

**NMED AIR QUALITY
APPLICATION FOR TITLE V RENEWAL
TRANSWESTERN PIPELINE COMPANY, LLC
ROSWELL COMPRESSOR STATION NO. 9**

Prepared By:

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Transwestern Pipeline Company, LLC
6381 North Main Street
Roswell, NM 88201

Adam Erenstein – Manager of Consulting Services

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(505) 266-6611

September 2022

Project 223201.0115





9400 Holly Ave NE, Bldg 3, Ste B, Albuquerque, NM 87122 / P 505.266.6611 / trinityconsultants.com

September 6, 2022

Permit Programs Manager
NMED Air Quality Bureau
525 Camino de los Marquez Suite 1
Santa Fe, NM 87505-1816

Application for Title V Renewal-Transwestern Pipeline Company, LLC- Roswell Compressor Station No.9

Permit Programs Manager:

Energy Transfer, LP is submitting this this application for a Title V Renewal for its existing Roswell Compressor Station No.9. This submittal is pursuant to 20.2.70.300.B.(2) NMAC which requires a Title V application to be submitted at least twelve months prior to the expiration of the current permit. Title V Permit P154-R4 expires on September 28, 2023.

The format and content of this application are consistent with the Bureau's current policy regarding Title V applications; it is a complete application package using the most current application forms. Enclosed is one hard copy and one working copy of the application, including the original certification page, electronic files, and an application check. Please feel free to contact me at (505) 266-6611 or by email at aerenstein@trinityconsultants.com if you have any questions regarding this application. Alternatively, you may contact Kerry Egan with Transwestern Pipeline Company, LLC at (505) 260-4023 or by email at kerry.egan@energytransfer.com.

Sincerely,

Adam Erenstein
Manager of Consulting Services

Cc: Kerry Egan (Transwestern Pipeline Company, LLC)
Trinity Project File 223201.0115

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

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

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

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

Acknowledgements:

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

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

Check No.: [redacted] in the amount of [redacted]

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

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

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

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

Section 1 – Facility Information

Section 1-A: Company Information		AI # if known (see 1 st 3 to 5 #s of permit IDEA ID No.):10	Updating Permit/NOI #: P154-R4
1	Facility Name: Roswell Compressor Station No. 9	Plant primary SIC Code (4 digits): 4922	
		Plant NAIC code (6 digits): 486210	
a	Facility Street Address (If no facility street address, provide directions from a prominent landmark): 6381 North Main Street, Roswell, NM 88201		
2	Plant Operator Company Name: Transwestern Pipeline Company, LLC	Phone/Fax: (505) 260-4023 / N/A	
a	Plant Operator Address: 8501 Jefferson Street, Albuquerque, NM 87113		

b	Plant Operator's New Mexico Corporate ID or Tax ID: 74-1294795 (Tax ID)	
3	Plant Owner(s) name(s): Transwestern Pipeline Company, LLC	Phone/Fax: (505) 260-4023 / N/A
a	Plant Owner(s) Mailing Address(s): 8501 Jefferson Street, Albuquerque, NM 87113	
4	Bill To (Company): Transwestern Pipeline Company, LLC	Phone/Fax: (505) 260-4023 / N/A
a	Mailing Address: 8501 Jefferson Street, Albuquerque, NM 87113	E-mail: APInvoicesETP.Mailbox@energytransfer.com
5	<input checked="" type="checkbox"/> Preparer: Adam Erenstein <input checked="" type="checkbox"/> Consultant: Trinity Consultants	Phone/Fax: (505) 266-6611 / N/A
a	Mailing Address: 9400 Holly Ave NE, Building 3, Suite B, Albuquerque, NM 87122	E-mail: aerenstein@trinityconsultants.com
6	Plant Operator Contact: Dustin Jolly	Phone/Fax: (575) 347-6025 / N/A
a	Address: 6381 N Main St, Roswell, NM 88201	E-mail: dustin.jolly@energytransfer.com
7	Air Permit Contact: Kerry Egan	Title: Sr. Environmental Specialist
a	E-mail: Kerry.egan@energytransfer.com	Phone/Fax: (505) 260-4023 / N/A
b	Mailing Address: 8501 Jefferson St NE Albuquerque, NM 87113	
c	The designated Air permit Contact will receive all official correspondence (i.e. letters, permits) from the Air Quality Bureau.	

Section 1-B: Current Facility Status

1.a	Has this facility already been constructed? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	1.b If yes to question 1.a, is it currently operating in New Mexico? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
2	If yes to question 1.a, was the existing facility subject to a Notice of Intent (NOI) (20.2.73 NMAC) before submittal of this application? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If yes to question 1.a, was the existing facility subject to a construction permit (20.2.72 NMAC) before submittal of this application? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
3	Is the facility currently shut down? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If yes, give month and year of shut down (MM/YY): N/A
4	Was this facility constructed before 8/31/1972 and continuously operated since 1972? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
5	If Yes to question 3, has this facility been modified (see 20.2.72.7.P NMAC) or the capacity increased since 8/31/1972? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	
6	Does this facility have a Title V operating permit (20.2.70 NMAC)? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If yes, the permit No. is: P-154-R4
7	Has this facility been issued a No Permit Required (NPR)? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If yes, the NPR No. is: N/A
8	Has this facility been issued a Notice of Intent (NOI)? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If yes, the NOI No. is: N/A
9	Does this facility have a construction permit (20.2.72/20.2.74 NMAC)? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If yes, the permit No. is: 1776-M1, 1777-M1, 6742
10	Is this facility registered under a General permit (GCP-1, GCP-2, etc.)? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If yes, the register No. is: N/A

Section 1-C: Facility Input Capacity & Production Rate

1	What is the facility's maximum input capacity, specify units (reference here and list capacities in Section 20, if more room is required)			
a	Current	Hourly: 50 MMSCF/hr	Daily: 1,200 MMSCF/d	Annually: 438,000 MMSCF/yr
b	Proposed	Hourly: N/A	Daily: N/A	Annually: N/A
2	What is the facility's maximum production rate, specify units (reference here and list capacities in Section 20, if more room is required)			
a	Current	Hourly: 50 MMSCF/hr	Daily: 1,200 MMSCF/d	Annually: 438,000 MMSCF/yr

b	Proposed	Hourly: N/A	Daily: N/A	Annually: N/A
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Section 1-D: Facility Location Information

1	Section: 28	Range: 24E	Township: 9S	County: Chaves	Elevation (ft): 3,610
2	UTM Zone: <input type="checkbox"/> 12 or <input checked="" type="checkbox"/> 13			Datum: <input type="checkbox"/> NAD 27 <input type="checkbox"/> NAD 83 <input checked="" type="checkbox"/> WGS 84	
a	UTM E (in meters, to nearest 10 meters): 544,674.23 m E			UTM N (in meters, to nearest 10 meters): 3,707,952.29 m N	
b	AND Latitude (deg., min., sec.): 33° 30' 36.68" N			Longitude (deg., min., sec.): 104° 31' 8.35" W	
3	Name and zip code of nearest New Mexico town: Roswell 88201				
4	Detailed Driving Instructions from nearest NM town (attach a road map if necessary): From intersection of W Mescalero Rd and Highway 285 in Roswell, NM head north on Highway 285. Drive approximately 7 miles. After passing Snapdragon Rd, continue for 0.3 miles. Make a right on the next street. Continue for 0.11 miles. The facility will be ahead on the right.				
5	The facility is 5 miles north of Roswell, NM 88201.				
6	Status of land at facility (check one): <input checked="" type="checkbox"/> Private <input type="checkbox"/> Indian/Pueblo <input type="checkbox"/> Federal BLM <input type="checkbox"/> Federal Forest Service <input type="checkbox"/> Other (specify)				
7	List all municipalities, Indian tribes, and counties within a ten (10) mile radius (20.2.72.203.B.2 NMAC) of the property on which the facility is proposed to be constructed or operated: Roswell, NM and Chaves County, NM				
8	20.2.72 NMAC applications only : Will the property on which the facility is proposed to be constructed or operated be closer than 50 km (31 miles) to other states, Bernalillo County, or a Class I area (see www.env.nm.gov/aqb/modeling/classIareas.html)? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No (20.2.72.206.A.7 NMAC) If yes, list all with corresponding distances in kilometers: Salt Creek Wilderness (9.17 km)				
9	Name nearest Class I area: Salt Creek Wilderness				
10	Shortest distance (in km) from facility boundary to the boundary of the nearest Class I area (to the nearest 10 meters): 9.17 km				
11	Distance (meters) from the perimeter of the Area of Operations (AO is defined as the plant site inclusive of all disturbed lands, including mining overburden removal areas) to nearest residence, school or occupied structure: 1310 m				
12	Method(s) used to delineate the Restricted Area: Continuous fencing and signage "Restricted Area" is an area to which public entry is effectively precluded. Effective barriers include continuous fencing, continuous walls, or other continuous barriers approved by the Department, such as rugged physical terrain with steep grade that would require special equipment to traverse. If a large property is completely enclosed by fencing, a restricted area within the property may be identified with signage only. Public roads cannot be part of a Restricted Area.				
13	Does the owner/operator intend to operate this source as a portable stationary source as defined in 20.2.72.7.X NMAC? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No A portable stationary source is not a mobile source, such as an automobile, but a source that can be installed permanently at one location or that can be re-installed at various locations, such as a hot mix asphalt plant that is moved to different job sites.				
14	Will this facility operate in conjunction with other air regulated parties on the same property? <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes If yes, what is the name and permit number (if known) of the other facility?				

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

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

Section 1-F: Other Facility Information

1	Are there any current Notice of Violations (NOV), compliance orders, or any other compliance or enforcement issues related to this facility? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If yes, specify: N/A		
a	If yes, NOV date or description of issue: N/A	NOV Tracking No: N/A	
b	Is this application in response to any issue listed in 1-F, 1 or 1a above? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If Yes, provide the 1c & 1d info below:		
c	Document Title: N/A	Date: N/A	Requirement # (or page # and paragraph #): N/A
d	Provide the required text to be inserted in this permit: N/A		
2	Is air quality dispersion modeling or modeling waiver being submitted with this application? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
3	Does this facility require an "Air Toxics" permit under 20.2.72.400 NMAC & 20.2.72.502, Tables A and/or B? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
4	Will this facility be a source of federal Hazardous Air Pollutants (HAP)? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		
a	If Yes, what type of source? <input checked="" type="checkbox"/> Major (<input checked="" type="checkbox"/> ≥ 10 tpy of any single HAP OR <input checked="" type="checkbox"/> ≥ 25 tpy of any combination of HAPS) OR <input type="checkbox"/> Minor (<input type="checkbox"/> < 10 tpy of any single HAP AND <input type="checkbox"/> < 25 tpy of any combination of HAPS)		
5	Is any unit exempt under 20.2.72.202.B.3 NMAC? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Unit 921 (Emergency generator engine)		
a	If yes, include the name of company providing commercial electric power to the facility: <u>Xcel Energy</u> Commercial power is purchased from a commercial utility company, which specifically does not include power generated on site for the sole purpose of the user.		

Section 1-G: Streamline Application

(This section applies to 20.2.72.300 NMAC Streamline applications only)

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

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

1	Responsible Official (R.O.) (20.2.70.300.D.2 NMAC): David Roybal		Phone: (505) 260-4006
a	R.O. Title: Director of Operations	R.O. e-mail: David.roybal@energytransfer.com	
b	R. O. Address: 8501 Jefferson St NE Albuquerque, NM 87113		
2	Alternate Responsible Official (20.2.70.300.D.2 NMAC): Toby Clark		Phone: (432) 614-9387
a	A. R.O. Title: Vice President of Operations	A. R.O. e-mail: toby.clark@energytransfer.com	
b	A. R. O. Address: 600 N Marienfeld St, Suite 700 Midland, TX 79701		
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 name of the organization that owns the company to be permitted wholly or in part.): Energy Transfer LP		
a	Address of Parent Company: 8111 Westchester Dr., Suite 600 Dallas, TX 75225		
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 contacts familiar with plant operations: N/A		

7	Affected Programs to include Other States, local air pollution control programs (i.e. Bernalillo) and Indian tribes: N/A Will the property on which the facility is proposed to be constructed or operated be closer than 80 km (50 miles) from other states, local pollution control programs, and Indian tribes and pueblos (20.2.70.402.A.2 and 20.2.70.7.B)? If yes, state which ones and provide the distances in kilometers: No
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Section 1-I – Submittal Requirements

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

Hard Copy Submittal Requirements:

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

Electronic files sent by (check one):

CD/DVD attached to paper application

secure electronic transfer. Air Permit Contact Name Kerry Egan

Email kerry.egan@energytransfer.com

Phone number (505) 260-4023

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

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

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

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

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

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

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

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Table 2-A: Regulated Emission Sources

