr emission limits, in addition to the requirements stated in Section B108, the engine load shall be calculated by using the following equation:

Load(Hp) = <u>Fuel consumption (scfh) x Measured fuel heating value (LHV btu/scf)</u> Manufacturer's rated BSFC (btu/bhp-hr) at 100% load or best efficiency

(1)The monitoring period shall be annual for Units 701, 702, & 703 based on the reporting period stated in A109.B.

(1.a) The monitoring period shall be quarterly <u>annually</u> for Units 721 & 722 based on the reporting period stated in A109.B.

(2) The tests shall continue based on the existing testing schedule.

(3) All subsequent monitoring shall occur in each succeeding monitoring period. No two monitoring events shall occur closer together in time than 25% of a monitoring period.

(4) The permittee shall follow the General Testing Procedures of Section B111 except B111.D(1), due to the nature of the facility operation as a peaking station. The facility is not required to give a 30 day notification to the Department. Instead the permittee shall contact the Department by telephone as soon as possible prior to the test.

(5) Performance testing required for units subject to 40 CFR 63, Subpart ZZZZ may be used, subject to approval by the Department, to satisfy these periodic testing requirements if they meet the requirements of this condition and are completed during the specified monitoring period.

Aside from the change proposed above, TWP has no additional relevant information to provide in this application.

## **Section 22: Certification**

Company Name: : \_\_\_\_ Transwestern Pipeline Company, LLC

I, <u>Dave Roybal</u>, 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 do day of February, 2019, upon my oath or affirmation, before a notary of the State of

ignature

2.20 -Date

Dave Roybal
Printed Name

Director of Operations Title

Scribed and sworn before me on this 20th day of \_\_\_\_\_\_ , 2019 .

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

2020 *naust* day of

My Commission Ex

Notary's Signature

2-20-19

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.

OFFICIAL SEAL

**Gloria Wier** 

STATE OF NEW LINES