

February 4, 2025

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

**RE: Application for Significant Revision  
NSR Permit No. 0274-M8  
Bitter Lake Compressor Station  
Chaves County, New Mexico  
IACX Roswell LLC**

Dear Sir/Madam:

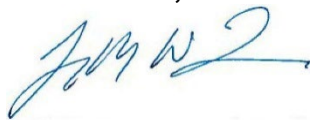
On behalf of IACX Roswell LLC (IACX), Altamira-US, LLC (Altamira) is submitting the enclosed Application for a Significant Revision to NSR Permit No. 0274-M8 for the Bitter Lake Compressor Station (Facility). The Facility is located approximately 13.31 miles northeast of Roswell in Chaves County, New Mexico.

With this application, IACX plans to add one (1) natural gas compressor engine and one (1) flare to control SSM events. The remaining equipment will remain unchanged.

The enclosed application has been prepared in accordance with the requirements set forth in Title 20 New Mexico Administrative Code, Section 2.72.219. (NMAC 20.2.72.219.D.1.a.).

If you have any questions or comments, please contact Justin Wheeler of IACX at (972) 960-3219 or [justinwheeler@iacx.com](mailto:justinwheeler@iacx.com).

Sincerely,  
**Altamira-US, LLC**



Laura Worthen Lodes  
Chief Engineer

<b>Mail Application To:</b>  New Mexico Environment Department Air Quality Bureau Permits Section 525 Camino de los Marquez, Suite 1 Santa Fe, New Mexico, 87505  Phone: (505) 476-4300 Fax: (505) 476-4375 <a href="http://www.env.nm.gov/aqb">www.env.nm.gov/aqb</a>		<b>For Department use only:</b>
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## Universal Air Quality Permit Application

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

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

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

### Acknowledgements:

☐ I acknowledge that a pre-application meeting is available to me upon request. ☐ Title V Operating, Title IV Acid Rain, and NPR applications have no fees.  
☒ \$500 NSR application Filing Fee enclosed **OR** ☐ The full permit fee associated with 10 fee points (required w/ streamline applications).  
☒ Check No.: 12351 in the amount of \$500  
☒ I acknowledge the required submittal format for the hard copy application is printed double sided 'head-to-toe', 2-hole punched (except the Sect. 2 landscape tables is printed 'head-to-head'), numbered tab separators. Incl. a copy of the check on a separate page.  
☒ I acknowledge there is an annual fee for permits in addition to the permit review fee: [www.env.nm.gov/air-quality/permit-fees-2/](http://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/](http://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.XX.XXX.XX** 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 <sup>st</sup> 3 to 5 #s of permit IDEA ID No.): 14	Updating Permit/NOI #:0274-M8
1	Facility Name: Bitter Lake Compressor Station	Plant primary SIC Code (4 digits): 1311	
		Plant NAIC code (6 digits): 211130	
a	Facility Street Address (If no facility street address, provide directions from a prominent landmark):		
2	Plant Operator Company Name: IACX Roswell LLC	Phone/Fax: 972-960-3219 / NA	
a	Plant Operator Address: 5001 LBJ Freeway, Suite 300, Dallas, TX 75244		
b	Plant Operator's New Mexico Corporate ID or Tax ID:		

3	Plant Owner(s) name(s): IACX Roswell LLC	Phone/Fax: Phone/Fax: 972-960-3219 / NA
a	Plant Owner(s) Mailing Address(s): 5001 LBJ Freeway, Suite 300, Dallas, TX 75244	
4	Bill To (Company): IACX Roswell LLC	Phone/Fax: Phone/Fax: 972-960-3219 / NA
a	Mailing Address: 5001 LBJ Freeway, Suite 300, Dallas, TX 75244	E-mail: justinwheeler@iacx.com
5	<input type="checkbox"/> Preparer: <input checked="" type="checkbox"/> Consultant: Laura Worthen-Lodes	Phone/Fax: 405-702-1618
a	Mailing Address: 525 Central Park Dr., Suite 500, Oklahoma City, OK 73105	E-mail: laura.worthen-lodes@altamira-us.com
6	Plant Operator Contact: Justin Wheeler	Phone/Fax: 972-679-2147 / NA
a	Address: 5001 LBJ Freeway, Suite 300, Dallas, TX 75244	E-mail: justinwheeler@iacx.com
7	Air Permit Contact: Justin Wheeler	Title: Director of Environmental, Health and Safety
a	E-mail: justinwheeler@iacx.com	Phone/Fax: 972-679-2147 / NA
b	Mailing Address: 5001 LBJ Freeway, Suite 300, Dallas, TX 75244	
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):
4	Was this facility constructed before 8/31/1972 and continuously operated since 1972? <input type="checkbox"/> Yes <input checked="" 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 type="checkbox"/> N/A	
6	Does this facility have a Title V operating permit (20.2.70 NMAC)? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If yes, the permit No. is: P-
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:
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:
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: 0274-M8
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:

### 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: 1.25 MMSCF/hr	Daily: 30 MMSCFD	Annually: 10,950 MMSCF/yr
b	Proposed	Hourly: 1.25 MMSCF/hr	Daily: 30 MMSCFD	Annually: 10,950 MMSCF/yr
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: 1.25 MMSCF/hr	Daily: 30 MMSCFD	Annually: 10,950 MMSCF/yr
b	Proposed	Hourly: 1.25 MMSCF/hr	Daily: 30 MMSCFD	Annually: 10,950 MMSCF/yr

**Section 1-D: Facility Location Information**

1	Section: 14	Range: 24 E	Township: 11S	County: Chaves	Elevation (ft): 3,558
2	UTM Zone: <input type="checkbox"/> 12 or <input checked="" type="checkbox"/> 13			Datum: <input checked="" type="checkbox"/> NAD 27 <input type="checkbox"/> NAD 83 <input type="checkbox"/> WGS 84	
a	UTM E (in meters, to nearest 10 meters): 556,500			UTM N (in meters, to nearest 10 meters): 3,712,770	
b	AND Latitude (deg., min., sec.): 33.553056			Longitude (deg., min., sec.): -104.390833	
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):				
5	The facility is 13.31 (distance) miles northeast (direction) of Roswell (nearest town).				
6	Status of land at facility (check one): <input checked="" type="checkbox"/> Private <input type="checkbox"/> Indian/Pueblo <input type="checkbox"/> Federal BLM <input type="checkbox"/> Federal Forest Service <input type="checkbox"/> Other (specify)				
7	List all municipalities, Indian tribes, and counties within a ten (10) mile radius (20.2.72.203.B.2 NMAC) of the property on which the facility is proposed to be constructed or operated:				
8	20.2.72 NMAC applications <b>only</b> : 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 <a href="http://www.env.nm.gov/air-quality/modeling-publications/">www.env.nm.gov/air-quality/modeling-publications/</a> )? <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:				
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): 1.80				
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:				
12	Method(s) used to delineate the Restricted Area:  "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 <b>maximum</b> 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:			
4	Month and year of anticipated construction completion:			
5	Month and year of anticipated startup of new or modified facility:			
6	Will this facility operate at this site for more than one year? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No			



**Section 1-F: Other Facility Information**

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

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

1	<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):		Phone:
a	R.O. Title:	R.O. e-mail:	
b	R. O. Address:		
2	Alternate Responsible Official (20.2.70.300.D.2 NMAC):		Phone:
a	A. R.O. Title:	A. R.O. e-mail:	
b	A. R. O. Address:		
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):		
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.):		
a	Address of Parent Company:		
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.):		
6	Telephone numbers & names of the owners' agents and site contacts familiar with plant operations:		

7	Affected Programs to include Other States, local air pollution control programs (i.e. Bernalillo) and Indian tribes: Will the property on which the facility is proposed to be constructed or operated be closer than 80 km (50 miles) from other states, local pollution control programs, and Indian tribes and pueblos (20.2.70.402.A.2 and 20.2.70.7.B)? If yes, state which ones and provide the distances in kilometers:
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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 Laura Worthen Lodes,

Email laura.worthen-lodes@altamira-us.com Phone number 405-919-4129.

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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Change Log – Do **not** submit this page with your application.