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

Unit Number ¹	Source Description	Make	Model #	Serial #	Manufacturer's Rated Capacity ³ (Specify Units)	Requested Permitted Capacity ³ (Specify Units)	Date of Manufacture ²	Controlled by Unit #	Source Classification Code (SCC)	For Each Piece of Equipment, Check One	RICE Ignition Type (CI, SI, 4SLB, 4SRB, 2SLB) ⁴	Replacing Unit No.
							Date of Construction/Reconstruction ²	Emissions vented to Stack #				
903	Compressor Engine #3	Cooper-Bessemer	LSV-16SSG	7030	4500 hp	4500 hp	1959	N/A	31000203	<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> To be Removed <input type="checkbox"/> New/Additional <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Modified <input type="checkbox"/> To be Replaced	4SLB	N/A
							1959	903				
904	Compressor Engine #4	Cooper-Bessemer	LSV-16SSG	7029	4500 hp	4500 hp	1959	N/A	31000203	<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> To be Removed <input type="checkbox"/> New/Additional <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Modified <input type="checkbox"/> To be Replaced	4SLB	N/A
							1959	904				
921	Generator Engine #1	Ingersoll-Rand	PSVG-6	6BPSC280	408 hp	408 hp	1959	N/A	20100202	<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> To be Removed <input type="checkbox"/> New/Additional <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Modified <input type="checkbox"/> To be Replaced	4SRB	N/A
							1959	921				
MIST-1	Mist Extractor Tank	NA	NA	NA	1,140 gal	1,140 gal	<1980	N/A	40400311	<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> To be Removed <input type="checkbox"/> New/Additional <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Modified <input type="checkbox"/> To be Replaced	N/A	N/A
							<1980	N/A				
MIST-2	Mist Extractor Tank	NA	NA	NA	50 gal	50 gal	2006	N/A	40400311	<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> To be Removed <input type="checkbox"/> New/Additional <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Modified <input type="checkbox"/> To be Replaced	N/A	N/A
							2006	N/A				
TK-1	Pipeline Liquids Tank	NA	NA	NA	21,000 gal	21,000 gal	<1980	N/A	40400311	<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> To be Removed <input type="checkbox"/> New/Additional <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Modified <input type="checkbox"/> To be Replaced	N/A	N/A
							<1980	N/A				
TK-30	Pipeline Liquids Tank	NA	NA	NA	2,500 gal	2,500 gal	2006	N/A	40400311	<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> To be Removed <input type="checkbox"/> New/Additional <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Modified <input type="checkbox"/> To be Replaced	N/A	N/A
							2006	N/A				
TK-31	Pipeline Liquids Tank	NA	NA	NA	2,500 gal	2,500 gal	2006	N/A	40400311	<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> To be Removed <input type="checkbox"/> New/Additional <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Modified <input type="checkbox"/> To be Replaced	N/A	N/A
							2006	N/A				
TK-32	Pipeline Liquids Tank	NA	NA	NA	1,000 gal	1,000 gal	2006	N/A	40400311	<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> To be Removed <input type="checkbox"/> New/Additional <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Modified <input type="checkbox"/> To be Replaced	N/A	N/A
							2006	N/A				
TK-33	Pipeline Liquids Tank	NA	NA	NA	1,000 gal	1,000 gal	2006	N/A	40400311	<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> To be Removed <input type="checkbox"/> New/Additional <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Modified <input type="checkbox"/> To be Replaced	N/A	N/A
							2006	N/A				
TK-34	Pipeline Liquids Tank	NA	NA	NA	1,000 gal	1,000 gal	2006	N/A	40400311	<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> To be Removed <input type="checkbox"/> New/Additional <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Modified <input type="checkbox"/> To be Replaced	N/A	N/A
							2006	N/A				
FUG-007	Station Fugitives	N/A	N/A	N/A	N/A	N/A	N/A	N/A	31000220	<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> To be Removed <input type="checkbox"/> New/Additional <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Modified <input type="checkbox"/> To be Replaced	N/A	N/A
							N/A	N/A				
SVE-1	Soil Vapor Extractor & Thermal Oxidizer	Baker Furnace	200 CFM	286	200 CFM	200 CFM	<1996	N/A	30622201	<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> To be Removed <input type="checkbox"/> New/Additional <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Modified <input type="checkbox"/> To be Replaced	N/A	N/A
							2003	SVE-1				
SVE-2	Soil Vapor Extractor & Thermal Oxidizer	Baker Furnace	200 CFM	285	200 CFM	200 CFM	<1996	N/A	30622201	<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> To be Removed <input type="checkbox"/> New/Additional <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Modified <input type="checkbox"/> To be Replaced	N/A	N/A
							2003	SVE-2				
SSM/M	Startup, Shutdown, Maintenance, and Malfunctions	NA	NA	NA	NA	NA	NA	NA	NA	<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> To be Removed <input type="checkbox"/> New/Additional <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Modified <input type="checkbox"/> To be Replaced	N/A	N/A
							NA	NA				

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

² Specify dates required to determine regulatory applicability.

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

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

Table 2-B: Insignificant Activities¹ (20.2.70 NMAC) OR Exempted Equipment (20.2.72 NMAC)

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

Unit Number	Source Description	Manufacturer	Model No.	Max Capacity	List Specific 20.2.72.202 NMAC Exemption (e.g. 20.2.72.202.B.5)	Date of Manufacture /Reconstruction ²	For Each Piece of Equipment, Check One
			Serial No.	Capacity Units	Insignificant Activity citation (e.g. IA List Item #1.a)	Date of Installation /Construction ²	
LOAD	Pipeline Liquid Loading	Unknown	NA	NA	List of Insignificant Activities	NA	<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> To be Removed <input type="checkbox"/> New/Additional <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Modified <input type="checkbox"/> To be Replaced
			NA	NA	IA List Item #1.a	1991	
GWS	Groundwater Stripper	Unknown	NA	20	List of Insignificant Activities	Unknown	<input checked="" type="checkbox"/> Existing (unchanged) <input type="checkbox"/> To be Removed <input type="checkbox"/> New/Additional <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Modified <input type="checkbox"/> To be Replaced
			NA	gpm	IA List Item #1.a	2003	
							<input type="checkbox"/> Existing (unchanged) <input type="checkbox"/> To be Removed <input type="checkbox"/> New/Additional <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Modified <input type="checkbox"/> To be Replaced
							<input type="checkbox"/> Existing (unchanged) <input type="checkbox"/> To be Removed <input type="checkbox"/> New/Additional <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Modified <input type="checkbox"/> To be Replaced
							<input type="checkbox"/> Existing (unchanged) <input type="checkbox"/> To be Removed <input type="checkbox"/> New/Additional <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Modified <input type="checkbox"/> To be Replaced
							<input type="checkbox"/> Existing (unchanged) <input type="checkbox"/> To be Removed <input type="checkbox"/> New/Additional <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Modified <input type="checkbox"/> To be Replaced
							<input type="checkbox"/> Existing (unchanged) <input type="checkbox"/> To be Removed <input type="checkbox"/> New/Additional <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Modified <input type="checkbox"/> To be Replaced
							<input type="checkbox"/> Existing (unchanged) <input type="checkbox"/> To be Removed <input type="checkbox"/> New/Additional <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Modified <input type="checkbox"/> To be Replaced
							<input type="checkbox"/> Existing (unchanged) <input type="checkbox"/> To be Removed <input type="checkbox"/> New/Additional <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Modified <input type="checkbox"/> To be Replaced
							<input type="checkbox"/> Existing (unchanged) <input type="checkbox"/> To be Removed <input type="checkbox"/> New/Additional <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Modified <input type="checkbox"/> To be Replaced
							<input type="checkbox"/> Existing (unchanged) <input type="checkbox"/> To be Removed <input type="checkbox"/> New/Additional <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Modified <input type="checkbox"/> To be Replaced
							<input type="checkbox"/> Existing (unchanged) <input type="checkbox"/> To be Removed <input type="checkbox"/> New/Additional <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Modified <input type="checkbox"/> To be Replaced

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

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

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

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

Stack No.	Unit No.(s)	Total HAPs		Formaldehyde <input checked="" type="checkbox"/> HAP or <input type="checkbox"/> TAP		Acetaldehyde <input checked="" type="checkbox"/> HAP or <input type="checkbox"/> TAP		Acrolein <input checked="" type="checkbox"/> HAP or <input type="checkbox"/> TAP		Provide Pollutant Name Here <input type="checkbox"/> HAP or <input type="checkbox"/> TAP		Provide Pollutant Name Here <input type="checkbox"/> HAP or <input type="checkbox"/> TAP		Provide Pollutant Name Here <input type="checkbox"/> HAP or <input type="checkbox"/> TAP		Provide Pollutant Name Here <input type="checkbox"/> HAP or <input type="checkbox"/> TAP		Provide Pollutant Name Here <input type="checkbox"/> HAP or <input type="checkbox"/> TAP	
		lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr
903	903	3.07	13.45	2.25	9.88	0.36	1.56	0.22	0.96										
904	904	3.07	13.45	2.25	9.88	0.36	1.56	0.22	0.96										
921	921	0.12	0.28	0.079	0.18	0.011	0.024	0.010	0.023										
SVE-1	SVE-1	0.061	0.27	-	-	-	-	-	-										
SVE-2	SVE-2	0.061	0.27	-	-	-	-	-	-										
Totals:		6.38	27.72	4.59	19.94	0.73	3.14	0.45	1.94										

Table 2-J: Fuel

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

Unit No.	Fuel Type (low sulfur Diesel, ultra low sulfur diesel, Natural Gas, Coal, ...)	Fuel Source: purchased commercial, pipeline quality natural gas, residue gas, raw/field natural gas, process gas (e.g. SRU tail gas) or other	Specify Units				
			Lower Heating Value	Hourly Usage	Annual Usage	% Sulfur	% Ash
903	Natural Gas	Pipeline Quality Natural Gas	1065 Btu/SCF	0.040 MMScf/Hr	351.26 MMScf	0	0
904	Natural Gas	Pipeline Quality Natural Gas	1065 Btu/SCF	0.040 MMScf/Hr	351.26 MMScf	0	0
921	Natural Gas	Pipeline Quality Natural Gas	1065 Btu/SCF	0.0037 MMScf/Hr	16.36 MMScf	0	0
SVE-1	Natural Gas	Pipeline Quality Natural Gas	1065 Btu/SCF	0.00059 MMScf/Hr	5.18 MMScf	0	0
SVE-2	Natural Gas	Pipeline Quality Natural Gas	1065 Btu/SCF	0.00059 MMScf/Hr	5.18 MMScf	0	0

Table 2-P: Greenhouse Gas Emissions

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

Unit No.	GWPs ¹	CO ₂ ton/yr	N ₂ O ton/yr	CH ₄ ton/yr	SF ₆ ton/yr	PFC/HFC ton/yr ²									Total GHG Mass Basis ton/yr ⁴	Total CO ₂ e ton/yr ⁵
		1	298	25	22,800	footnote 3										
903	mass GHG	21,879.99	0.041	0.41											21,880.44	
	CO ₂ e	21,879.99	12.29	10.31												21,902.59
904	mass GHG	21,879.99	0.041	0.41											21,880.44	
	CO ₂ e	21,879.99	12.29	10.31												21,902.59
921	mass GHG	1,019.07	0.001921	0.01921											1,019.09	
	CO ₂ e	1,019.07	0.572	0.480												1,020.12
MIST/ TANKS	mass GHG	0	0	20.51											20.51	
	CO ₂ e	0	0	512.75												512.75
SSM/M	mass GHG	0	0	1,000.00											1,000.00	
	CO ₂ e	0	0	25,000.00												25,000.00
FUG- 007	mass GHG	0.38	0	26.69											27.07	
	CO ₂ e	0.38	0	667.32												667.70
SVE-1	mass GHG	1,056.40	0.00061	0.024											1,056.42	
	CO ₂ e	1,056.40	0.18	0.600												1,057.18
SVE-2	mass GHG	1,056.40	0.00061	0.024											1,056.42	
	CO ₂ e	1,056.40	0.18	0.60												1,057.18
	mass GHG															
	CO ₂ e															
	mass GHG															
	CO ₂ e															
	mass GHG															
	CO ₂ e															
	mass GHG															
	CO ₂ e															
Total	mass GHG	46,892.23	0.085	1048.09											47,940.40	
	CO ₂ e	46,892.23	25.51	26,202.37												73,120.11

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

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

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

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

⁵ CO₂e means Carbon Dioxide Equivalent and is calculated by multiplying the TPY mass emissions of the green house gas by its GWP.

Section 3

Application Summary

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

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

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

Facility Description:

Transwestern Pipeline Company, LLC owns and operates Roswell Compressor Station No. 9, located in Chaves County. This facility is a natural gas compressor station. The Roswell Compressor Station No. 9 is currently permitted under NSR permit No. 6742 and Title V Permit No. P154-R4.

Equipment:

- Two (2) Cooper-Bessemer 4500 hp Compressor Engines (Units 903 & 904);
- One (1) Ingersoll Rand PSV-6 408 hp Generator (Unit 921);
- One (1) 27 bbl MIST Tank (MIST-1);
- One (1) 1.2 bbl MIST Tank (MIST-2);
- One (1) 500 bbl Pipeline Liquids Tank (Unit TK-1);
- Two (2) 59 bbl Pipeline Liquids Tank (Unit TK-30 & TK-31);
- Three (3) 23.8 bbl Pipeline Liquids Tank (Units TK-32, TK-33 & TK-34) and ;
- Two (2) Soil Vapor Extractor and Thermal Oxidizer (Units SVE-1 & SVE-2);

Process Description:

Roswell Compressor Station is equipped with two (2) 4,500-hp natural gas-fired Cooper-Bessemer LSV-16G compressor engines and one (1) 408-hp natural gas-fired Ingersoll-Rand PSVG-6 generator engine. These engines are grandfathered emission units that are not included on any NSR permit. The station is equipped with two mist extractors (or mist eliminators) and several condensate tanks, which are permitted under NSR Permit No. 6742, as well as lube oil tanks and piping fugitive emission components. This station also has two gas compressors driven by General Electric variable speed induction electric motors. There are no emissions to the atmosphere from these electric motors. Separate from the primary compressor station equipment, but also located on station property, are two soil vapor extraction (SVE) systems that utilize thermal oxidizers to control volatile organic compound (VOC) and hazardous air pollutant (HAP) emissions. These units are permitted under NSR Permit Nos. 1776-M1 and 1777-M1.

Natural gas enters the compressor station and pipeline condensate is separated from the incoming gas stream at an inlet separator. The liquid stream enters one of the two mist eliminators (MIST-1 or MIST-2). Once the pressurized condensate enters the mist eliminator, lighter components in the condensate flash due to the pressure change. Depending on liquid production, the condensate will either remain in the mist eliminator or flow to one of the pipeline liquid storage tanks. Condensate is periodically removed from the storage tanks by truck; truck-loading emissions are insignificant. The vapor stream flows from the separator to one of the station's compressors, where the natural gas is compressed to a higher pressure and sent off site via the downstream pipeline.

The SVE units are part of a remediation system that consists of SVE with vapor treatment and groundwater recovery with

treatment. Soil vapor is extracted from wells and routed to the two Baker Furnace thermal oxidizer units for treatment prior to being discharged to the atmosphere. Groundwater is recovered and pumped to one of four 200-gallon holding tanks before entering a 90-barrel surge tank. The water is then routed through a 325-gallon equalization tank and 100-gallon holding tank before pumped to an air stripper. The air stripper removes hydrocarbons from the water and vents them to two carbon adsorbers in series. The stripped water then enters two liquid phase carbon adsorbers to further remove traces of hydrocarbons. The treated water then enters a 1,000-gallon irrigation tank before being sprayed onto fields for irrigation and subsequent re-entry into the groundwater. The groundwater tanks comply with 40 CFR §63, Subpart GGGG, and are not emission sources. The air stripper meets exemption criteria in 20.2.72.202.B.5 and is an insignificant source.

Type of Permit Application: Transwestern Pipeline Company, LLC is submitting this application for a renewal of Title V permit P154-R4. The station also operates under New Source Review (NSR) Permit Nos. 6742, 1776-M1, and 1777-M1

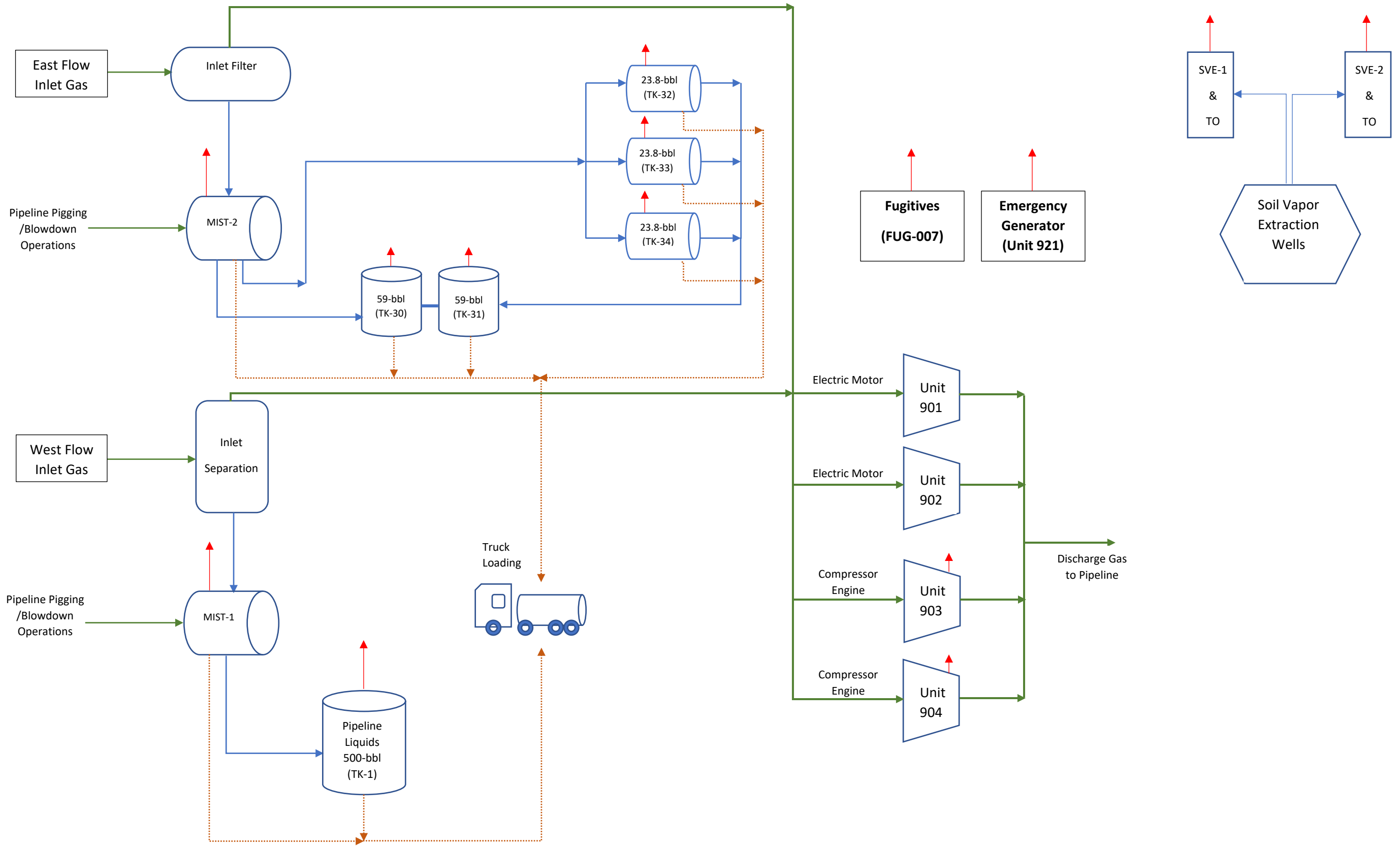
Applicable Regulation: This submittal is pursuant 20.2.70.300.B.(2).

Section 4

Process Flow Sheet

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

A process flow diagram is included in this section.

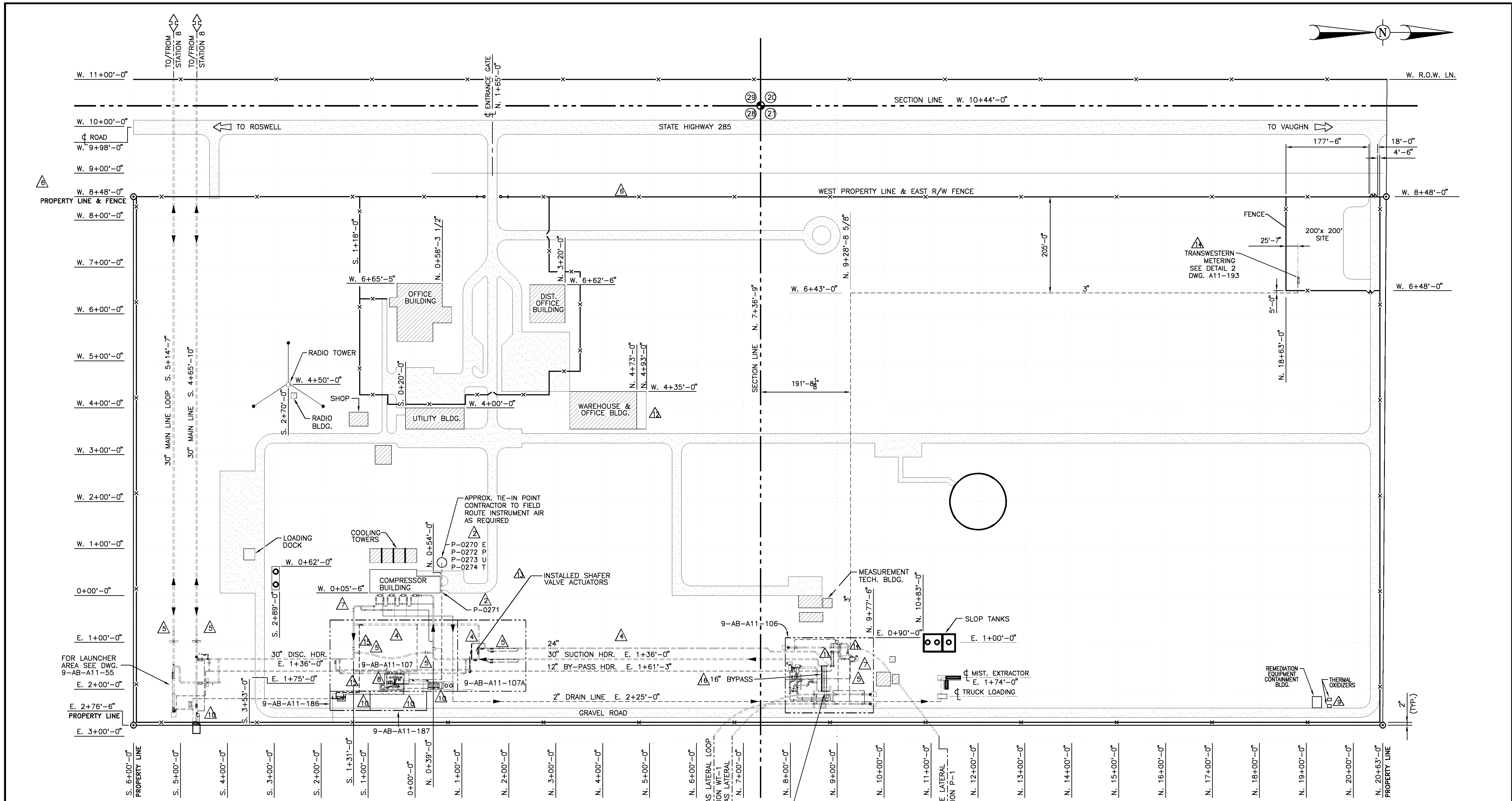
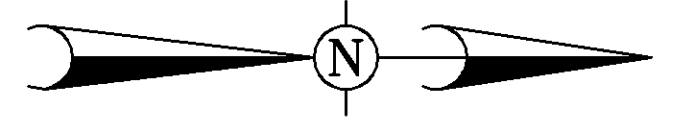


Section 5

Plot Plan Drawn To Scale

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

A plot plan has been included in this section.



16	INSTALLED 16" BYPASS PER W.O. 541621285801	GBL	6/18/21	PC
15	INSTALLED 2" LIQUID SYPHON HOT TAP/DRAIN LINE PER W.O. 541621285712	GBL	6/24/19	PC
14	SWEPI INTERCONNECT PER W.O. 541100623	JAM	4/2012	GAG
13	INSTALLED SHAFER VALVE ACTUATORS PER W.O. 541101760	EZ	8/12/13	PC
12	ADDED WAREHOUSE BLDG. EXTENSION PER W.O. 541100231	ES	10/12/12	GAG
11	INSTALLED 1/2" ULTRA-SONIC METER RUN PER W.O. 541542100283	ES	8/18/10	PC
10	INSTALL LAUNCHER/RECEIVER PER W.O. 541621183	JWS	7/14/10	GAG

9	INSTALLED 1" FUEL GAS LINE FOR REMEDIATION SYSTEM PER W.O. C.016038.01/C.018216.01	ES	8/16/05	PC
8	RETIRE SOLEXOL F/S W.O. C.016008.02	JML	02/03/03	GAG
7	AS-BUILT PER W.O. RT9081/STB135	DK	1-6-00	GAG
6	AS-BUILT PER W.O. CT8067	JML	2-25-99	GAG
5	RECOATED PIPE PER W.O. ER3511	AA	8-31-98	GAG
4	AS-BUILT PER W.O. S36036	JML	1-15-98	DK
3	AS-BUILT PER W.O. S34022	RJM	10-24-94	JAM

DWG. STATUS	CHECKED	APPROVED		
	BY DATE	BY DATE	BY DATE	BY DATE
PREL.Y	P.L./STA. NO. ACCOUNT NO. 9			
	CONSTRUCTION YEAR			
CONSTR.	DESIGN	J.E.W.	1-12-94	
	DRAWN	D.V.	1-12-94	
CADD	ASBUILT	RJM	10-24-94	
	FILE NO.			
PLOT DATE:	SCALE: 1"=100'-0"			
FILE NAME:	9-AB-A11-105			

 ENERGY TRANSFER	SAN JUAN BI-DIRECTIONAL FLOW ROSWELL COMPRESSOR STATION No. 9 PIPING PLAN INDEX CHAVES COUNTY, NEW MEXICO	PROJECT NO.	S-34022
		PREVIOUS DWG. NO.	
Transwestern Pipeline Company Houston, Texas		SHEET OF	
		DWG. NO.	9-AB-A11-105
		SHEET 1 OF	16

DWG. NO. REFERENCE DRAWING TITLE

NO. REVISION - DESCRIPTION

BY DATE CHK'D APP'D

SCALE: 1"=100'-0"

Section 6

All Calculations

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

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

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

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

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

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

Significant Figures:

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

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

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

- (1) If the first digit to be discarded is less than the number 5, the last digit retained shall not be changed;
- (2) If the first digit discarded is greater than the number 5, or if it is the number 5 followed by at least one digit other than the number zero, the last figure retained shall be increased by one unit; **and**
- (3) If the first digit discarded is exactly the number 5, followed only by zeros, the last digit retained shall be rounded upward if it is an odd number, but no adjustment shall be made if it is an even number.
- (4) The final result of the calculation shall be expressed in the units of the standard.

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

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

Calculations are included following Section 6a. Except for the SVE units, Roswell Compressor Station does not employ emission control devices, methods, or techniques, so all emission estimates are of uncontrolled emissions. Estimates of startup, shutdown, and maintenance emissions are also provided in this section.

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).

Emissions Summary

REQUESTED SITE ALLOWABLE EMISSIONS (POTENTIAL TO EMIT) SUMMARY

UNIT	Description	NO _x		CO		VOC		SO ₂		TSP/PM10/PM2.5		HAP		CO ₂ e	
		(lb/hr)	(T/yr)	(lb/hr)	(T/yr)	(lb/hr)	(T/yr)	(lb/hr)	(T/yr)	(lb/hr)	(T/yr)	(lb/hr)	(T/yr)	(T/yr)	
GRANDFATHERED SOURCES															
903	Compressor Engine #3	125.00	547.50	16.50	72.27	9.90	43.36	0.086	0.38	0.43	1.87	3.07	13.45	21,902.58	
904	Compressor Engine #4	125.00	547.50	16.50	72.27	9.90	43.36	0.086	0.38	0.43	1.87	3.07	13.45	21,902.58	
921	Generator Engine #1	12.00	27.00	6.80	15.30	0.40	0.90	0.008	0.018	0.075	0.17	0.12	0.28	1,020.12	
FUG-007	Station Pipeline Fugitives					0.43	1.88							667.71	
NSR PERMIT NUMBER 6742 SOURCES															
MIST/TANKS	Pipeline Liquid Mist Eliminators and Storage Tanks					11.28	13.33							512.75	
SSM/M	Startup, Shutdown, Maintenance, and Malfunctions					-	10.00							25,000.00	
SOURCES AUTHORIZED BY PORTABLE SOURCE PERMIT NUMBERS 1776-M1 and 1777-M1															
SVE-1	Soil Vapor Extractor and Thermal Oxidizer	0.06	0.27	0.05	0.23	0.83	3.64	0.00037	0.0016	0.0047	0.021	0.061	0.27	1057.18	
SVE-2	Soil Vapor Extractor and Thermal Oxidizer	0.06	0.27	0.05	0.23	0.83	3.64	0.00037	0.0016	0.0047	0.021	0.061	0.27	1057.18	
Site Total:		262.12	1,122.54	39.90	160.29	33.57	120.12	0.180	0.77	0.94	3.95	6.39	27.71	73,120.11	

Insignificant Activities

UNIT	Description	VOC
		(T/yr)
LOAD	Pipeline Liquids Truck Loading	0.03
GWS	Groundwater Stripper (uncontrolled rate)	0.47

Notes:

lb/hr - pounds per hour

T/yr - tons per year

Transwestern Pipeline Company, LLC, Roswell Compressor Station No.9

Engine Emissions

Unit ID	Unit Description	Engine Type	Engine Rating	Operating Hours	Fuel Heating Value	Typical Fuel Consumption Rate	Maximum Annual Fuel Use	
			(bhp)	(hr/yr)	(Btu/scf)	(BTU/hp-hr)	(MMBtu/hr)	(MMBtu/yr)
903	Cooper Bessemer LSV16G	4SLB	4,500	8,760	1,065	9,490	42.7	374,096
904	Cooper Bessemer LSV16G	4SLB	4,500	8,760	1,065	9,490	42.7	374,096
921	Ingersoll Rand PSVG-6	4SRB	408	4,500	1,065	9,490	3.9	17,424