**Table 2-A: Regulated Emission Sources**

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

Unit Number <sup>1</sup>	Source Description	Make	Model #	Serial #	Manufacturer's Rated Capacity <sup>3</sup> (Specify Units)	Requested Permitted Capacity <sup>3</sup> (Specify Units)	Date of Manufacture <sup>2</sup>	Controlled by Unit #	Source Classification Code (SCC)	For Each Piece of Equipment, Check One	RICE Ignition Type (CI, SI, 4SLB, 4SRB, 2SLB) <sup>4</sup>	Replacing Unit No.
							Date of Construction/Reconstruction <sup>2</sup>	Emissions vented to Stack #				
C-891	Compressor Engine	Cooper Bessemer	GMVH-10C	48778	2250 hp	1414 hp	4/7/1981	N/A	20200202	<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	2SLB	
							11/15/1987	C-891				
C-893	Compressor Engine	Cooper Bessemer	GMVH-10C	48776	2250 hp	1391 hp	4/7/1981	N/A	20200202	<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	2SLB	
							12/1/1989	C-893				
C-894	Compressor Engine	CAT	3408C LE	BAZ02303	425 hp	425 hp	5/15/2006	N/A	20200202	<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	
							3/7/2020	C-894				
C-895	Compressor Engine	CAT	3408C LE	BAZ00179	425 hp	425 hp	6/5/2002	N/A	20200202	<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	
							3/7/2020	C-895				
C-896	Compressor Engine	CAT	3408C LE	TBD	425 hp	425 hp	TBD	N/A	20200203	<input type="checkbox"/> Existing (unchanged) <input type="checkbox"/> To be Removed <input checked="" type="checkbox"/> New/Additional <input type="checkbox"/> Replacement Unit <input type="checkbox"/> To Be Modified <input type="checkbox"/> To be Replaced	4SLB	
							TBD	C-896				
DEHY	Glycol Dehydrator	Lakota	N/A	N/A	30 MMscf/d	30 MMscf/d	1/1/1980	N/A	31000301	<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	
							1/1/1980	N/A				
RB-1	Dehydrator Reboiler	N/A	N/A	N/A	N/A	N/A	N/A	N/A	31000404	<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				
RB-2	Dehydrator Reboiler	N/A	N/A	N/A	N/A	N/A	N/A	N/A	31000404	<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				
TK-1	Condensate Tank	N/A	N/A	19428	100 bbl/day	100 bbl/day	1/2/2008	N/A	40400311	<input type="checkbox"/> Existing (unchanged) <input type="checkbox"/> To be Removed <input type="checkbox"/> New/Additional <input type="checkbox"/> Replacement Unit <input checked="" type="checkbox"/> To Be Modified <input type="checkbox"/> To be Replaced	N/A	
							1/23/2008	N/A				
TK-2	Condensate Tank	N/A	1415	19349	100 bbl/day	100 bbl/day	1/17/2008	N/A	40400311	<input type="checkbox"/> Existing (unchanged) <input type="checkbox"/> To be Removed <input type="checkbox"/> New/Additional <input type="checkbox"/> Replacement Unit <input checked="" type="checkbox"/> To Be Modified <input type="checkbox"/> To be Replaced	N/A	
							1/17/2008	N/A				
TK-2a	Condensate Tank	N/A	N/A	19342	100 bbl/day	100 bbl/day	1/16/2008	N/A	40400311	<input type="checkbox"/> Existing (unchanged) <input type="checkbox"/> To be Removed <input type="checkbox"/> New/Additional <input type="checkbox"/> Replacement Unit <input checked="" type="checkbox"/> To Be Modified <input type="checkbox"/> To be Replaced	N/A	
							1/16/2008	N/A				
FLARE-1	Flare	N/A	N/A	N/A	N/A	N/A	N/A	N/A	31000205	<input type="checkbox"/> Existing (unchanged) <input type="checkbox"/> To be Removed <input checked="" 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				
FUG	Facility Fugitive Emissions	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				
Load-1	Condensate Loading Emissions	N/A	N/A	N/A	N/A	N/A	N/A	N/A	40600132	<input type="checkbox"/> Existing (unchanged) <input type="checkbox"/> To be Removed <input type="checkbox"/> New/Additional <input type="checkbox"/> Replacement Unit <input checked="" type="checkbox"/> To Be Modified <input type="checkbox"/> To be Replaced	N/A	
							N/A	N/A				
Load-2	Produced Water Loading Emissions	N/A	N/A	N/A	N/A	N/A	N/A	N/A	40600132	<input type="checkbox"/> Existing (unchanged) <input type="checkbox"/> To be Removed <input type="checkbox"/> New/Additional <input type="checkbox"/> Replacement Unit <input checked="" type="checkbox"/> To Be Modified <input type="checkbox"/> To be Replaced	N/A	
							N/A	N/A				

Unit Number <sup>1</sup>	Source Description	Make	Model #	Serial #	Manufacturer's Rated Capacity <sup>3</sup> (Specify Units)	Requested Permitted Capacity <sup>3</sup> (Specify Units)	Date of Manufacture <sup>2</sup>	Controlled by Unit #	Source Classification Code (SCC)	For Each Piece of Equipment, Check One	RICE Ignition Type (CI, SI, 4SLB, 4SRB, 2SLB) <sup>4</sup>	Replacing Unit No.
							Date of Construction/Reconstruction <sup>2</sup>	Emissions vented to Stack #				
SSM	Startup, Shutdown, and Maintenance	N/A	N/A	N/A	N/A	N/A	N/A	N/A	310888811	<input type="checkbox"/> Existing (unchanged) <input type="checkbox"/> To be Removed <input type="checkbox"/> New/Additional <input type="checkbox"/> Replacement Unit <input checked="" type="checkbox"/> To Be Modified <input type="checkbox"/> To be Replaced	N/A	
							N/A	N/A				
M	Malfunction	N/A	N/A	N/A	N/A	N/A	N/A	N/A	310888811	<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				

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

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

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

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

**Table 2-B: Exempted Equipment** (20.2.72 NMAC)

All 20.2.70 NMAC (Title V) applications must list all Insignificant Activities in this table. All 20.2.72 NMAC applications must list Exempted Equipment in this table. If equipment listed on this table is exempt under 20.2.72.202.B.5, include emissions calculations and emissions totals for 202.B.5 "similar functions" units, operations, and activities in Section 6, Calculations. Equipment and activities exempted under 20.2.72.202 NMAC may not necessarily be Insignificant under 20.2.70 NMAC (and vice versa). Unit & stack numbering must be consistent throughout the application package. Per Exemptions Policy 02-012.00 (see [http://www.env.nm.gov/aqb/permit/aqb\\_pol.html](http://www.env.nm.gov/aqb/permit/aqb_pol.html)), 20.2.72.202.B NMAC Exemptions do not apply, but 20.2.72.202.A NMAC exemptions do apply to NOI facilities under 20.2.73 NMAC. List 20.2.72.301.D.4 NMAC Auxiliary Equipment for Streamline applications in Table 2-A. The List of Insignificant Activities (for TV) can be found online at <https://www.env.nm.gov/wp-content/uploads/sites/2/2017/10/InsignificantListTitleV.pdf>. TV sources may elect to enter both TV Insignificant Activities and Part 72 Exemptions on this form.

Unit Number	Source Description	Manufacturer	Model No.	Max Capacity	List Specific 20.2.72.202 NMAC Exemption (e.g. 20.2.72.202.B.5)	Date of Manufacture /Reconstruction <sup>2</sup>	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 <sup>2</sup>	
RB-1	Dehydrator Reboiler	Flameco	SB24-12	0.75	20.2.72.202.B.5 NMAC	1980	<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
			0509-415	MMBtu/hr		1980	
RB-2	Dehydrator Reboiler	Flameco	SB24-12	0.75	20.2.72.202.B.5 NMAC	1980	<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
			0411-688	MMBtu/hr		1980	
TK-3	Lube Oil Tank	N/A	N/A	N/A	20.2.72.202.B.2 NMAC	N/A	<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	
TK-6	Used Lube Oil Tank	N/A	N/A	N/A	20.2.72.202.B.2 NMAC	N/A	<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	
TK-10	Lube Oil Tank	N/A	N/A	N/A	20.2.72.202.B.2 NMAC	N/A	<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	
TK-12	Used Lube Oil Tank	N/A	N/A	N/A	20.2.72.202.B.2 NMAC	N/A	<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	
HRU	Helium Recovery Unit	N/A	N/A	N/A	20.2.72.202.B.5 NMAC	N/A	<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	
Haul	Facility Haul Roads	N/A	N/A	N/A	20.2.72.202.B.5 NMAC	N/A	<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	
PIG-TANK	Temporary Tank for Pigging Liquids	N/A	N/A	N/A	20.2.72.202.B.5 NMAC	N/A	<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
			N/A	N/A		N/A	
							<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

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

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

Unit and stack numbering must correspond throughout the application package. Only list control equipment for TAPs if the TAP's maximum uncontrolled emissions rate is over its respective threshold as listed in 20.2.72 NMAC, Subpart V, Tables A and B. In accordance with 20.2.72.203.A(3) and (8) NMAC, 20.2.70.300.D(5)(b) and (c) 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.