Pollutant	Emission Factor ^a (lb/hr)		Emission Factor ^b (lb/MMBtu)		Emission (lb/hr)			Emission (tpy)			TOTAL HAP (tpy)
	4SLB	4SRB	4SLB	4SRB	903	904	921	903	904	921	
NOx	125	12.0	-	-	125.00	125.00	12.00	547.50	547.50	27.00	-
CO	16.5	6.8	-	-	16.50	16.50	6.80	72.27	72.27	15.30	-
VOC	9.9	0.40	-	-	9.90	9.90	0.40	43.36	43.36	0.900	-
PM	-	-	0.0099871	0.01941	0.43	0.43	0.075	1.87	1.87	0.169	-
SO ₂	-	-	2.01E-03	2.01E-03	0.086	0.086	0.0078	0.38	0.38	0.0175	-
1,1,2,2-Tetracholoethane	-	-	4.00E-05	2.53E-05	0.002	0.002	0.0001	0.007	0.007	0.0002	0.015
1,3-Butadiene	-	-	2.67E-04	6.63E-04	0.011	0.011	0.0026	0.050	0.050	0.0058	0.11
2-Methylnaphthalene	-	-	3.32E-05	-	0.0014	0.0014	0.0000	0.006	0.006	0.0000	0.012
2,2,4-Trimethylpentane	-	-	2.50E-04	-	0.011	0.011	0.0000	0.047	0.047	0.0000	0.094
Acetaldehyde	-	-	8.36E-03	2.79E-03	0.36	0.36	0.011	1.56	1.56	0.02431	3.15
Acrolein	-	-	5.14E-03	2.63E-03	0.22	0.22	0.010	0.96	0.96	0.02291	1.95
Benzene	-	-	4.40E-04	1.58E-03	0.019	0.019	0.0061	0.082	0.082	0.0138	0.18
Biphenyl	-	-	2.12E-04	-	0.009	0.009	0.0000	0.040	0.040	0.0000	0.079
Ethylbenzene	-	-	3.97E-05	2.48E-05	0.002	0.002	0.0001	0.007	0.007	0.000216	0.015
Formaldehyde	-	-	5.28E-02	2.05E-02	2.25	2.25	0.079	9.88	9.88	0.1786	19.93
Methanol	-	-	2.50E-03	3.06E-03	0.11	0.11	0.012	0.47	0.47	0.027	0.96
n-Hexane	-	-	1.11E-03	-	0.05	0.05	0.0000	0.21	0.21	0.0000	0.42
Naphthalene	-	-	7.44E-05	9.71E-05	0.0032	0.0032	0.0004	0.014	0.014	0.0008	0.029
PAH	-	-	2.69E-05	1.41E-04	0.0011	0.0011	0.0005	0.005	0.005	0.0012	0.011
Toluene	-	-	4.08E-04	5.58E-04	0.017	0.017	0.0022	0.076	0.076	0.0049	0.16
Xylene	-	-	1.84E-04	1.95E-04	0.008	0.008	0.0008	0.034	0.034	0.0017	0.071
Total HAP:					3.07	3.07	0.12	13.45	13.45	0.281	27.17

^a NOx emission factors are based on the permitted hourly rate in Permit No. P154-R4. CO, and VOC emissions factors are based on the current permitted (P154-R4) hourly rates.

^b All other emission factors are taken from U.S. EPA AP-42 Section 3.2.

**TRANSWESTERN PIPELINE COMPANY, LLC
ROSWELL COMPRESSOR STATION NO. 9**

TANK EMISSION SUMMARY

TANK ID	Tank Name	Tank Capacity (bbl)	Annual Throughput (bbl/yr)	Flash Emissions		Working Loss		Standing Loss		TOTAL Emissions	
				(lb/hr)	(lb/yr)	(lb/hr)	(lb/yr)	(lb/hr)	(lb/yr)	(lb/hr)	(T/yr)
MIST-1	Mist Extractor Tank	27	365	2.78	24,350	0.38	106.73	0.0406	355.29		
MIST-2	Mist Extractor Tank	1.2						0.0009	8.00		
TK-1	Pipeline Liquids Tank	500	365	-	-	7.87	80.55	0.106	928.66		
TK-30	Pipeline Liquids Tank	59						0.0248	216.82		
TK-31	Pipeline Liquids Tank	59						0.0248	216.82		
TK-32	Pipeline Liquids Tank	23.8						0.0152	133.22		
TK-33	Pipeline Liquids Tank	23.8						0.0152	133.22		
TK-34	Pipeline Liquids Tank	23.8						0.0152	133.22		
Pipeline Liquids Tank Total:				2.78	24,350	8.25	187.28	0.24	2125.24	11.28	13.33

^a Flash Emissions are estimated using the Vasquez Beggs equation presented in this section.

^b Working and standing emissions for the tanks were determined using AP-42 Section 7.1 calculation methods presented in this section.

**TRANSWESTERN PIPELINE COMPANY, LLC
ROSWELL COMPRESSOR STATION NO. 9**

VOLATILE ORGANIC COMPOUND EMISSION CALCULATION FOR TANK 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	50	API
Separator Pressure (psig)	1,008	P
Separator Temperature (°F)	70	Ti
Separator Gas Gravity at Initial Condition	1.18	SGi
Stock Tank Barrels of Oil per day (BOPD)	1	Q
Stock Tank Gas Molecular Weight	44	MW
Fraction VOC (C3+) of Stock Tank Gas	0.65	VOC
Atmospheric Pressure (psia)	13	Patm

CONSTRAINTS:

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

$SG_x = \text{Dissolved gas gravity at 100 psig} = SG_i [1.0 + 0.00005912 * API * T_i * \log(P_i/114.7)]$

SGx =	1.41
-------	------

$Rs = (C1 * SG_x * P_i^{C2}) \exp((C3 * API) / (T_i + 460))$

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 →	°API Gravity		Given °API
	< 30	>= 30	
C1	0.0362	0.0178	0.0178
C2	1.0937	1.187	1.187
C3	25.724	23.931	23.931

Rs =	898.07	scf/bbl	for P + Patm =	1020.866776
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$THC = Rs * Q * MW * 1/385 \text{ scf/lb-mole} * 365 \text{ D/Yr} * 1 \text{ ton}/2000 \text{ lb.s}$

THC	Total Hydrocarbon (tons/year)
Rs	Solution Gas/Oil Ratio (scf/STB)
Q	Oil Production Rate (bbl/day)
MW	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 =	18.7	TPY
-------	------	-----

$VOC = THC * \text{Frac. of C3+ in the Stock Tank Vapor}$

VOC =	12.18	TPY	from "FLASHING" of oil from pressurized sump to separator at ambient temp., pressure
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Emissions are calculated using the maximum pipeline pressure.

**TRANSWESTERN PIPELINE COMPANY, LLC
ROSWELL COMPRESSOR STATION NO. 9**

Tank Working and Standing Potential to Emit (Pipeline Liquid Tanks)

Variable	Description	Units	Value
-	Roof Construction	-	Cone
ΔP_b	Breather vent pressure range	psi	0.06
I	Solar insolation factor	Btu/ft ² -day	1810
P _A	Atmospheric Pressure	psia	12.9
T	Annual Average Temperature	°F	61.4
T _{AX}	Daily Maximum Ambient Temperature	°R	535.3
T _{AN}	Daily Minimum Ambient Temperature	°R	507.5
ΔT_A	Daily average ambient temperature range	°R	27.8
K _p	Product factor		1

Sample Calculations
$L_s = \text{Standing loss (lb/yr)} = 365 V_v W_v K_e K_s$
$L_w = \text{Working loss (lb/yr)} = 0.001 M_v P_v Q K_n K_p$
$L_H = \text{Hourly working loss (lb/hr)} = 0.001 M_v P_{max} Q_H$

Note: Solar insolation factor and temperature data for Roswell, NM.

Tank and Material Specifications

Tank No.	Material	VFR/HFR	D	H/L	CAPACITY	COLOR	α	Mv	P _{MAX}	P _{VA}	Q _H	Q	T _{LA}
		Tank Type	Tank Dia.	Tank Height/Length	Tank Capacity	Tank Color	Paint Solar Absorbance Factor	Vapor Molecular Weight	Maximum True Vapor Pressure	Average True Vapor Pressure	Maximum Hourly Throughput	Annual Throughput	Daily Average Liquid Surface Temp.
			(ft)	(ft)	(bbl)			(lb/lbmol)	(psia)	(psia)	(bbl/hr)	(bbl/yr)	(°R)
MIST-1	Pipeline Liquids	HFR	2.5	31	27	Black	0.97	69	5.557	4.238	1.0	365	538.0
MIST-2	Pipeline Liquids	HFR	1	8.5	1.2	White	0.17	69	4.225	3.198			523.8
TK-1	Pipeline Liquids	VFR	12	25.0	500	White	0.17	69	4.225	3.198	27.0	365	523.8
TK-30	Pipeline Liquids	VFR	7.6	7.6	59	White	0.17	69	4.225	3.198			523.8
TK-31	Pipeline Liquids	VFR	7.6	7.6	59	White	0.17	69	4.225	3.198			523.8
TK-32	Pipeline Liquids	HFR	3.79	12.0	24	White	0.17	69	4.225	3.198			523.8
TK-33	Pipeline Liquids	HFR	3.79	12.0	24	White	0.17	69	4.225	3.198			523.8
TK-34	Pipeline Liquids	HFR	3.79	12.0	24	White	0.17	69	4.225	3.198			523.8

Tank Emission Calculations

Tank No.	Material	ΔP_v	H _{RO}	H _{vo}	V _v	W _v	ΔT_v	K _E	K _S	L _S	K _n	L _w	L _H
		Daily Vapor Pressure Range	Tank Roof Outage	Vapor Space Outage	Vapor Space Volume	Vapor Density	Daily Vapor Temperature Range	Vapor Expansion Factor	Vented Vapor Saturation Factor	Standing Loss per Tank	Annual Turnover Factor	Total Working Loss	Total Hourly Working Loss
		(psia)	(ft)	(ft)	(ft ³)	(lb/ft ³)	(°R)			(lb/yr)		(lb/yr)	(lb/hr)
MIST-1	Pipeline Liquids	1.143	0.0260	1.250	97	0.050652	69.2	0.25407	0.78079	355.29	1.00	106.73	0.3834
MIST-2	Pipeline Liquids	0.910	0.0104	0.500	4	0.039257	28.6	0.14253	0.92187	8.00			
TK-1	Pipeline Liquids	0.910	0.1250	12.625	1,428	0.039257	28.6	0.14253	0.31847	928.66	1.00	80.55	7.87
TK-30	Pipeline Liquids	0.910	0.0792	3.879	176	0.039257	28.6	0.14253	0.60330	216.82			
TK-31	Pipeline Liquids	0.910	0.0792	3.879	176	0.039257	28.6	0.14253	0.60330	216.82			
TK-32	Pipeline Liquids	0.910	0.0395	1.895	86	0.039257	28.6	0.14253	0.75688	133.22			
TK-33	Pipeline Liquids	0.910	0.0395	1.895	86	0.039257	28.6	0.14253	0.75688	133.22			
TK-34	Pipeline Liquids	0.910	0.0395	1.895	86	0.039257	28.6	0.14253	0.75688	133.22			

(a) Emission calculations are based on the equations found in EPA AP-42 Section 7.1.3.1. All factors used are represented in the tables on this page. All other variables are found in AP-42 Chapter 7 or are default unit values.

**TRANSWESTERN PIPELINE COMPANY, LLC
ROSWELL COMPRESSOR STATION NO. 9**

Truck Loading Potential to Emit

Material Loaded	S ^a	P ^b	M ^b	T	Loading Loss ^c	Throughput	VOC Emissions
		@ Tank T _{LA}		@ Tank T _{LA}			
		(psia)		(°R)	(lb/Mgal)	(Mgals/yr)	(T/yr)
Pipeline Liquids	0.6	4.24	69	538	4.06	15.33	0.031

^a S factor from AP-42, Table 5.2-1, for trucks with submerged loading in dedicated normal service.

^b Vapor pressure and molecular weight based on gasoline. See tank working and standing loss calculations.

Sample Calculations:

^c Loading Loss (lb/Mgal) = 12.46 * S * P * M / T (AP-42 Section 5.2, Equation (1))

**TRANSWESTERN PIPELINE COMPANY, LLC
ROSWELL COMPRESSOR STATION NO. 9**

Site Fugitives

Component	Emission Factor (lb/hr/comp)	Number of Components	VOC%	Estimated Emissions	
				(lb/hr)	(tpy)
Valves:					
Gas/Vapor	0.00992	459	5.9%	0.27	1.18
Relief valves	0.0194	2	5.9%	0.00	0.01
Compressors:	0.0194	2	5.9%	0.00	0.01
Flanges:					
Gas/Vapor	0.00086	1,928	5.9%	0.10	0.43
Pumps:	0.02866	2	100.0%	0.06	0.25
TOTAL VOC EMISSIONS				0.43	1.88

a. Emission calculations from Title V permit revision application submitted December 18, 2014.

**TRANSWESTERN PIPELINE COMPANY, LLC
ROSWELL COMPRESSOR STATION NO. 9**

Soil Vapor Extractors - Thermal Oxidizer Combustion Emissions

Unit ID	Unit Description	Emission Factors ^a (lb/scf)				
		NOx	CO	VOC	SO ₂	PM
SVE-1	Soil Vapor Extractor and Thermal Oxidizer	100	84	5.5	0.6	7.6
SVE-2	Soil Vapor Extractor and Thermal Oxidizer	100	84	5.5	0.6	7.6

^a Emission factors taken from U.S. EPA AP-42, Tables 1.4-1 and 1.4-2, where lb/scf represents pounds per million standard cubic feet

These factors are converted to emission factors in lb/MMBtu in the table below using a heating value of 1,020 Btu/scf, as per footnote (a) to those tables.

Conversion Factor = 1,020 MMBtu/MMscf

Unit ID	Unit Description	Maximum Rated Capacity ^b	Operating Hours (hr/yr)	Emission Factors (lb/MMBtu)				
		MMBtu/hr		NOx	CO	VOC	SO ₂	PM
SVE-1	Soil Vapor Extractor and Thermal Oxidizer	0.63	8,760	0.0980	0.0824	0.00539	0.000588	0.0075
SVE-2	Soil Vapor Extractor and Thermal Oxidizer	0.63	8,760	0.0980	0.0824	0.00539	0.000588	0.0075

^b Maximum rated capacity taken from Baker Thermal Catalytic Oxidizers manufacturer specification sheet. See Section 7.0.

Unit ID	NOx	CO	VOC	SO ₂	PM	NOx	CO	VOC	SO ₂	PM
	lb/hr					ton/yr				
SVE-1	0.06	0.05	0.42	0.00037	0.0047	0.27	0.23	1.82	0.0016	0.021
SVE-2	0.06	0.05	0.42	0.00037	0.0047	0.27	0.23	1.82	0.0016	0.021

TRANSWESTERN PIPELINE COMPANY, LLC

ROSWELL COMPRESSOR STATION NO. 9

Soil Vapor Extractors - Thermal Oxidizer VOC Emissions (from each of the two u

Maximum Flow: 200 scfm

Control Efficiency: 99%

Component	Vent Conc. ^a	MW	Uncontrolled		Controlled	
	(mol%)		Hourly	Annual	Hourly	Annual
			(lb/hr)	(ton/yr)	(lb/hr)	(ton/yr)
Nitrogen	85.010%	28.01	-	-	-	-
Oxygen	1.455%	32.00	-	-	-	-
Carbon Dioxide	12.02%	44.01	167.49	733.62	-	-
Methane	0.080%	16.04	0.41	1.78	0.0041	0.0178
Ethane	0.010%	30.07	0.10	0.42	0.0010	0.0042
Propane	0.030%	44.10	0.42	1.83	0.0042	0.0183
I-Butane	0.020%	58.12	0.37	1.61	0.0037	0.0161
N-Butane	0.080%	58.12	1.47	6.45	0.0147	0.0645
I-Pentane	0.080%	72.15	1.83	8.00	0.0183	0.0800
N-Pentane	0.150%	72.15	3.43	15.01	0.0343	0.1501
n-Hexane	0.160%	86.17	4.37	19.12	0.0437	0.1912
Hexanes	0.240%	86.17	6.55	28.68	0.0655	0.2868
Heptanes	0.330%	100.20	10.47	45.86	0.1047	0.4586
Octanes	0.178%	114.22	6.44	28.20	0.0644	0.2820
Nonanes	0.057%	128.25	2.31	10.14	0.0231	0.1014
Decanes	0.048%	142.28	2.16	9.47	0.0216	0.0947
Benzene	0.013%	78.11	0.32	1.41	0.0032	0.0141
Toluene	0.029%	92.13	0.85	3.71	0.0085	0.0371
Ethylbenzene	0.003%	106.16	0.10	0.44	0.0010	0.0044
Xylenes	0.014%	106.16	0.47	2.06	0.0047	0.0206
Total	100.0%		209.54	917.81	0.42	1.84
Total VOC^b	1.43%	N/A	41.55	181.99	0.42	1.82
Total HAP ^c	0.22%		6.10	26.74	0.061	0.27

^a Vent stream flowrate and concentration from Title V permit revision application submitted December 18, 2014. See CORE Laboratories soil vapor analysis in Section 7.0

^b VOCs are indicated in the shaded cells (from "Propane" through "Xylenes.")

^c HAPs include the following compounds: n-Hexane, Benzene, Toluene, Ethylbenzene, and Xylenes.

Sample Calculation:

Propane (lb/hr): $(\text{Flowrate, scfm}) \times (60 \text{ min/hr}) \times (\text{conc., mole frac.}) \times \text{Mw} / (379 \text{ scf/lbmol}) =$
 $(200 \text{ scfm}) \times (60 \text{ min/hr}) \times (0.03\%) \times (44.1 \text{ lb/lbmol}) / (379 \text{ scf/lbmol}) = 0.42 \text{ lb/hr}$

Controlled (lb/hr): $(0.42 \text{ lb/hr}) \times (1 - 0.99) = 0.0042 \text{ lb/hr}$

**TRANSWESTERN PIPELINE COMPANY, LLC
ROSWELL COMPRESSOR STATION NO. 9**

Groundwater Treatment Air Stripper Potential to Emit

Emission Unit	Maximum Throughput ¹	Uncontrolled Emission Rate ²		Control Efficiency ³	Controlled Emission Rate	
		VOC	HAP		VOC	HAP
	gal/yr	ton/yr	ton/yr	%	ton/yr	ton/yr
Air Stripper	10,512,000	0.47	0.46	90%	0.05	0.05

Notes:

1. The maximum throughput is based on a maximum groundwater processing rate of 20 gallons per minute (gpm). The actual collection rate is based on the number of groundwater recovery wells in operation and is typically much lower, approximately 1.0 gpm.
2. Emission rate assumes all VOC and HAP contained in the contaminated groundwater is emitted from the air stripper.
3. Air emissions from the air stripper are passed through two vapor-phase GAC vessels prior to discharge to the atmosphere.

VOC concentrations in groundwater samples¹:

VOC	05-16-2013 (µg/L)	06-17-2013 (µg/L) ²	07-17-2013 (µg/L)	Average (µg/L)	lb/gal
Benzene	2,800	2,500	3,000	2,767	2.3E-05
Toluene	4,900	4,500	5,300	4,900	4.1E-05
Ethylbenzene	260	260	270	263	2.2E-06
Xylene	2,600	2,500	2,600	2,567	2.1E-05
Other VOC ²	260	265	270	265	2.2E-06
TOTAL VOC	10,820	10,025	11,440	10,762	9.0E-05
TOTAL HAP	10,560	9,760	11,170	10,497	8.8E-05

Notes:

- ¹ The last year for which groundwater sampling data are available is 2013. The data presented are all the data available from 2013. See the Hall Environmental Analysis Laboratory, Inc. sampling results included in Section 7.0.
- ² The "Other VOC" concentration for the 06-17-2013 sample was taken as the average of the other two samples.

**TRANSWESTERN PIPELINE COMPANY, LLC
ROSWELL COMPRESSOR STATION NO. 9**

Greenhouse Gas Emission Calculations

GHG	Emission Factor
	kg/MMBtu
CO ₂	53.06
CH ₄	0.001
N ₂ O	0.0001

Note: Emission factors from Tables C-1 and C-2 of 40 CFR 98, Subpart C.

Unit ID	Description	Maximum Annual Fuel Use	CO ₂	CH ₄	N ₂ O	Total
		(MMBtu/yr)	Mass Emissions (T/yr)			
903	Compressor Engine #3	374,096	21,879.99	0.41	0.041	21,880.44
904	Compressor Engine #4	374,096	21,879.99	0.41	0.041	21,880.44
921	Generator Engine #1	17,424	1,019.07	0.01921	0.001921	1,019.09
FUG-007	Station Pipeline Fugitives	-	0.38	26.69	0	27.08
SVE-1	Soil Vapor Extractor and Thermal Oxidizer	5,519	322.78	0.0061	0.00061	322.79
SVE-1	Vent Stream		733.62	0.018	0	733.64
SVE-2	Soil Vapor Extractor and Thermal Oxidizer	5,519	322.78	0.0061	0.00061	322.79
SVE-2	Vent Stream		733.62	0.018	0	733.64
TANKS	Pipeline Liquid Mist Eliminator and Storage Tanks	-	0	20.51	0	20.51
SSM/M	Startup, Shutdown, Maintenance, and Malfunctions	-	0	1,000.00	0	1,000.00
GHG MASS (T/yr)			46,892.23	1,048.09	0.086	47,940.41

For combustion sources (engines and thermal oxidizers):

$$\text{Mass Emissions} = \text{Emission Factor} * \text{Maximum Annual Fuel Use} * (1 \text{ lb}/0.4536 \text{ kg}) * (1 \text{ T}/2,000 \text{ lb})$$

Emissions of CO₂ and CH₄ for Station Pipeline Fugitives and SVE-1 and SVE-2 Vent Streams are based on the computed weight percentages of CO₂ and CH₄ in the gas analysis.

Emissions of methane from the mist eliminator and storage tanks and from SSM/M activities is based on the VOC emissions for these sources divided by the weight fraction of VOC each source, which is 0.65 for the tanks (see flash calculations) and a conservatively assumed 0.01 (i.e., 1.0%) for SSM/M activities.

Stack ID	Description	GWP	CO ₂	CH ₄	N ₂ O	Total
			1	25	298	-
		CO ₂ e Emissions (T/yr)				
903	Compressor Engine #3		21,879.99	10.31	12.29	21,902.58
904	Compressor Engine #4		21,879.99	10.31	12.29	21,902.58
921	Generator Engine #1		1,019.07	0.480	0.572	1,020.12
FUG-007	Station Pipeline Fugitives		0	667.32	0	667.71
SVE-1	Soil Vapor Extractor and Thermal Oxidizer		322.78	0.15	0.18	323.12
SVE-1	Vent stream		733.62	0.44	0	734.07
SVE-2	Soil Vapor Extractor and Thermal Oxidizer		322.78	0.15	0.18	323.12
SVE-2	Vent stream		733.62	0.44	0	734.07
TANKS	Pipeline Liquid Mist Eliminator and Storage Tanks		0	512.75	0	512.75
SSM/M	Startup, Shutdown, Maintenance, and Malfunctions		0	25,000.0	0	25,000.00
GHG CO₂e (T/yr)			46,892.23	26,202.36	25.51	73,120.11

Note:

CO₂e Emissions (T/yr) = Mass Emissions (T/yr) * GWP, where GWP is the indicated global warming potential for each compound.

Section 6.a

Green House Gas Emissions

(Submitting under 20.2.70, 20.2.72 20.2.74 NMAC)

Title V (20.2.70 NMAC), Minor NSR (20.2.72 NMAC), and PSD (20.2.74 NMAC) applicants must estimate and report greenhouse gas (GHG) emissions to verify the emission rates reported in the public notice, determine applicability to 40 CFR 60 Subparts, and to evaluate Prevention of Significant Deterioration (PSD) applicability. GHG emissions that are subject to air permit regulations consist of the sum of an aggregate group of these six greenhouse gases: carbon dioxide (CO₂), nitrous oxide (N₂O), methane (CH₄), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF₆).

Calculating GHG Emissions:

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

Sources for Calculating GHG Emissions:

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

Global Warming Potentials (GWP):

Applicants must use the Global Warming Potentials codified in Table A-1 of the most recent version of 40 CFR 98 Mandatory Greenhouse Gas Reporting. The GWP for a particular GHG is the ratio of heat trapped by one unit mass of the GHG to that of one unit mass of CO₂ over a specified time period.

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

Metric to Short Ton Conversion:

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

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

Section 7

Information Used To Determine Emissions

Information Used to Determine Emissions shall include the following:

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

Compressor Engines (Units 903 & 904)

- AP-42 Section 3.2 Tables 3.2-2 and 3.2-3
- Previously permitted emission rates for the engines. Original manufacturer data for engines are not available due to the significant age of the units in operation. The units were installed in 1959.

Emergency Generator Engine (Units 921)

- AP-42 Section 3.2

Soil Vapor Extractors (SVE1 & SVE2)

- AP-42 Tables 1.4-1 & 1.4-2
- Manufacture Specification Sheet
- Core Laboratories-Analysis of soil vapor; use to estimate emissions from the SVE system thermal oxidizers

Tanks (Units MIST-1, MIST-2, TK-1, TK-30, TK-31, TK-32, TK-33 & TK-34)

- Vasquez Beggs equation
- AP-42 Section 7.1 Calculation Methods

Fugitive

- Protocol for Equipment Leak Emission Factors.

Emission Factors for Units 903 and 904
(From U.S. EPA AP-42, Section 3.2)

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

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

0.0000771
+0.00991
0.00999
(Total PM Emission Factor)

Emission Factors for Units 903 and 904
(From U.S. EPA AP-42, Section 3.2)

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

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

Emission Factors for Units 903 and 904
(From U.S. EPA AP-42, Section 3.2)

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

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

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

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

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

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

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

Emission Factors for Units 903 and 904
(From U.S. EPA AP-42, Section 3.2)

^h = heating value of natural gas (assume 1020 Btu/scf at 60°F).

^e Based on 100% conversion of fuel sulfur to SO₂. Assumes sulfur content in natural gas of 2,000 gr/10⁶ scf.

^f Emission factor for TOC is based on measured emission levels from 22 source tests.

^g 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.

^h VOC emission factor is based on the sum of the emission factors for all speciated organic compounds less ethane and methane.

ⁱ Considered $\leq 1 \mu\text{m}$ in aerodynamic diameter. Therefore, for filterable PM emissions, PM10(filterable) = PM2.5(filterable).

^j PM Condensable = PM Condensable Inorganic + PM-Condensable Organic

^k Hazardous Air Pollutant as defined by Section 112(b) of the Clean Air Act.

^l 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.

Emission Factors for Unit 921
(From U.S. EPA AP-42, Section 3.2)

Table 3.2-3. UNCONTROLLED EMISSION FACTORS FOR 4-STROKE RICH-BURN
 ENGINES^a
 (SCC 2-02-002-53)

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

0.00950
 +0.00991
 0.01941
 (Total PM
 Emission Factor)

Emission Factors for Unit 921
(From U.S. EPA AP-42, Section 3.2)

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

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

^a Reference 7. Factors represent uncontrolled levels. For NO_x, 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 NO_x control, such as PCC and SCR for lean burn engines, and PSC for rich burn engines. Factors are based on large population of engines. Factors are for engines at all loads, except as indicated. SCC = Source Classification Code. TOC = Total Organic Compounds. PM10 = Particulate Matter ≤ 10 microns (μm) aerodynamic diameter. A “<” sign in front of a factor means that the corresponding emission factor is based on one-half of the method detection limit.

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

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

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

^d Based on 99.5% conversion of the fuel carbon to CO₂. CO₂ [lb/MMBtu] = (3.67)(%CON)(C)(D)(1/h), where %CON = percent conversion of fuel carbon to CO₂,

Emission Factors for Unit 921
(From U.S. EPA AP-42, Section 3.2)

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

^c Based on 100% conversion of fuel sulfur to SO₂. Assumes sulfur content in natural gas of $2,000 \text{ gr}/10^6 \text{ scf}$.

^f Emission factor for TOC is based on measured emission levels from 6 source tests.

^g Emission factor for methane is determined by subtracting the VOC and ethane emission factors from the TOC emission factor.

^h 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.

ⁱ No data were available for uncontrolled engines. PM10 emissions are for engines equipped with a PCC.