[illegible]

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

Unit No.	NOx		CO		VOC		SOx		PM <sup>1</sup>		PM10 <sup>1</sup>		PM2.5 <sup>1</sup>		H <sub>2</sub> S		Lead	
	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr
C-891	12.47	54.61	7.79	34.13	1.87	8.19	0.13	0.57	-	-	0.46	2.03	0.46	2.03	-	-	-	-
C-893	12.27	53.74	7.67	33.58	1.84	8.06	0.13	0.56	-	-	0.46	2.00	0.46	2.00	-	-	-	-
C-894	0.94	4.1	1.72	7.55	0.5	2.18	0.046	0.2	-	-	0.034	0.15	0.034	0.15	-	-	-	-
C-895	0.94	4.1	1.72	7.55	0.5	2.18	0.046	0.2	-	-	0.034	0.15	0.034	0.15	-	-	-	-
C-896	0.94	4.1	1.72	7.55	0.5	2.18	0.046	0.2	-	-	0.034	0.15	0.034	0.15	-	-	-	-
DEHY	-	-	-	-	180.40	790.20	-	-	-	-	-	-	-	-	-	-	-	-
RB-1	0.07	0.32	0.06	0.27	0.004	0.02	0.002	0.01	-	-	-	-	-	-	-	-	-	-
RB-2	0.07	0.32	0.06	0.27	0.004	0.02	0.002	0.01	-	-	-	-	-	-	-	-	-	-
TK-1	-	-	-	-	67.12	2.05	-	-	-	-	-	-	-	-	-	-	-	-
TK-2	-	-	-	-	67.12	2.05	-	-	-	-	-	-	-	-	-	-	-	-
TK-2a	-	-	-	-	67.12	2.05	-	-	-	-	-	-	-	-	-	-	-	-
FLARE-1	0.69	3.02	1.38	6.03	0.00	0.001	-	-	-	-	-	-	-	-	-	-	-	-
FUG-1	-	-	-	-	0.55	2.41	-	-	-	-	-	-	-	-	-	-	-	-
LOAD-1	-	-	-	-	13.5	0.60			-	-	-	-	-	-	-	-	-	-
LOAD-2	-	-	-	-	13.5	0.60	-	-	-	-	-	-	-	-	-	-	-	-
SSM	-	-	-	-	-	15.89	-	-	-	-	-	-	-	-			-	-
M	-	-	-	-	-	10.00	-	-	-	-	-	-	-	-	-	-	-	-
Totals	28.3971	124.314	22.1235	96.9311	414.528	848.676	0.40103	1.74325	-	-	1.022	4.48	1.022	4.48	*	0	-	-

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**Table 2-E: Requested Allowable Emissions**

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

Unit No.	NOx		CO		VOC		SOx		PM <sup>1</sup>		PM10 <sup>1</sup>		PM2.5 <sup>1</sup>		H <sub>2</sub> S		Lead	
	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr
C-891	10.43	45.67	6.38	27.94	1.87	8.19	0.13	0.57	-	-	0.46	2.03	0.46	2.03	-	-	-	-
C-893	5.87	25.71	7.69	33.69	1.84	8.06	0.13	0.56	-	-	0.46	2	0.46	2	-	-	-	-
C-894	0.94	4.10	1.72	7.55	0.50	2.18	0.05	0.2	-	-	0.03	0.15	0.03	0.15	-	-	-	-
C-895	0.94	4.10	1.72	7.55	0.50	2.18	0.05	0.2	-	-	0.03	0.15	0.03	0.15	-	-	-	-
C-896	0.94	4.10	1.72	7.55	0.50	2.18	0.05	0.2	-	-	0.03	0.15	0.03	0.15	-	-	-	-
DEHY	-	-	-	-	0.55	2.40	-	-	-	-	-	-	-	-	0.001	0.002	-	-
RB-1	0.07	0.32	0.06	0.27	0.004	0.02	0.002	0.01	-	-	0.01	0.02	0.01	0.02				
RB-2	0.07	0.32	0.06	0.27	0.004	0.02	0.002	0.01	-	-	0.01	0.02	0.01	0.02	-	-	-	-
TK-1	-	-	-	-	1.34	0.04	-	-	-	-	-	-	-	-	-	-	-	-
TK-2	-	-	-	-	1.34	0.04	-	-	-	-	-	-	-	-	-	-	-	-
TK-2a	-	-	-	-	1.34	0.04	-	-	-	-	-	-	-	-	-	-	-	-
FLARE-1	1.67	7.30	3.33	14.58	93.80	0.32	0.90	3.93	-	-	-	-	-	-	3.38	0.01	-	-
FUG-1	-	-	-	-	0.55	2.41	-	-	-	-	-	-	-	-	-	-	-	-
LOAD-1	-	-	-	-	13.50	0.60	-	-	-	-	-	-	-	-	-	-	-	-
LOAD-2	-	-	-	-	13.50	0.60	-	-	-	-	-	-	-	-	-	-	-	-
M	-	-	-	-	*	10	-	-	-	-	-	-	-	-	-	-	-	-
<b>Totals</b>	20.9346	91.6278	22.6825	99.4019	131.145	39.2817	1.29827	5.6775	-	-	0.988	4.33	0.988	4.33	*	2	-	-

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

All applications for facilities that have emissions during routine or predictable startup, shutdown or scheduled maintenance (SSM)<sup>1</sup>, including NOI applications, must include in this table the Maximum Emissions during routine or predictable startup, shutdown and scheduled maintenance (20.2.7 NMAC, 20.2.72.203.A.3 NMAC, 20.2.73.200.D.2 NMAC). In Section 6 and 6a, provide emissions calculations for all SSM emissions reported in this table. Refer to "Guidance for Submittal of Startup, Shutdown, Maintenance Emissions in Permit Applications" ([https://www.env.nm.gov/aqb/permit/aqb\\_pol.html](https://www.env.nm.gov/aqb/permit/aqb_pol.html)) for more detailed instructions. Numbers shall be expressed to at least 2 decimal points (e.g. 0.41, 1.41, or 1.41E-4).

<sup>2</sup> **Condensable Particulate Matter:** Include condensable particulate matter emissions for PM10 and PM2.5 if the source is a combustion source. Do not include condensable particulate matter for PM unless PM is set equal to PM10 and PM2.5. Particulate matter (PM) is not subject to an ambient air quality standard, but it is a regulated air pollutant under PSD (20.2.74 NMAC) and Title V (20.2.70 NMAC).

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

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

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

[illegible]

### Table 2-H: Stack Exit Conditions

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

[illegible]

**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 X HAP		Acetaldehyde X HAP		Acrolein X HAP		Benzene X HAP		Ethylbenzene X HAP		n-Hexane X HAP		Toluene X HAP		Xylene X HAP	
		lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr
C-891	C-891	0.7	3.1	0.5	2.3	0.1	0.3	0.1	0.3	0.02	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
C-893	C-893	0.7	3.1	0.5	2.3	0.1	0.3	0.1	0.3	0.02	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
C-894	C-894	0.2	1.0	0.2	0.8	0.03	0.1	0.02	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
C-895	C-895	0.2	1.0	0.2	0.8	0.03	0.1	0.02	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
C-896	C-896	0.2	1.0	0.2	0.8	0.00	0.1	0.00	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DEHY	DEHY	0.2	0.8	-	-	-	-	-	-	0.09	0.39	0.01	0.02	0.01	0.04	0.07	0.29	0.02	0.07
RB-1	RB-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
RB-2	RB-2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TK-1	TK-1	0.3	0.004	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TK-2	TK-2	0.3	0.004	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TK-2a	TK-2a	0.3	0.004	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
FLARE-1	FLARE-1	0.01	0.01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
FUG-1	FUG-1	0.1	0.3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
LOAD-1	LOAD-1	0.62	0.03	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
LOAD-2	LOAD-2	0.62	0.03	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>Totals:</b>		4.4	10.4	1.6	7.0	0.2	1.0	0.2	0.9	0.1	0.6	0.0	0.0	0.0	0.1	0.1	0.4	0.0	0.1