^j Considered $\leq 1 \mu\text{m}$ in aerodynamic diameter. Therefore, for filterable PM emissions, $\text{PM}_{10}(\text{filterable}) = \text{PM}_{2.5}(\text{filterable})$.

^k No data were available for condensable emissions. The presented emission factor reflects emissions from 4SLB engines.

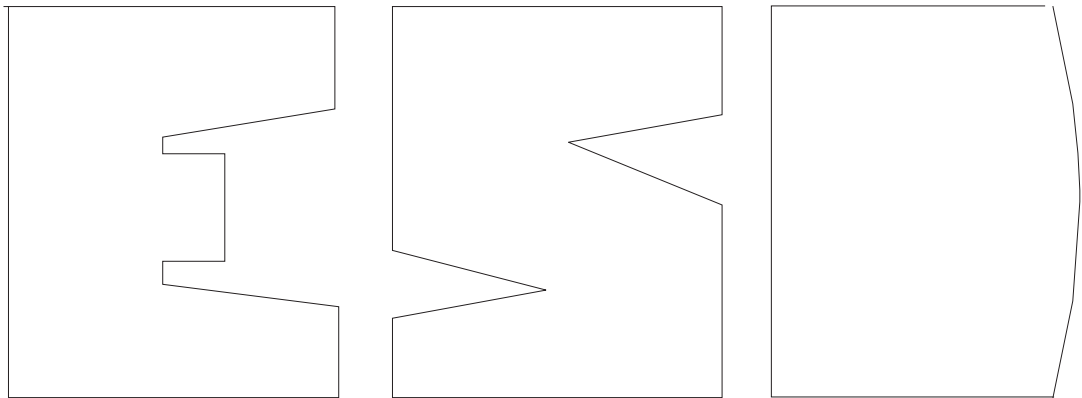
^l Hazardous Air Pollutant as defined by Section 112(b) of the Clean Air Act.

^m 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.

ⁿ Ethane emission factor is determined by subtracting the VOC emission factor from the NMHC emission factor.



Protocol for Equipment Leak Emission Estimates



**Fugitive Leak Emission Factors (From U.S. EPA document EPA-453/R-95-017,
Protocol for Equipment Leak Emission Estimates, November 1995)**

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

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

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

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

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

Emission Factors for Units SVE-1 and SVE-2
(From U.S. EPA AP-42, Section 1.4)

Table 1.4-1. EMISSION FACTORS FOR NITROGEN OXIDES (NO_x) AND CARBON MONOXIDE (CO)
 FROM NATURAL GAS COMBUSTION^a

Combustor Type (MMBtu/hr Heat Input) [SCC]	NO _x ^b		CO	
	Emission Factor (lb/10 ⁶ scf)	Emission Factor Rating	Emission Factor (lb/10 ⁶ scf)	Emission Factor Rating
Large Wall-Fired Boilers (>100) [1-01-006-01, 1-02-006-01, 1-03-006-01] Uncontrolled (Pre-NSPS) ^c Uncontrolled (Post-NSPS) ^c Controlled - Low NO _x burners Controlled - Flue gas recirculation	280	A	84	B
	190	A	84	B
	140	A	84	B
	100	D	84	B
Small Boilers (<100) [1-01-006-02, 1-02-006-02, 1-03-006-02, 1-03-006-03] Uncontrolled Controlled - Low NO _x burners Controlled - Low NO _x burners/Flue gas recirculation	100	B	84	B
	50	D	84	B
	32	C	84	B
Tangential-Fired Boilers (All Sizes) [1-01-006-04] Uncontrolled Controlled - Flue gas recirculation	170	A	24	C
	76	D	98	D
	94	B	40	B
Residential Furnaces (<0.3) [No SCC] Uncontrolled				

^a Reference 11. Units are in pounds of pollutant per million standard cubic feet of natural gas fired. To convert from lb/10⁶ scf to kg/10⁶ m³, multiply by 16. Emission factors are based on an average natural gas higher heating value of 1,020 Btu/scf. To convert from lb/10⁶ scf to lb/MMBtu, divide by 1,020. The emission factors in this table may be converted to other natural gas heating values by multiplying the given emission factor by the ratio of the specified heating value to this average heating value. SCC = Source Classification Code. ND = no data. NA = not applicable.

^b Expressed as NO₂. For large and small wall fired boilers with SNCR control, apply a 24 percent reduction to the appropriate NO_x emission factor. For tangential-fired boilers with SNCR control, apply a 13 percent reduction to the appropriate NO_x emission factor.

^c NSPS=New Source Performance Standard as defined in 40 CFR 60 Subparts D and Db. Post-NSPS units are boilers with greater than 250 MMBtu/hr of heat input that commenced construction modification, or reconstruction after August 17, 1971, and units with heat input capacities between 100 and 250 MMBtu/hr that commenced construction modification, or reconstruction after June 19, 1984.

Emission Factors for Units SVE-1 and SVE-2
(From U.S. EPA AP-42, Section 1.4)

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

Pollutant	Emission Factor (lb/10 ⁶ scf)	Emission Factor Rating
CO ₂ ^b	120,000	A
Lead	0.0005	D
N ₂ O (Uncontrolled)	2.2	E
N ₂ O (Controlled-low-NO _x burner)	0.64	E
→ PM (Total) ^c	7.6	D
PM (Condensable) ^c	5.7	D
PM (Filterable) ^c	1.9	B
→ SO ₂ ^d	0.6	A
TOC	11	B
Methane	2.3	B
VOC	5.5	C

^a Reference 11. Units are in pounds of pollutant per million standard cubic feet of natural gas fired. Data are for all natural gas combustion sources. To convert from lb/10⁶ scf to kg/10⁶ m³, multiply by 16. **To convert from lb/10⁶ scf to lb/MMBtu, divide by 1,020.** The emission factors in this table may be converted to other natural gas heating values by multiplying the given emission factor by the ratio of the specified heating value to this average heating value. TOC = Total Organic Compounds. VOC = Volatile Organic Compounds.

^b Based on approximately 100% conversion of fuel carbon to CO₂. CO₂[lb/10⁶ scf] = (3.67) (CON) (C)(D), where CON = fractional conversion of fuel carbon to CO₂, C = carbon content of fuel by weight (0.76), and D = density of fuel, 4.2x10⁴ lb/10⁶ scf.

^c All PM (total, condensable, and filterable) is assumed to be less than 1.0 micrometer in diameter. Therefore, the PM emission factors presented here may be used to estimate PM₁₀, PM_{2.5} or PM₁ emissions. Total PM is the sum of the filterable PM and condensable PM. Condensable PM is the particulate matter collected using EPA Method 202 (or equivalent). Filterable PM is the particulate matter collected on, or prior to, the filter of an EPA Method 5 (or equivalent) sampling train.

^d Based on 100% conversion of fuel sulfur to SO₂. Assumes sulfur content is natural gas of 2,000 grains/10⁶ scf. The SO₂ emission factor in this table can be converted to other natural gas sulfur contents by multiplying the SO₂ emission factor by the ratio of the site-specific sulfur content (grains/10⁶ scf) to 2,000 grains/10⁶ scf.



BAKER FURNACE INC.

1015 E. Discovery Lane, Anaheim, CA 92801 • (714) 491-9293 • Fax (714) 491-8221 • 800-237-5675 (Outside CA)
March 21, 1996

Mr. George Robinson
Transwestern Pipeline Company
EOC Environmental Affairs
3 Allen Center Building
Room 3142
333 Clay Street
Houston, TX 77002

Subject: Utility requirements for 200 CFM Baker Oxidizers

Dear Mr. Robinson:

Please note the following information with regards to your thermal oxidizers serial numbers 285, 286, 287:

Electrical - Per your specification, the oxidizers have been set up to operate on 230 V. 3 phase electrical power. Full load amperage is 25 amps. The largest draw is the 5 h.p. VES blower motor which has an FLA of 13 amps. 120 V. control voltage is provided within our control panel via a step down transformer.

→ **Natural Gas** - Each of the oxidizers has a maximum supplemental fuel requirement of 630,000 BTU/hr., supplied to the inlet of the supplemental fuel train at 5 p.s.i.. The size of the supplemental fuel train inlet connection is 1" female NPT.

Vapor Inlet - Vapor inlet connection at the moisture knockout tank is 2.5" female NPT.

Destruction Efficiency - Minimum of 99% in thermal configuration, 97% in catalytic configuration.

Nox production - 70 ppm or .083 lbs/million BTU/hour (corrected to 3% oxygen)

CO production - 40 ppm or .029 lbs/million BTU/hour (corrected to 3% oxygen)

Sox production - negligible dependent on sulfur content of natural gas

Sincerely;

Edward E. Anderson
Baker Furnace Inc.



BAKER THERMAL/CATALYTIC OXIDIZERS

GENERAL INFORMATION - SPECIFICATION SHEET - 200 CFM

GENERAL INFORMATION

SKID FOOTPRINT	7 FT. X 10 FT.
TRAILER SIZE	14.5' X 8' (INCLUDES TONGUE)
EXHAUST STACK HEIGHT	13 FT.
EXHAUST STACK I.D. AT OUTLET	11.5 IN.
COMBUSTION CHAMBER I.D.	21 IN.
COMBUSTION CHAMBER LENGTH	14 FT.
VAPOR INLET CONNECTION	2.5 IN. FEMALE NPT
SUPPLEMENTAL FUEL CONNECTION	1 IN. FEMALE NPT
→ SUPPLEMENTAL FUEL REQUIREMENTS	→ 630,000 BTU/HR. @ 1-5 P.S.I.
ELECTRICAL REQUIREMENTS	230 V 3 PHASE

OPERATIONAL INFORMATION

RETENTION TIME	1 SECOND
BURNER TURN-DOWN	14:1
TEMPERATURE - THERMAL MODE	1450°F
TEMPERATURE - CATALYST MODE	700°F
VELOCITY IN COMBUSTION CHAMBER	10 FT./SEC
DESTRUCTION EFFICIENCY:	
THERMAL MODE	99.5%
CATALYTIC MODE	97.0%
APPROXIMATE ALLOWABLE INFLUENT CONCENTRATION	
THERMAL MODE	50-60% L.E.L.
CATALYTIC MODE	20% L.E.L.

STANDARD FEATURES/COMPONENTS

AUTOMATIC L.E.L. DILUTION	
COMBUSTIBLE SENSOR/TRANSMITTER	
AUTOMATIC TEMPERATURE CONTROL	
FIVE SAFETY INTERLOCKS	
COMBUSTION BLOWER	89 CFM, 1.5 HP
POSITIVE DISPLACEMENT V.E.S. BLOWER	5 HP @ 4" Hg
ELECTRONIC AIRFLOW TRANSMITTER AND PITOT TUBE	
MOISTURE KNOCKOUT TANK	12 IN. DIA., 12 GALLONS
FOUR P.I.D. CONTROLLERS	
THREE PEN CHART RECORDER	
F.M. APPROVED FLAME ARRESTER	
U.L. CLASSIFIED CONTROL PANEL	L.E.L., TEMPERATURE, AIRFLOW

OPTIONS

TRAILER	
BLOWER SILENCE PACKAGE	TYPICAL 10 DBA REDUCTION
VACUUM UPGRADE	10 HP @ 10" Hg
"BAKER-FAX" TELEMETRY	
AUTO-DRAIN KNOCKOUT TANK	
HEAT EXCHANGER	
CATALYTIC MODULE (PLATINUM BASED)	50% EFFICIENT .5 CUBIC FEET



BAKER FURNACE INC.





CORE LABORATORIES

LABORATORY TESTS RESULTS 10/03/96

JOB NUMBER: 964627

CUSTOMER: DANIEL B. STEPHENS & ASSOCIATES

ATTN: BOB HARLEY

CLIENT I.D.: 6033.2 Enron Roswell
DATE SAMPLED: 09/25/96
TIME SAMPLED: 10:40
WORK DESCRIPTION: MW-1 SVE/AI

LABORATORY I.D.: 964627-0002
DATE RECEIVED: 09/26/96
TIME RECEIVED: 13:04
REMARKS:

TEST DESCRIPTION	FINAL RESULT	LIMITS/**DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
Extended Refinery Gas Analysis		*1		UOP 539, GPA 2286	10/03/96	AH
Hydrogen	<0.10	0.10	Mol %			
Oxygen	1.46	0.01	Mol %			
Nitrogen	85.01	0.01	Mol %			
Carbon Monoxide	<0.01	0.01	Mol %			
Carbon Dioxide	12.02	0.01	Mol %			
Hydrogen Sulfide	<0.01	0.01	Mol %			
Methane	0.08	0.01	Mol %			
Ethylene	<0.01	0.01	Mol %			
Ethane	<0.01	0.01	Mol %			
Propylene	<0.01	0.01	Mol %			
Propane	0.03	0.01	Mol %			
Isobutane	0.02	0.01	Mol %			
C4 Olefins	<0.01	0.01	Mol %			
n-Butane	0.08	0.01	Mol %			
Isopentane	0.08	0.01	Mol %			
n-Pentane	0.15	0.01	Mol %			
Hexanes Plus	1.07	0.01	Mol %			
Total	100.00	0.01	Mol %			
Relative Density	1.06690	0				
Gross Heating Value (Dry/Real)	71.9	0	BTU/CF 14.696			
---Analysis of Hexanes Plus		0.001	Mol %			
Pentenes	<0.001	0.001	Mol %			
2,2-Dimethylbutane	0.003	0.001	Mol %			
2-Methyl Pentane	0.077	0.001	Mol %			
3-Methyl Pentane	0.051	0.001	Mol %			
n-Hexane	0.160	0.001	Mol %			
Hexenes	<0.001	0.001	Mol %			
Methylcyclopentane	0.052	0.001	Mol %			
Benzene	0.013	0.001	Mol %			
Cyclohexane	0.056	0.001	Mol %			
2-Methyl Hexane	0.047	0.001	Mol %			
3-Methylhexane	0.040	0.001	Mol %			
Dimethylcyclopentanes	0.034	0.001	Mol %			
n-Heptane	0.113	0.001	Mol %			
C7 Olefins	<0.001	0.001	Mol %			
Methylcyclohexane	0.096	0.001	Mol %			
Trimethylcyclopentanes	0.021	0.001	Mol %			
Toluene	0.029	0.001	Mol %			
2-Methylheptane	0.035	0.001	Mol %			
3-Methylheptane	0.030	0.001	Mol %			
Dimethylcyclohexanes	0.037	0.001	Mol %			
2,2,4 Trimethylpentane	<0.001	0.001	Mol %			
n-Octane	0.055	0.001	Mol %			

P O BOX 34766
HOUSTON, TX 77234-4282
(713) 943-9776





CORE LABORATORIES

LABORATORY TESTS RESULTS 10/03/96

JOB NUMBER: 964627

CUSTOMER: DANIEL B. STEPHENS & ASSOCIATES

ATTN: BOB MARLEY

CLIENT I.D.: 6033.2 Enron Roswell

LABORATORY I.D.: 964627-0002

DATE SAMPLED: 09/25/96

DATE RECEIVED: 09/26/96

TIME SAMPLED: 10:40

TIME RECEIVED: 13:04

WORK DESCRIPTION: MW-1 SVE/AI

REMARKS:

TEST DESCRIPTION	FINAL RESULT	LIMITS/*DILUTION	UNITS OF MEASURE	TEST METHOD	DATE	TECHN
Ethyl Benzene	0.003	0.001	Mol %			
Xylenes	0.014	0.001	Mol %			
C9 Paraffins	0.034	0.001	Mol %			
n-Nonane	0.023	0.001	Mol %			
Decanes Plus	0.048	0.001	Mol %			
Total	1.073	0.001	Mol %			

P O BOX 34766
HOUSTON, TX 77234-4282
(713) 943-9776



Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1305715

Date Reported: 5/31/2013

CLIENT: Cypress Engineering

Client Sample ID: Pre-Treatment

Project: TWP Roswell Station 9

Collection Date: 5/16/2013 7:20:00 AM

Lab ID: 1305715-001

Matrix: AQUEOUS

Received Date: 5/17/2013 9:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Methyl tert-butyl ether (MTBE)	ND	250		µg/L	100	5/20/2013 6:35:57 PM	R10751
Benzene	2800	100		µg/L	100	5/20/2013 6:35:57 PM	R10751
Toluene	4900	100		µg/L	100	5/20/2013 6:35:57 PM	R10751
Ethylbenzene	260	100		µg/L	100	5/20/2013 6:35:57 PM	R10751
Xylenes, Total	2600	200		µg/L	100	5/20/2013 6:35:57 PM	R10751
1,2,4-Trimethylbenzene	160	100		µg/L	100	5/20/2013 6:35:57 PM	R10751
1,3,5-Trimethylbenzene	100	100		µg/L	100	5/20/2013 6:35:57 PM	R10751
Surr: 4-Bromofluorobenzene	101	69.4-129		%REC	100	5/20/2013 6:35:57 PM	R10751

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank	Page 1 of 26
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded	
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit	
	P	Sample pH greater than 2 for VOA and TOC only.	R	RPD outside accepted recovery limits	
	RL	Reporting Detection Limit	S	Spike Recovery outside accepted recovery limits	

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1306739

Date Reported: 6/27/2013

CLIENT: Cypress Engineering

Client Sample ID: Pre-Treatment

Project: TWP Roswell Station 9

Collection Date: 6/17/2013 9:30:00 AM

Lab ID: 1306739-001

Matrix: AQUEOUS

Received Date: 6/18/2013 9:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	2500	100		µg/L	100	6/20/2013 7:15:49 PM	R11460
Toluene	4500	100		µg/L	100	6/20/2013 7:15:49 PM	R11460
Ethylbenzene	260	100		µg/L	100	6/20/2013 7:15:49 PM	R11460
Xylenes, Total	2500	200		µg/L	100	6/20/2013 7:15:49 PM	R11460
Surr: 4-Bromofluorobenzene	99.5	69.4-129		%REC	100	6/20/2013 7:15:49 PM	R11460

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH greater than 2 for VOA and TOC only.
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1307905

Date Reported: 7/31/2013

CLIENT: Cypress Engineering

Client Sample ID: Pre-Treatment

Project: TWP Roswell Station 9

Collection Date: 7/17/2013 10:45:00 AM

Lab ID: 1307905-001

Matrix: AQUEOUS

Received Date: 7/19/2013 10:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8021B: VOLATILES							Analyst: DAM
Methyl tert-butyl ether (MTBE)	ND	250		µg/L	100	7/23/2013 7:39:27 PM	R12136
Benzene	3000	100		µg/L	100	7/23/2013 7:39:27 PM	R12136
Toluene	5300	100		µg/L	100	7/23/2013 7:39:27 PM	R12136
Ethylbenzene	270	100		µg/L	100	7/23/2013 7:39:27 PM	R12136
Xylenes, Total	2600	200		µg/L	100	7/23/2013 7:39:27 PM	R12136
1,2,4-Trimethylbenzene	170	100		µg/L	100	7/23/2013 7:39:27 PM	R12136
1,3,5-Trimethylbenzene	100	100		µg/L	100	7/23/2013 7:39:27 PM	R12136
Surr: 4-Bromofluorobenzene	103	69.4-129		%REC	100	7/23/2013 7:39:27 PM	R12136

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH greater than 2 for VOA and TOC only.
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit

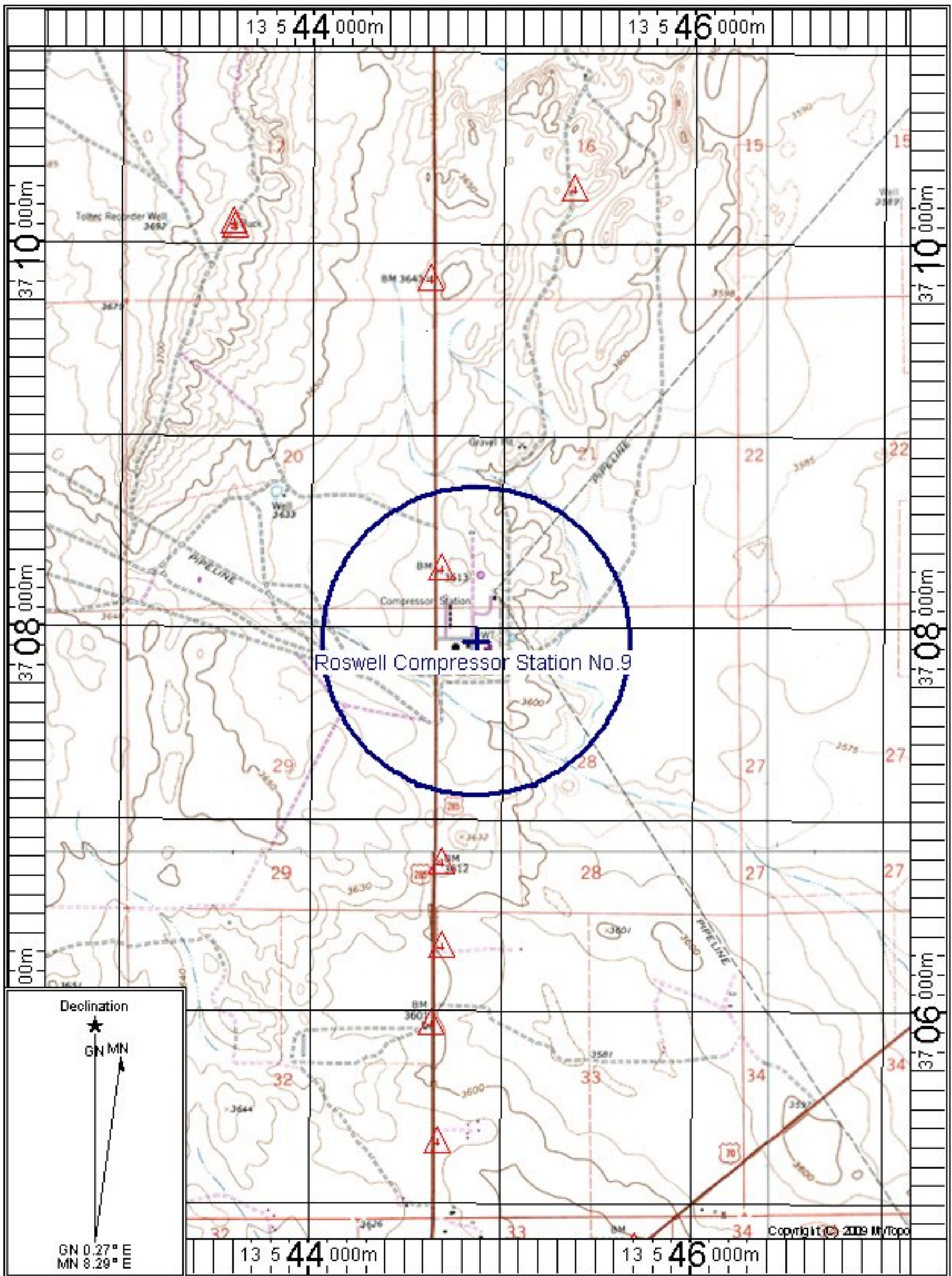
Section 8

Map(s)

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

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

A topographic map is included in this section.



Map Name: BITTER LAKE
 Print Date: 07/20/22

Scale: 1 inch = 2,500 ft.
 Map Center: 13 0544863 E 37079

Horizontal Datum: WGS84

Section 9

Proof of Public Notice

(for NSR applications submitting under 20.2.72 or 20.2.74 NMAC)

(This proof is required by: 20.2.72.203.A.14 NMAC “Documentary Proof of applicant’s public notice”)

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

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

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

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

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

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

N/A- Public Notice is not required for application being submitted under 20.2.70 NMAC.

Section 10

Written Description of the Routine Operations of the Facility

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

Roswell Compressor Station No. 9 is a compressor facility that services a natural gas pipeline system. 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 liquids then enter a mist eliminator to allow flash off due to pressure change. Depending on liquid production, the liquids will either remain in the mist eliminator or be routed to a condensate storage tank for storage. Liquids that accumulate in the mist eliminators and storage tanks are periodically loaded out on tanker trucks and removed from the station.

After passing through the separators, the natural gas stream is compressed by grandfathered natural gas-driven (Units 903 and 904) and electric-driven (Units 901 and 902) compressors. The electric-driven units are not sources of emissions. Following compression, the gas exits the station at a higher pressure and is directed back into the pipeline system. Unit 921 is a grandfathered natural gas-fired engine.

The station also includes two soil vapor extraction systems that operate by extracting vapors from extraction wells and processing the vapors through two thermal oxidizers to control hydrocarbon vapors and hazardous pollutants. These systems are parts of a groundwater remediation treatment system at the station that consists of extraction wells, two thermal oxidizers, an air stripper, and several groundwater storage tanks. The groundwater treatment system is complying with 40 CFR 63, Subpart GGGG; therefore, the tanks are not emission sources.

There are no major processes at this station that have bottlenecks to limit production.

Section 11

Source Determination

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

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

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

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

Refer to Table 2-A

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

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

Yes No

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

Yes No

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

Yes No

C. Make a determination:

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

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

Section 12

Section 12.A

PSD Applicability Determination for All Sources

(Submitting under 20.2.72, 20.2.74 NMAC)

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

A. This facility is:

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

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

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

C. Netting **is not required (project is not significant).**

D. BACT is **not required for this renewal.**

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.

Section 12 is not required as the application is getting submitted under 20.2.70 NMAC.

Section 13

Determination of State & Federal Air Quality Regulations

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

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

Required Information for Specific Equipment:

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

Required Information for Regulations that Apply to the Entire Facility:

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

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

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

Regulatory Citations for Emission Standards:

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

Federally Enforceable Conditions:

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

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

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

<u>STATE REGU- LATIONS CITATION</u>	Title	Applies? Enter Yes or No	Unit(s) or Facility	JUSTIFICATION: (You may delete instructions or statements that do not apply in the justification column to shorten the document.)
20.2.1 NMAC	General Provisions	Yes	Facility	General Provisions apply to Notice of Intent, Construction, and Title V permit applications.
20.2.3 NMAC	Ambient Air Quality Standards NMAAQS	Yes	Facility	20.2.3 NMAC is a State Implementation Plan (SIP) approved regulation that limits the maximum allowable concentration of Total Suspended Particulates, Sulfur Compounds, Carbon Monoxide and Nitrogen Dioxide. Title V applications, see exemption at 20.2.3.9 NMAC
20.2.7 NMAC	Excess Emissions	Yes	Facility	This regulation establishes requirements for the facility if operations at the facility result in any excess emissions. The owner or operator will operate the source at the facility having an excess emission, to the extent practicable, including associated air pollution control equipment, in a manner consistent with good air pollution control practices for minimizing emissions. The facility will also notify the NMED of any excess emission per 20.2.7.110 NMAC.
20.2.23 NMAC	Fugitive Dust Control	No	N/A	This facility does not have any fugitive dust sources; therefore this regulation does not apply.
20.2.33 NMAC	Gas Burning Equipment - Nitrogen Dioxide	No	N/A	The facility does not have gas burning equipment (external combustion emission sources, such as gas fired boilers and heaters), therefore the facility is not subject to this regulation.
20.2.34 NMAC	Oil Burning Equipment: NO ₂	No	N/A	This facility does not have oil burning equipment (external combustion emission sources, such as oil fired boilers and heaters) having a heat input of greater than 1,000,000 million British Thermal Units per year per unit, therefore this regulation does not apply.
20.2.35 NMAC	Natural Gas Processing Plant – Sulfur	No	N/A	This facility is not a natural gas processing plant; therefore this regulation does not apply.
20.2.37 and 20.2.36 NMAC	Petroleum Processing Facilities and Petroleum Refineries	N/A	N/A	These regulations were repealed by the Environmental Improvement Board. If you had equipment subject to 20.2.37 NMAC before the repeal, your combustion emission sources are now subject to 20.2.61 NMAC.
<u>20.2.38</u> NMAC	Hydrocarbon Storage Facility	No	N/A	The station is not one of the types of facilities listed; therefore, this regulation does not apply.
<u>20.2.39</u> NMAC	Sulfur Recovery Plant - Sulfur	No	N/A	This facility is not a sulfur recovery plant; therefore, this regulation does not apply.
20.2.61.109 NMAC	Smoke & Visible Emissions	Yes	903 904 921	This regulation establishes control on smoke and visible emissions from certain sources. Heaters, reboilers, flares, and engines are stationary combustion equipment. Units 903, 904, and 921 are subject to this regulation and will comply with the requirements.
20.2.70 NMAC	Operating Permits	Yes	Facility	This regulation establishes requirements for obtaining an operating permit. The facility is major source for criteria pollutants, HAPS and GHG. Transwestern Pipeline Company, LLC is submitting this application for a Title V renewal permit per 20.2.70.300.B(2) NMAC.
20.2.71 NMAC	Operating Permit Fees	Yes	Facility	This regulation establishes a schedule of operating permit emission fees. This facility is subject to 20.2.70 NMAC and is therefore subject to the requirements of this regulation. The facility will meet all fee requirements under 20.2.71.110 NMAC.
20.2.72 NMAC	Construction Permits	Yes	SVE-1 SVE-2 MIST-1 MIST-2 TK-1 TK-30 TK-31 TK-32 TK-33	This facility is subject to 20.2.72 NMAC and the following NSR Permit numbers: 1776-M1 and 1777-M1 for SVE-1 and SVE-2, respectively, and 6742, for the mist eliminators (MIST-1 and MIST-2) and condensate tanks (TK-1, TK-30, TK-31, TK-32, TK-33, and TK-34).