**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
C-891	Natural Gas	Pipeline Quality Natural Gas	1020		82.4 MMScf		
C-893	Natural Gas	Pipeline Quality Natural Gas	1020		81.1 MMscf		
C-894	Natural Gas	Pipeline Quality Natural Gas	1020		29.2 MMscf		
C-895	Natural Gas	Pipeline Quality Natural Gas	1020		29.2 MMscf		
C-896	Natural Gas	Pipeline Quality Natural Gas	1020		29.2 MMscf		
RB-1	Natural Gas	Pipeline Quality Natural Gas	1020		6.4 MMscf		
RB-2	Natural Gas	Pipeline Quality Natural Gas	1020		6.4 MMscf		

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

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

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

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

Note:  $1.00 \text{ bbl} = 0.159 \text{ M}^3 = 42.0 \text{ gal}$

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

[illegible]

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

[illegible]

**Table 2-O: Parametric Emissions Measurement Equipment**

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

[illegible]

**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 CO<sub>2</sub>e emissions are less than 75,000 tons per year.

		CO <sub>2</sub> ton/yr	N <sub>2</sub> O ton/yr	CH <sub>4</sub> ton/yr	SF <sub>6</sub> ton/yr	PFC/HFC ton/yr <sup>2</sup>										Total GHG Mass Basis ton/yr <sup>4</sup>	Total CO <sub>2</sub> e ton/yr <sup>5</sup>
Unit No.	GWPs <sup>1</sup>	1	298	25	22,800	footnote 3											
C-891	mass GHG	1262.8	0.0024	0.024													
	CO <sub>2</sub> e	1262.8	0.7152	0.6													
C-893	mass GHG	1242.28	0.0023	0.023													
	CO <sub>2</sub> e	1242.28	0.6854	0.575													
C-894	mass GHG	84.96	1.59E-04	1.59E-03													
	CO <sub>2</sub> e	84.96	4.74E-02	3.98E-02													
C-895	mass GHG	84.96	1.59E-04	1.59E-03													
	CO <sub>2</sub> e	84.96	4.74E-02	3.98E-02													
C-896	mass GHG	84.96	1.59E-04	1.59E-03													
	CO <sub>2</sub> e	84.96	4.74E-02	3.98E-02													
BL- GDR-1a	mass GHG	46.06	8.68E-05	8.68E-04													
	CO <sub>2</sub> e	46.06	6.21E-05	5.21E-04													
BL- GDR-2b	mass GHG	46.06	8.68E-05	8.68E-04													
	CO <sub>2</sub> e	46.06	6.21E-05	5.21E-04													
	mass GHG																
	CO <sub>2</sub> e																
	mass GHG																
	CO <sub>2</sub> e																
	mass GHG																
	CO <sub>2</sub> e																
	mass GHG																
	CO <sub>2</sub> e																
	mass GHG																
	CO <sub>2</sub> e																
	mass GHG																
	CO <sub>2</sub> e																
Total	mass GHG	2852.08	0.0053506	0.053506													
	CO <sub>2</sub> e	2852.08	1.5428702	1.2952916													

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

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

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

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

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

# Section 3

## Application Summary

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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](http://www.env.nm.gov/aqb/permit/app_form.html)) for more detailed instructions on SSM emissions.

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IACX Roswell LLC (IACX) is submitting an application to authorize the addition of one (1) natural gas-fired compressor engine and one (1) flare. The facility is a natural gas compressor station. Bitter Lake is located approximately 13.31 miles northeast of Roswell in Chaves County, New Mexico.

Bitter Lake is an extension of a local gas transportation system that gathers casinghead gas from multiple wells in the area. The facility compresses the gas for delivery to a main line. The site operates natural gas-fired engines (Units C-891, C-893, C-894, C-895, and C-896) to raise the discharge pressure of the gas in the pipeline to overcome the effect of frictional losses in the pipeline upstream of the station or from pressure losses/changes within the facility in order to maintain the required suction pressure at the next downstream facility. The volume of gas flowing and the amount of subsequent frictional losses in the pipeline are dependent on field conditions and downstream plant conditions causing pressure variations. The glycol dehydrator (Unit DEHY) has a capacity of 30 MMscf/day and the two associated reboilers operate a 0.75 MMBtu/hr (Units RB-1 and RB-2). Only one of the two reboilers operates under normal operating conditions. The second reboiler may be used either as a backup unit or as a second unit in series to accommodate higher production rates and the resultant increased heat load on the glycol system. The helium recovery unit (Unit HRU) re-injects gas into the pipeline for further separation at another facility further downstream; therefore, there are no emissions associated with the unit. There are three condensate tanks located at the facility (Units TK-1, TK-2, and TK-2a), which contain hydrocarbons and water that drop out of the line prior to compression. There are associated loading emissions with the three condensate and produced water tanks (Unit LOAD-1 and LOAD-2). There are also lube oil tanks (Units TK-3 and TK-10) along with used lube oil tanks (Units TK-6 and TK-12).

Additional emissions result from facility-wide fugitives (Unit FUG), haul roads (Unit Haul), flaring of emissions during Startup, Shutdown, and Maintenance (Unit SSM), and Malfunction emissions (Unit M).

# Section 4

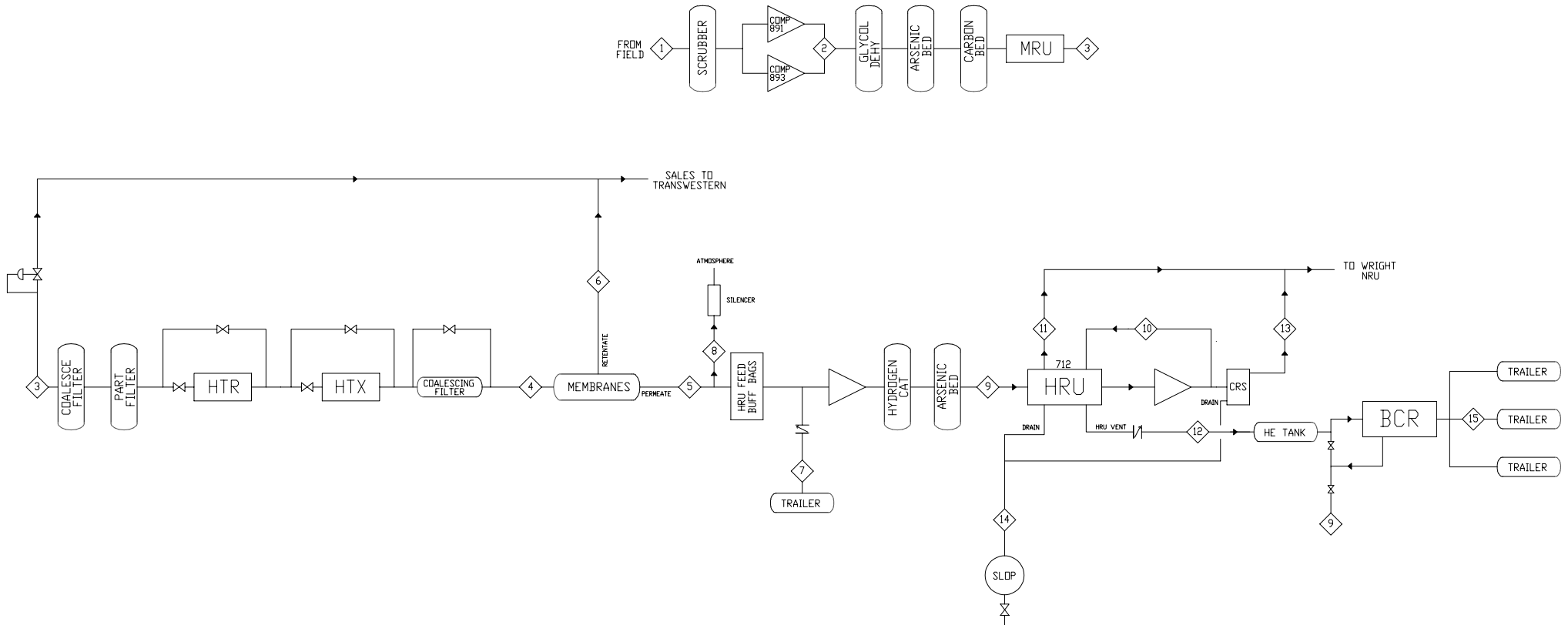
## Process Flow Sheet

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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.

---

REV.	DATE	COMMENT	BY	APPD
0	12/27/2021	FIRST ISSUE	MTG	
1	12/30/2021	LINE MOD	AMJ	



STREAM NUMBER	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
DESCRIPTION	FIELD GAS	COMPRESSED FEED	MRU OUTLET	MEMBRANE INLET	MEMB. PERMEATE	MEMB. RETENTATE	HRU TRAILER RECYCLE	HRU FEED VENT	HRU FEED	HRU RINSE	HRU DEPRESS	HRU HE VENT	HRU RINSE VENT	DRAIN/LIQUIDS	HELIUM SALES
TEMPERATURE	AMBIENT	AMBIENT	AMBIENT	50degF	50degF	50degF	AMBIENT	AMBIENT	80degF	100degF	AMBIENT	AMBIENT	AMBIENT	AMBIENT	AMBIENT
PRESSURE	100 PSIG	900 PSIG	900 PSIG	900 PSIG	ATMOSPHERIC	850 PSIG	ATMOSPHERIC	ATMOSPHERIC	75 PSIG	55-90PSIG	ATMOSPHERIC	0-20PSIG	ATMOSPHERIC	ATMOSPHERIC	0-3200PSIG
PHASE	GASEOUS	GASEOUS	GASEOUS	GASEOUS	GASEOUS	GASEOUS	GASEOUS	GASEOUS	GASEOUS	GASEOUS	GASEOUS	GASEOUS	GASEOUS	LIQUID	GASEOUS
COMMENT	He FEED	He FEED	He FEED	He FEED	He RICH	He POOR	90% He PURITY	He RICH WASTED - VENTED	He RICH	He POOR	He POOR	He RICH	98% He PURITY	OIL & RAIN	98% He PURITY

DESCRIPTION	BITTER LAKES PROCESS FLOW DIAGRAM DRAWING #1
CUSTOMER	IACX ENERGY

# Section 5

## Plot Plan Drawn To Scale

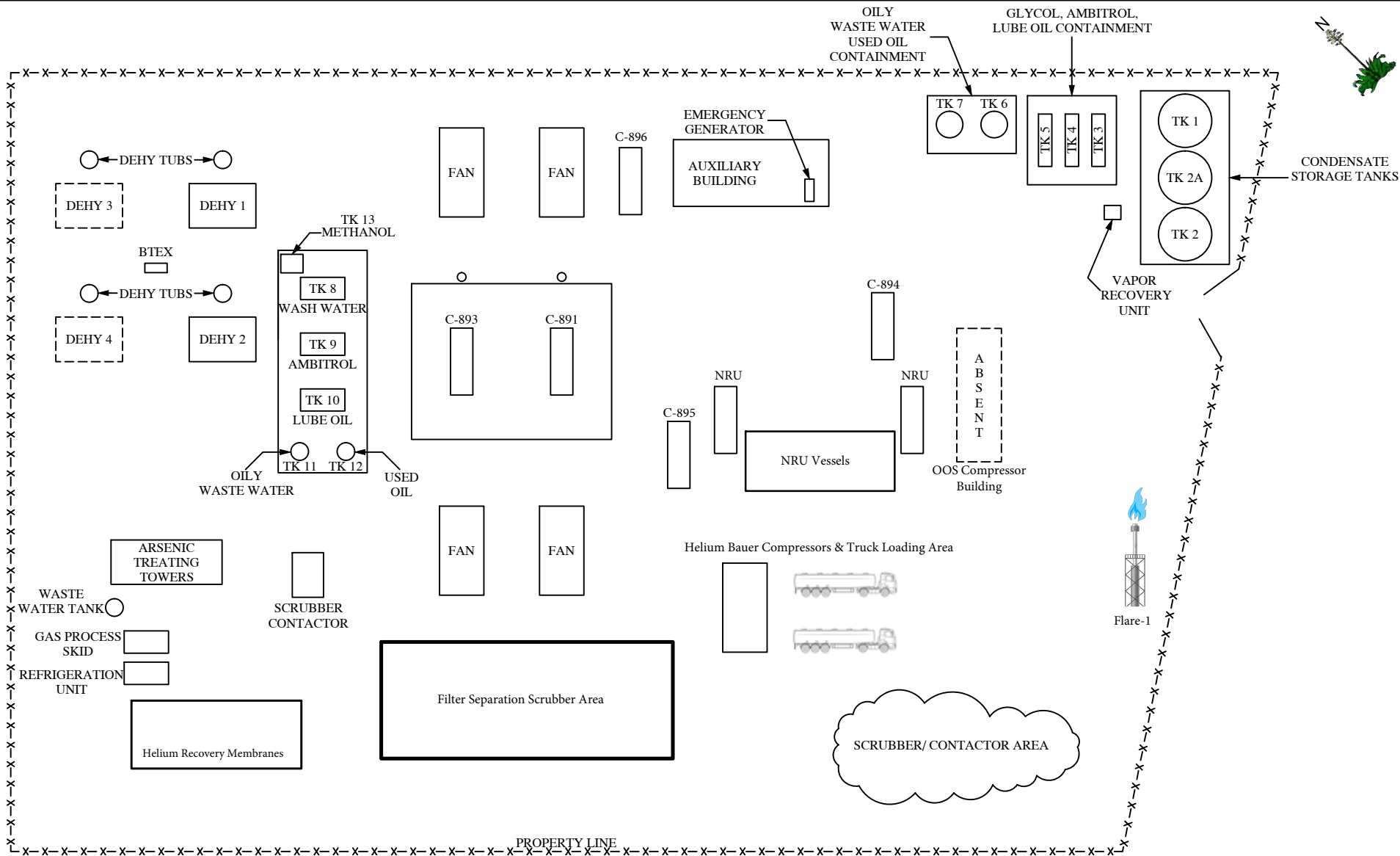
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A **plot plan drawn to scale** showing emissions points, roads, structures, tanks, and fences of property owned, leased, or under direct control of the applicant. This plot plan must clearly designate the restricted area as defined in UA1, Section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

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A plot plan is attached.





IACX Roswell LLC	
Bitter Lakes Helium Plant	
State: New Mexico	Update: JWW
County: Chaves	Date: 01/10/2025
Section: 10	Rev:1-2025
Township: 9S	Manager: VM
Range: 25E	EHS: HT

# Section 6

## All Calculations

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**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](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.

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### **Heaters and Reboilers**

The facility will be equipped with several heaters and reboilers of various heat input capacities. For units RB-1 and RB-2 Chapter 1.4 *Natural Gas Combustion* was used to determine emissions of Nitrogen oxides (NO<sub>x</sub>), carbon monoxide (CO), volatile organic compounds (VOC), particulate matter (PM), and hazardous air pollutants (HAPs). Sulfur dioxide emissions were calculated stoichiometrically assuming that the natural gas used as fuel in the heaters and reboilers contains a maximum H<sub>2</sub>S content of 5 ppm based on pipeline specifications.

Greenhouse gas emissions from all heaters and reboilers were calculated using 40 CFR 98 Subpart C Table C-1 and Table C-2.

### **TEG Glycol Dehydrators**

BR&E ProMax was used to determine emissions from the glycol still vent and non-condensable overheads from the BTEX condenser. The glycol dehydrator is controlled by a condenser and reboiler equipped with a glow plug.

### **Flares**

The flare at the facility (FLARE) will flare both inlet gas. The expected composition and maximum expected volumes of inlet gas were used as the basis of the flare calculation. TNRCC RG-109 flare emission factors for low Btu gas were used to calculate emissions of nitrogen oxides (NO<sub>x</sub>) and carbon monoxide (CO). VOC, H<sub>2</sub>S, and SO<sub>2</sub> emissions are calculated based on the VOC and H<sub>2</sub>S content of the inlet and residue gas. An assumed 98% destruction efficiency is applied to the VOC and H<sub>2</sub>S emissions.

Greenhouse gas emissions from the flares were calculated using 40 CFR 98 Subpart C Table C-1 and Table C-2 with the methodology outlined in 40 CFR 98.233(n).

### **Condensate Storage Tanks**

Emissions from various storage tanks were determined using BR&E ProMax.

### **Condensate Loading**

Condensate loading emissions were calculated using the loading loss equation and variables from AP-42 Section 5.2, *Transportation and Marketing of Petroleum Liquids*. True vapor pressure of loaded liquid, molecular weight of vapor, temperature of bulk liquid, and volatile organic compound (VOC), hazardous air pollutants (HAP), and hydrogen sulfide (H<sub>2</sub>S) mass percentage were determined with BR&E ProMax. Condensate loading is vapor balanced with the condensate tanks with a 70% capture efficiency.

### **Fugitives**

The emissions from fugitive components associated with this project are calculated using emission factors from Table 2-4 of the EPA Protocol for Equipment Leak Emission estimates, November 1995. Site specific analyses for inlet gas, residue gas, and condensate were used.