<u>STATE REGU- LATIONS CITATION</u>	Title	Applies? Enter Yes or No	Unit(s) or Facility	JUSTIFICATION: (You may delete instructions or statements that do not apply in the justification column to shorten the document.)
			TK-34	
20.2.73 NMAC	NOI & Emissions Inventory Requirements	Yes	Facility	This regulation establishes the requirements for obtaining a construction permit. The facility is a stationary source that has potential emission rates greater than 10 pounds per hour and 25 tons per year of any regulated air contaminant for which there is a National or New Mexico Air Quality Standard. This regulation applies.
20.2.74 NMAC	Permits – Prevention of Significant Deterioration (PSD)	Yes	Facility	This facility is PSD major defined by: 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; or 20.2.74.200.7.AG(5) The fugitive emissions of a stationary source shall not be included in determining for any of the purposes of this section whether it is a major stationary source, unless the source belongs 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.
20.2.75 NMAC	Construction Permit Fees	Yes	Facility	This facility is subject to 20.2.72 NMAC and is in turn subject to 20.2.75 NMAC for NSR permit application fees only. This facility is exempt from annual fees under this part (20.2.75.11.E NMAC) as it is subject to fees pursuant to 20.2.71 NMAC
20.2.77 NMAC	New Source Performance	No	Units subject to 40 CFR 60	There are no emissions source at this facility that is subject to any NSPS requirements, therefore 20.2.77 does not apply.
20.2.78 NMAC	Emission Standards for HAPS	No	Units Subject to 40 CFR 61	No emission source at the station is subject to any requirement under 40 CFR Part 61.
20.2.79 NMAC	Permits – Nonattainment Areas	No	Facility	This facility is located in an attainment area for all criteria pollutants; therefore, 20.2.79 does not apply.
20.2.80 NMAC	Stack Heights	No	N/A	There are no new or modified sources with a stack that are proposed with this application; therefore 20.2.80 does not apply.
20.2.82 NMAC	MACT Standards for source categories of HAPS	Yes	903 904 921 SVE-1 SVE-2	Engines (Units 903, 904, and 921) are subject to 40 CFR 63, Subpart ZZZZ and Soil Vapor Extractors (SVE-1 and SVE-2) are subject to 40 CFR Part 63, Subpart GGGGG.

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

<u>FEDERAL REGU- LATIONS CITATION</u>	Title	Applies? Enter Yes or No	Unit(s) or Facility	JUSTIFICATION:
40 CFR 50	NAAQS	Yes	Facility	This regulation defines national ambient air quality standards. The facility meets all applicable national ambient air quality standards for NO _x , CO, SO ₂ , PM ₁₀ , and PM _{2.5} under this regulation.
NSPS 40 CFR 60, Subpart A	General Provisions	No	N/A	No emission source at the station is subject to any requirement under 40 CFR 60; therefore, this regulation does not apply.
NSPS 40 CFR60.40a, Subpart Da	Subpart Da, Performance Standards for Electric Utility Steam Generating Units	No	N/A	This facility does not combust fuel to produce electric power by means of generating steam; therefore, this regulation does not apply.
NSPS 40 CFR60.40b Subpart Db	Electric Utility Steam Generating Units	No	N/A	This facility is does not combust fuel to produce electric power by means of generating steam; therefore, this regulation does not apply.
40 CFR 60.40c, Subpart Dc	Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units	No	N/A	This facility does not have any steam generating units; therefore, this regulation does not apply.
NSPS 40 CFR 60, Subpart Ka	Standards of Performance for Storage Vessels for Petroleum Liquids for which Construction, Reconstruction, or Modification Commenced After May 18, 1978, and Prior to July 23, 1984	No	N/A	There are no storage tanks at this facility with a capacity greater than 151,416 liters; therefore this regulation does not apply.
NSPS 40 CFR 60, Subpart Kb	Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced After July 23, 1984	No	N/A	This facility does not have any storage vessels, with a capacity greater than or equal to 75 cubic meters (m ³) that is used to store volatile organic liquids; therefore this regulation does not apply.
NSPS 40 CFR	Stationary Gas Turbines	No	N/A	This facility does not have any gas turbines; therefore, this regulation does not apply.

<u>FEDERAL REGU- LATIONS CITATION</u>	Title	Applies? Enter Yes or No	Unit(s) or Facility	JUSTIFICATION:
60.330 Subpart GG				
NSPS 40 CFR 60, Subpart KKK	Leaks of VOC from Onshore Gas Plants	No	N/A	This facility is not an onshore gas plants; therefore, this regulation does not apply.
NSPS 40 CFR Part 60 Subpart LLL	Standards of Performance for Onshore Natural Gas Processing: SO ₂ Emissions	No	N/A	The facility is not a natural gas processing plant; therefore, this regulation does not apply.
NSPS 40 CFR Part 60 Subpart OOOO	Standards of Performance for Crude Oil and Natural Gas Production, Transmission, and Distribution for which construction, modification or reconstruction commenced after August 23, 2011 and before September 18, 2015	No	N/A	This facility was not constructed, modified, or reconstructed after Aug 23, 2011; therefore, this regulation does not apply.
NSPS 40 CFR Part 60 Subpart OOOOa	Standards of Performance for Crude Oil and Natural Gas Facilities for which Construction, Modification or Reconstruction Commenced After September 18, 2015	No	N/A	This facility was not constructed, modified, or reconstructed after September 18, 2015; therefore, this regulation does not apply.
NSPS 40 CFR 60 Subpart IIII	Standards of performance for Stationary Compression Ignition Internal Combustion Engines	No	N/A	This rule applies to compression ignition engines. None of the engines at this station is a compression ignition engine; therefore, this regulation does not apply.
NSPS 40 CFR Part 60 Subpart JJJJ	Standards of Performance for Stationary Spark Ignition Internal Combustion Engines	No	N/A	The compressions ignition engines at this facility were not constructed after June 12, 2006; therefore, this regulation does not apply.
NSPS 40 CFR 60 Subpart TTTT	Standards of Performance for Greenhouse Gas Emissions for Electric Generating Units	No	N/A	This facility does not have any electric generating units; therefore, this regulation does not apply.
NSPS 40	Emissions	No	N/A	This facility does not have any electric generating units; therefore, this regulation

<u>FEDERAL REGU- LATIONS CITATION</u>	Title	Applies? Enter Yes or No	Unit(s) or Facility	JUSTIFICATION:
CFR 60 Subpart UUUU	Guidelines for Greenhouse Gas Emissions and Compliance Times for Electric Utility Generating Units			does not apply.
NSPS 40 CFR 60, Subparts WWW, XXX, Cc, and Cf	Standards of performance for Municipal Solid Waste (MSW) Landfills	No	N/A	The facility is not a municipal solid waste landfill; therefore, this regulation does not apply.
NESHAP 40 CFR 61 Subpart A	General Provisions	No	N/A	This facility has no stationary source for which a standard is prescribed under this part; therefore, this regulation does not apply.
NESHAP 40 CFR 61 Subpart E	National Emission Standards for Mercury	No	N/A	The facility has no sources for which this rule is applicable; therefore this regulation is not applicable.
NESHAP 40 CFR 61 Subpart V	National Emission Standards for Equipment Leaks (Fugitive Emission Sources)	No	N/A	The facility has no source that is intended to operate in volatile hazardous air pollutant (VHAP) service.
MACT 40 CFR 63, Subpart A	General Provisions	Yes	903 904 921 SVE-1 SVE-2	Units 903, 904, 921, SVE-1 and SVE-2 are subject to 40 CFR 63, therefore this subpart applies.
MACT 40 CFR 63.760 Subpart HH	Oil and Natural Gas Production Facilities	No	N/A	This station is not an oil and natural gas production facility and does not have any dehydrators; therefore, is not subject to this subpart.
MACT 40 CFR 63 Subpart HHH		No	N/A	This facility does not have any dehydrators; therefore, this facility is not subject to this subpart.
MACT 40 CFR 63 Subpart DDDD	National Emission Standards for Hazardous Air Pollutants for Major Industrial, Commercial, and Institutional Boilers & Process Heaters	No	N/A	This facility does not have any boilers and process heaters; therefore, this subpart does not apply.
MACT 40 CFR 63 Subpart UUUUU	National Emission Standards for Hazardous Air Pollutants Coal & Oil Fire Electric Utility Steam	No	N/A	This facility does not have any steam generating units; therefore this subpart does not apply.

<u>FEDERAL REGU- LATIONS CITATION</u>	Title	Applies? Enter Yes or No	Unit(s) or Facility	JUSTIFICATION:
	Generating Unit			
MACT 40 CFR 63 Subpart ZZZZ	National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (RICE MACT)	Yes	903 904 921	<p>The station is a major source of hazardous air pollutant (HAP) emissions; therefore, this rule applies to the engines located at the station.</p> <p>Engines 903 and 904 are existing 4SLB engines of greater than 500 horsepower (hp). Per §63.6590(b)(3)(ii), these engines are subject to the regulation, but do not have any requirements under Subpart ZZZZ.</p> <p>Engine 921 is subject to monitoring and maintenance requirements under §63.6602, §63.6625(f) and (j), and operational limitations found in §63.6625(h) and §63.6640(f).</p>
40 CFR 64	Compliance Assurance Monitoring	No	N/A	The compressor engines at the station are major sources of NOx, but they do not use control devices to control emissions. Therefore, they are not subject to CAM. The SVE unit are controlled by thermal oxidizers, but the SVE units are not major sources of any pollutant prior to control. Therefore, they are not subject to CAM.
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; therefore, this regulation does not apply.
Title IV – Acid Rain 40 CFR 72	Acid Rain	No	N/A	This facility is not an acid rain source; therefore, this regulation does not apply.
Title IV – Acid Rain 40 CFR 73	Sulfur Dioxide Allowance Emissions	No	N/A	This facility is not an acid rain source; therefore, this regulation does not apply.
Title IV-Acid Rain 40 CFR 75	Continuous Emissions Monitoring	No	N/A	This facility does not generate electric power; therefore, this regulation does not apply.
Title IV – Acid Rain 40 CFR 76	Acid Rain Nitrogen Oxides Emission Reduction Program	No	N/A	This facility does not generate electric power; therefore, this regulation does not apply.
Title VI – 40 CFR 82	Protection of Stratospheric Ozone	No	N/A	<p>This facility does not conduct any of the following:</p> <p>(40 CFR 82.1 and 82.100) produce, transform, destroy, import or export a controlled substance or import or export a controlled product;</p> <p>(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;</p> <p>(40 CFR 82.80) if you are a department, agency, and instrumentality of the United States subject to Federal procurement requirements;</p> <p>(82.150) if you service, maintain, or repair appliances, dispose of appliances, refrigerant reclaimers, if you are an owner or operator of an appliance, if you are a manufacturer of appliances or of recycling and recovery equipment, if you are an approved recycling and recovery equipment testing organization, and/or if you sell or offer for sell or purchase class I or class I refrigerants.</p>

Section 14

Operational Plan to Mitigate Emissions

(Submitting under 20.2.70, 20.2.72, 20.2.74 NMAC)

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

Transwestern Pipeline Company (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 startup, shutdown, and scheduled maintenance through work practice standards and good air pollution control practices. TWP maintains this plan on site and will make the plan available to the Department upon request.

Section 15

Alternative Operating Scenarios

(Submitting under 20.2.70, 20.2.72, 20.2.74 NMAC)

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

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

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

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

Section 16

Air Dispersion Modeling

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

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

Check each box that applies:

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

Section 17

Compliance Test History

(Submitting under 20.2.70, 20.2.72, 20.2.74 NMAC)

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

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

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

Unit No.	Test Description	Test Date
904	Tested in accordance with EPA test methods for NOx and CO as required by Title V permit P154-R4	2/15/2022
903	Tested in accordance with EPA test methods for NOx and CO as required by Title V permit P154-R4	2/15/2022

Section 19

Requirements for Title V Program

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

Who Must Use this Attachment:

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

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.

The only equipment at Roswell Compressor Station that operates with a control device are the two soil vapor extraction systems, which use thermal oxidizers to control emission of VOC and HAP. The uncontrolled emissions are below major source levels. The station's compressor and emergency generator engines do not use control devices. Therefore, the CAM requirements of 60 CFR Part 64 do not apply to any emission unit operated at this site.

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

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

Based on the information and belief formed after reasonable inquiry, Transwestern Pipeline Company, believes that the Roswell CS No9 is in compliance with each requirement applicable to the facility.

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 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.

TWP will submit semiannual monitoring reports twice per year and an annual compliance certification once per year to the NMED. In addition, semiannual compliance reports for 40 CFR Part 63, Subpart GGGGG, will be submitted twice per year for as long as the remediation system is subject to this regulatory requirement.

19.5 - Stratospheric Ozone and Climate Protection

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

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

This regulation establishes requirements for protection of the stratospheric ozone. The regulation is not applicable because the facility does not "service", "maintain" or "repair" class I or class II appliances nor "disposes" of the appliances [40 CFR Part 82.1(a)].

19.6 - Compliance Plan and Schedule

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

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

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

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

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

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

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

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

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

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

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

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

Based on information and belief formed after reasonable inquiry and as described in Section 19.2, and with this filing, Transwestern Pipeline Company states that the Roswell Compressor Station No9 is in compliance with applicable requirements. No compliance plan, compliance schedule, or compliance reports are required.

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

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

This facility 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)?

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

The property on which the station operates is not closer than 80 km (50 miles) from other states, local pollution control programs, or Indian tribes and pueblos (20.2.70.402 A.2 and 20.2.70.b NMAC)

19.9 - Responsible Official

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

The responsible official for Roswell Compressor Station No. 9 is David Roybal.

Section 20

Other Relevant Information

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

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

Transwestern Pipeline Company has no additional relevant information to add to the application at this time.

Section 22: Certification

Company Name: _____

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

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

_____.

*Signature

Date

Printed Name

Title

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

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

_____ day of _____, _____.

Notary's Signature

Date

Notary's Printed Name

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