### **Miscellaneous MSS**

Miscellaneous MSS emissions include routine pigging activities, routine replacement of glycol solution used in dehydration units, use of aerosol lubricants, piping components, and calibration activities.

### **MSS Blowdowns**

MSS Blowdown emissions include venting emissions from blowdowns, starter vents, and any gas operated controllers present at the facility, if any.

**IACX Roswell LLC, Bitter Lake Compressor Station**  
**Emissions Summary**

**Uncontrolled Steady State Emissions**

Unit	Description	NO <sub>x</sub>		CO		VOC		SO <sub>2</sub>		TSP		PM <sub>10</sub>		PM <sub>2.5</sub>		CO <sub>2</sub> e tpy	Total HAPs		H <sub>2</sub> S		Formaldehyde		Acetaldehyde	
		lb/hr	tons/yr	lb/hr	tons/yr	lb/hr	tons/yr	lb/hr	tons/yr	lb/hr	tons/yr	lb/hr	tons/yr	lb/hr	tons/yr		lb/hr	tpy	lb/hr	tpy	lb/hr	tpy	lb/hr	tpy
C-891	Compressor Engine (Cooper Bessemer GMVH-10C)	12.47	54.63	7.79	34.13	1.87	8.19	0.01	0.02	0.46	2.03	0.46	2.03	0.46	2.03	4943.73	0.71	3.13	-	-	0.53	2.32	0.07	0.33
C-893	Compressor Engine (Cooper Bessemer GMVH-10C)	12.27	53.74	7.67	33.58	1.84	8.06	0.01	0.02	0.46	2.00	0.46	2.00	0.46	2.00	4863.31	0.70	3.08	-	-	0.52	2.28	0.07	0.32
C-894	Compressor Engine Caterpillar G3408C LE)	0.94	4.10	1.72	7.55	0.50	2.18	0.002	0.01	0.03	0.15	0.03	0.15	0.03	0.15	1750.91	0.23	1.01	-	-	0.18	0.78	0.03	0.12
C-895	Compressor Engine Caterpillar G3408C LE)	0.94	4.10	1.72	7.55	0.50	2.18	0.002	0.01	0.03	0.15	0.03	0.15	0.03	0.15	1750.91	0.23	1.01	-	-	0.18	0.78	0.03	0.12
C-896	Compressor Engine Caterpillar G3408C LE)	0.94	4.10	1.72	7.55	0.50	2.18	0.002	0.01	0.03	0.15	0.03	0.15	0.03	0.15	1750.91	0.23	1.01	-	-	0.18	0.78	0.03	0.12
FUG	Facility Fugitives	-	-	-	-	0.55	2.41	-	-	-	-	-	-	-	-	-	-	0.30	0.00002	0.0001	-	-	-	-
DEHY	Glycol Dehydrator	-	-	-	-	160.4	790.2	-	-	-	-	-	-	-	-	-	12145	531.93	0.03	0.13	-	-	-	-
RB-1	Dehydrator Reboiler	0.07	0.32	0.06	0.27	0.004	0.02	0.002	0.01	0.01	0.02	0.01	0.02	0.01	0.02	388.77	0.001	0.01	-	-	5.51E-05	0.0002	1.32E-03	0.006
RB-2	Dehydrator Reboiler	0.07	0.32	0.06	0.27	0.004	0.02	0.002	0.01	0.01	0.02	0.01	0.02	0.01	0.02	388.77	0.001	0.01	-	-	5.51E-05	0.0002	1.32E-03	0.006
TK-1	Condensate Tanks	-	-	-	-	67.12	2.05	-	-	-	-	-	-	-	-	-	13.47	0.22	0.04	0.001	-	-	-	-
TK-2	Condensate Tanks	-	-	-	-	67.12	2.05	-	-	-	-	-	-	-	-	-	13.47	0.22	0.04	0.001	-	-	-	-
TK-2a	Condensate Tanks	-	-	-	-	67.12	2.05	-	-	-	-	-	-	-	-	-	13.47	0.22	0.04	0.001	-	-	-	-
FLARE-1	Flare - Pilot Only	0.69	3.02	1.38	6.03	0.0002	0.001	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
LOAD-1	Load-out of Condensate	-	-	-	-	13.50	0.60	-	-	-	-	-	-	-	-	10.26	2.07	0.09	2.31E-05	1.03E-06	-	-	-	-
LOAD-2	Load-out of Produced Water	-	-	-	-	13.50	0.60	-	-	-	-	-	-	-	-	4.90	2.07	0.09	2.31E-05	1.03E-06	-	-	-	-
	Compressors Blowdowns	-	-	-	-	-	5.53	-	-	-	-	-	-	-	-	-	2.75	0.01	0.001	-	-	-	-	-
	Dehydrator Blowdowns	-	-	-	-	-	1.32	-	-	-	-	-	-	-	-	-	0.04	0.04	0.0001	-	-	-	-	-
SSM	Vessel Blowdowns	-	-	-	-	-	2.86	-	-	-	-	-	-	-	-	-	0.10	0.04	0.0003	-	-	-	-	-
	Pipeline/Pigging Blowdowns	-	-	-	-	-	6.18	-	-	-	-	-	-	-	-	-	0.22	0.00002	0.38	-	-	-	-	-
Totals		28.39	124.35	22.13	96.94	414.53	832.46	0.02	0.09	1.03	4.52	1.03	4.52	1.03	4.52	15852.443	168.13	545.22	0.25	0.14	1.58	6.94	0.24	1.03

**Controlled Steady State Emissions**

Unit	Description	NO <sub>x</sub>		CO		VOC		SO <sub>2</sub>		TSP		PM <sub>10</sub>		PM <sub>2.5</sub>		CO <sub>2</sub> e	Total HAPs		H <sub>2</sub> S		Formaldehyde		Acetaldehyde		Acrolein		Benzene		Ethylbenzene		n-Hexane		Toluene		Xylene		
		lb/hr	tons/yr	lb/hr	tons/yr	lb/hr	tons/yr	lb/hr	tons/yr	lb/hr	tons/yr	lb/hr	tons/yr	lb/hr	tons/yr		lb/hr	tpy	lb/hr	tpy	lb/hr	tpy	lb/hr	tpy	lb/hr	tpy	lb/hr	tpy	lb/hr	tpy	lb/hr	tpy	lb/hr	tpy	lb/hr	tpy	
C-891	Compressor Engine (Cooper Bessemer GMVH-10C)	10.43	45.68	6.38	27.94	2.47	10.84	0.01	0.02	0.46	2.03	0.46	2.03	0.46	2.03	4943.73	0.71	3.13	-	-	0.53	2.32	0.07	0.33	0.07	0.33	0.02	0.08	0.001	0.005	0.004	0.02	0.01	0.04	0.003	0.01	
C-893	Compressor Engine (Cooper Bessemer GMVH-10C)	5.87	25.71	7.69	33.69	2.43	10.66	0.01	0.02	0.46	2.00	0.46	2.00	0.46	2.00	4863.31	0.70	3.08	-	-	0.52	2.28	0.07	0.32	0.07	0.32	0.02	0.08	0.001	0.004	0.004	0.02	0.01	0.04	0.003	0.01	
C-894	Compressor Engine Caterpillar G3408C LE)	0.94	4.10	1.72	7.55	0.57	2.50	0.002	0.01	0.03	0.15	0.03	0.15	0.03	0.15	1750.91	0.23	1.01	-	-	0.18	0.78	0.03	0.12	0.02	0.08	0.001	0.01	0.0001	0.001	0.004	0.02	0.001	0.01	0.001	0.003	
C-895	Compressor Engine Caterpillar G3408C LE)	0.94	4.10	1.72	7.55	0.57	2.50	0.002	0.01	0.03	0.15	0.03	0.15	0.03	0.15	1750.91	0.23	1.01	-	-	0.18	0.78	0.03	0.12	0.02	0.08	0.001	0.01	0.0001	0.001	0.004	0.02	0.001	0.01	0.001	0.003	
C-896	Compressor Engine Caterpillar G3408C LE)	0.94	4.10	1.72	7.55	0.57	2.50	0.002	0.01	0.03	0.15	0.03	0.15	0.03	0.15	1750.91	0.23	1.01	-	-	0.18	0.78	0.03	0.12	0.02	0.08	0.001	0.01	0.0001	0.001	0.004	0.02	0.001	0.01	0.001	0.003	
FUG	Facility Fugitives	-	-	-	-	0.55	2.41	-	-	-	-	-	-	-	-	-	0.07	0.30	0.00002	0.0001	-	-	-	-	-	-	-	0.01	0.06	-	-	0.00	0.01	0.03	0.11	0.02	0.08
DEHY	Glycol Dehydrator	-	-	-	-	0.55	2.40	-	-	-	-	-	-	-	-	-	0.19	0.81	0.001	0.002	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
RB-1	Dehydrator Reboiler	0.07	0.32	0.06	0.27	0.004	0.02	0.002	0.01	0.01	0.02	0.01	0.02	0.01	0.02	388.77	0.001	0.01	-	-	0.0001	0.0002	0.001	0.006	0.00E+00	0.00E+00	1.54E-06	6.76E-06	-	-	-	-	-	-	-		
RB-2	Dehydrator Reboiler	0.07	0.32	0.06	0.27	0.004	0.02	0.002	0.01	0.01	0.02	0.01	0.02	0.01	0.02	388.77	0.001	0.01	-	-	0.0001	0.0002	0.001	0.006	0.00E+00	0.00E+00	6.76E-06	0.00E+00	-	-	-	-	-	-	-		
TK-1	Condensate Tanks	-	-	-	-	1.34	0.04	-	-	-	-	-	-	-	-	-	0.27	0.004	8.07E-04	2.46E-05	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
TK-2	Condensate Tanks	-	-	-	-	1.34	0.04	-	-	-	-	-	-	-	-	-	0.27	0.004	8.07E-04	2.46E-05	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
TK-2a	Condensate Tanks	-	-	-	-	1.34	0.04	-	-	-	-	-	-	-	-	-	0.27	0.004	8.07E-04	2.46E-05	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
FLARE	Flare - Pilot + SSM	1.67	7.30	3.33	14.58	93.80	0.32	0.90	3.93	-	-	-	-	-	-	3.38	0.01	9.71E-03	4.29E-02	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
LOAD-1	Load-out of Condensate	-	-	-	-	13.50	0.60	-	-	-	-	-	-	-	-	10.26	0.62	0.03	3.10E-07	-	-	-	-	-	-	-	-	0.06	0.003	0.01	0.001	0.25	0.01	0.19	0.01		
LOAD-2	Load-out of Produced Water	-	-	-	-	13.50	0.60	-	-	-	-	-	-	-	-	4.90	0.62	0.03	6.93E-06	3.10E-07	-	-	-	-	-	-	0.19	0.01	0.62	0.03	0.06	0.003	0.01	0.001	0.01	0.001	
	Compressors Blowdowns	-	-	-	-	-	5.53	-	-	-	-	-	-	-	-	-	2.75	0.25	0.203	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	Dehydrator Blowdowns	-	-	-	-	-	1.32	-	-	-	-	-	-	-	-	-	0.04	15.57	0.0389	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
SSM	Vessel Blowdowns	-	-	-	-	-	2.86	-	-	-	-	-	-	-	-	-	0.10	14.27	0.1031	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	Pipeline/Pigging Blowdowns	-	-	-	-	-	6.18	-	-	-	-	-	-	-	-	-	0.22	0.00002	0.38	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	Malfunction	-	-	-	-	-	10.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
M		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Totals		20.92	91.64	22.69	99.40	132.57	61.39	0.92	4.02	1.03	4.52	1.03	4.52	1.03	4.52	15852.44	7.80	13.57	32.60	0.77	1.58	6.94	0.24	1.03	0.20	0.88	0.05	0.24	0.25	0.02	0.66	0.13	0.36	0.23	0.22	0.12	
Totals Less Fugitives		20.92	91.64	22.69	99.40	132.02	58.99	0.92	4.02	1.03	4.52	1.03	4.52	1.03	4.52	15852.44	7.74	13.27	32.60	0.77	1.58	6.94	0.24	1.03	0.20	0.88	0.05	0.24	0.25	0.02	0.66	0.13	0.36	0.23	0.22	0.12	

Uncontrolled Steady-State Emissions

Cooper Bessemer Compressor Engines

Unit: C-891

Description: Cooper Bessemer GMVH-10C

Control Equipment:

Type: 2SLB

Engine Data

Horsepower: 1414 hp MFG Data

Fuel consumption: 6785 Btu/hp-hr MFG Data

Fuel heat value: 1020 Btu/scf Engineer Estimate

Heating rate: 9.6 MMBtu/hr

Fuel usage: 0.009 MMscf/hr

82.4 MMscf/yr

Operating hours: 8760.0 hours/year

Safety Factor 10%

Emission Rates

Uncontrolled Emissions

AECTool													Total	g/hp-hr lb/MMBtu gr/scf	Catalyst Manufacturer AP-42 Table 3.2-3
NO <sub>x</sub>	CO	VOC <sup>1</sup>	SO <sub>2</sub> <sup>2</sup>	PM <sup>3</sup>	HCHO	Acetaldehyde <sup>4</sup>	Acrolein <sup>4</sup>	Benzene <sup>4</sup>	Ethylbenzene <sup>4</sup>	n-hexane <sup>4</sup>	Toluene <sup>4</sup>	Xylene <sup>4</sup>	HAPs <sup>4</sup>		
4.001	2.5	0.60	0.000588	0.04831	0.0552	0.00776	0.00778	0.00194	0.000108	0.000445	0.000963	0.000268			
12.47	7.79	1.87	0.01	0.46	0.53	0.07	0.07	0.02	0.001	0.004	0.01	0.003	0.71	lb/hr	
54.63	34.13	8.19	0.02	2.03	2.32	0.33	0.33	0.08	0.005	0.02	0.04	0.01	3.13	tpy	

Controlled Emissions

AECTool													Total	g/hp-hr % lb/MMBtu gr/scf	Catalyst Manufacturer Control Efficiency AP-42 Table 3.2-3
NO <sub>x</sub>	CO	VOC <sup>1</sup>	SO <sub>2</sub> <sup>2</sup>	PM <sup>3</sup>	HCHO	Acetaldehyde <sup>4</sup>	Acrolein <sup>4</sup>	Benzene <sup>4</sup>	Ethylbenzene <sup>4</sup>	n-hexane <sup>4</sup>	Toluene <sup>4</sup>	Xylene <sup>4</sup>	HAPs <sup>4</sup>		
3.04	1.86	0.600													
24.0%	25.6%	0.0%	0.000588	0.04831	0.0552	0.00776	0.00778	0.00194	0.000108	0.000445	0.000963	0.000268			
10.43	6.38	1.87	0.01	0.46	0.53	0.07	0.07	0.02	0.001	0.004	0.01	0.003	0.71	lb/hr	
45.68	27.94	8.19	0.02	2.03	2.32	0.33	0.33	0.08	0.005	0.02	0.04	0.01	3.13	tpy	
CO <sub>2</sub>	CH <sub>4</sub>	N <sub>2</sub> O	CO <sub>2</sub> e												
120000	2.3	2.2		lb/MMscf	AP-42 Table 1.4-2										
4943.73	0.09	0.09	4973.10	tpy											
1	25	298		GWP											

Notes

<sup>1</sup> Formaldehyde and Acetaldehyde have been added into the VOC on the summary page

<sup>2</sup> SO2 is calculated based on the default fuel sulfur content from AECT of 0.002 grains total sulfur per scf.

<sup>3</sup> It is assumed that TSP = PM<sub>10</sub> = PM<sub>2.5</sub>. PM emissions are derived from AP 42 emissions factors and converted to g/hp-hr using engine specifications.

<sup>4</sup> Total HAPs were calculated using AP42 emissions factors for a 4-Stroke Lean Burn Engine and here includes only those HAPs listed in the AECTool.

Uncontrolled Steady-State Emissions

Cooper Bessemer Compressor Engines

Unit: C-893

Description: Cooper Bessemer GMVH-10C

Control Equipment:

Type: 2SLB

Engine Data

Horsepower: 1391 hp MFG Data

Fuel consumption: 6785 Btu/hp-hr MFG Data

Fuel heat value: 1020 Btu/scf Engineer Estimate

Heating rate: 9.4 MMBtu/hr

Fuel usage: 0.009 MMscf/hr

81.1 MMscf/yr

Operating hours: 8760.0 hours/year

Emission Rates

Uncontrolled Emissions

													AECTool Total HAPs <sup>4</sup>	Catalyst Manufacturer AP-42 Table 3.2-3
NO <sub>x</sub>	CO	VOC <sup>1</sup>	SO <sub>2</sub> <sup>2</sup>	PM <sup>3</sup>	HCHO	Acetaldehyde <sup>4</sup>	Acrolein <sup>4</sup>	Benzene <sup>4</sup>	Ethylbenzene <sup>4</sup>	n-hexane <sup>4</sup>	Toluene <sup>4</sup>	Xylene <sup>4</sup>		
4.001	2.5	0.60	0.000588	0.04831	0.0552	0.00776	0.00778	0.00194	0.000108	0.000445	0.000963	0.000268	g/hp-hr lb/MMBtu	
12.27	7.67	1.84	0.01	0.46	0.52	0.07	0.07	0.02	0.001	0.004	0.01	0.003	0.70	
53.74	33.58	8.06	0.02	2.00	2.28	0.32	0.32	0.08	0.004	0.02	0.04	0.01	3.08	tpy

Controlled Emissions

													AECTool Total HAPs <sup>4</sup>	Catalyst Manufacturer Control Efficiency AP-42 Table 3.2-3
NO <sub>x</sub>	CO	VOC <sup>1</sup>	SO <sub>2</sub> <sup>2</sup>	PM <sup>3</sup>	HCHO	Acetaldehyde <sup>4</sup>	Acrolein <sup>4</sup>	Benzene <sup>4</sup>	Ethylbenzene <sup>4</sup>	n-hexane <sup>4</sup>	Toluene <sup>4</sup>	Xylene <sup>4</sup>		
1.91	2.51	0.600	0.000588	0.04831	0.0552	0.00776	0.00778	0.00194	0.000108	0.000445	0.000963	0.000268	g/hp-hr %	
52.2%	-0.3%	0.0%											lb/MMBtu gr/scf	
5.87	7.69	1.84	0.01	0.46	0.52	0.07	0.07	0.02	0.001	0.004	0.01	0.003	0.70	lb/hr
25.71	33.69	8.06	0.02	2.00	2.28	0.32	0.32	0.08	0.004	0.02	0.04	0.01	3.08	tpy
CO <sub>2</sub>	CH <sub>4</sub>	N <sub>2</sub> O	CO <sub>2</sub> e											
120000	2.3	2.2		lb/MMscf	AP-42 Table 1.4-2									
4863.31	0.09	0.09	4892.21	tpy										
1	25	298		GWP										

Notes

<sup>1</sup> Formaldehyde and Acetaldehyde have been added into the VOC on the summary page

<sup>2</sup> SO2 is calculated based on the default fuel sulfur content from AECT of 0.002 grains total sulfur per scf.

<sup>3</sup> It is assumed that TSP = PM<sub>10</sub> = PM<sub>2.5</sub>, PM emissions are derived from AP 42 emissions factors and converted to g/hp-hr using engine specifications.

<sup>4</sup> Total HAPs were calculated using AP42 emissions factors for a 4-Stroke Lean Burn Engine and here includes only those HAPs listed in the AECTool.

Uncontrolled Steady-State Emissions

Caterpillar G3608C LE Compressor Engines

Unit: C-894, C-895, C-896  
Description: Caterpillar G3408C LE  
Control Equipment: Oxidation Catalyst  
Type: 4SLB

Engine Data

Horsepower: 425 hp MFG Data  
Fuel consumption: 7995 Btu/hp-hr MFG Data  
Fuel heat value: 1020 Btu/scf Engineer Estimate  
Heating rate: 3.4 MMBtu/hr  
Fuel usage: 0.003 MMscf/hr  
29.2 MMscf/yr  
Operating hours: 8760.0 hours/year

Emission Rates

Uncontrolled Emissions

													AECTool Total HAPs <sup>4</sup>	g/hp-hr lb/MMBtu gr/scf lb/hr tpy	Catalyst Manufacturer Data AP-42 Table 3.2-3
NO <sub>x</sub>	CO	VOC <sup>1</sup>	SO <sub>2</sub> <sup>2</sup>	PM <sup>3</sup>	HCHO	Acetaldehyde <sup>4</sup>	Acrolein <sup>4</sup>	Benzene <sup>4</sup>	Ethylbenzene <sup>4</sup>	n-hexane <sup>4</sup>	Toluene <sup>4</sup>	Xylene <sup>4</sup>			
1	1.84	0.53	0.000588	0.009987	0.19	0.00836	0.00514	0.00044	0.0000397	0.00111	0.000408	0.000184			
0.94	1.72	0.50	0.002	0.03	0.18	0.03	0.02	0.001	0.0001	0.004	0.001	0.001	0.23		
4.10	7.55	2.18	0.01	0.15	0.78	0.12	0.08	0.01	0.001	0.02	0.01	0.003	1.01		

Controlled Emissions

													AECTool Total HAPs <sup>4</sup>		
NO <sub>x</sub>	CO	VOC <sup>1</sup>	SO <sub>2</sub> <sup>2</sup>	PM <sup>3</sup>	HCHO	Acetaldehyde <sup>4</sup>	Acrolein <sup>4</sup>	Benzene <sup>4</sup>	Ethylbenzene <sup>4</sup>	n-hexane <sup>4</sup>	Toluene <sup>4</sup>	Xylene <sup>4</sup>			
1.00	1.84	0.530			0.050									g/hp-hr	Catalyst Manufacturer Data
0.0%	0.0%	0.0%			73.7%									%	Control Efficiency
			0.000588	0.009987		0.00836	0.00514	0.00044	0.0000397	0.00111	0.000408	0.000184		lb/MMBtu	AP-42 Table 3.2-3
														gr/scf	
0.94	1.72	0.50	0.002	0.03	0.05	0.03	0.02	0.001	0.0001	0.004	0.001	0.001	0.10		
4.10	7.55	2.18	0.01	0.15	0.21	0.12	0.08	0.01	0.001	0.02	0.01	0.003	0.44	lb/hr	
														tpy	
CO <sub>2</sub>	CH <sub>4</sub>	N <sub>2</sub> O	CO <sub>2</sub> e												
120000	2.3	2.2		lb/MMscf	AP-42 Table 1.4-2										
1750.91	0.03	0.03	1761.31	tpy											

Notes

<sup>1</sup> Formaldehyde and Acetaldehyde have been added into the VOC on the summary page  
<sup>2</sup> SO2 is calculated based on the default fuel sulfur content from AECT of 0.002 grains total sulfur per scf.  
<sup>3</sup> It is assumed that TSP = PM<sub>10</sub> = PM<sub>2.5</sub>. PM emissions are derived from AP 42 emissions factors and converted to g/hp-hr using engine specifications.  
<sup>4</sup> Total HAPs were calculated using AP42 emissions factors for a 4-Stroke Lean Burn Engine and here includes only those HAPs listed in the AECTool.

**FUGITIVE EMISSIONS**  
**Uncontrolled Steady-State Emissions**  
**Unit: FUG**

EPN: FUG

EPA:		FUG																		
COMPONENT	COUNT <sup>1</sup>	EPA FACTOR <sup>2</sup> (lb/hr-src)	REDUCTION ALLOWED FOR LDAR	VOC CONTENT IN STREAM	TOTAL VOC EMISSIONS (lb/hr)	TOTAL VOC EMISSIONS (tpy)	H <sub>2</sub> S CONTENT IN STREAM <sup>4</sup>	TOTAL H2S EMISSIONS (lb/hr)	TOTAL H <sub>2</sub> S EMISSIONS (tpy)	HAP CONTENT IN STREAM	TOTAL HAP EMISSIONS (lb/hr)	TOTAL HAP EMISSIONS (tpy)	Benzene (lb/hr)	n-Hexane (lb/hr)	Toluene (lb/hr)	Xylene (lb/hr)	Benzene (tpy)	n-Hexane (tpy)	Toluene (tpy)	Xylene (tpy)
GAS																				
VALVES	60	0.0099207	0%	22.63%	0.1347	0.5899	0.002%	1.39E-05	6.11E-05	0.83%	0.005	0.02	0.0010	0.0018	0.0012	0.0006	0.0045	0.0081	0.0054	0.0027
FLANGES	20	0.00086	0%	22.63%	0.0039	0.0170	0.002%	4.03E-07	1.76E-06	0.83%	0.000	0.001	0.0000	0.0001	0.0000	0.0000	0.0001	0.0002	0.0002	0.0001
CONNECTORS	20	0.00044	0%	22.63%	0.0020	0.0087	0.002%	2.06E-07	9.03E-07	0.83%	0.00	0.00	0.0000	0.0000	0.0000	0.0000	0.0001	0.0001	0.0001	0.0000
LIGHT OIL																				
FLANGES	20	0.000243	0%	100.00%	0.0049	0.0212	0.0023%	1.14E-07	4.98E-07	15.33%	0.00	0.00	0.0001	0.0000	0.0003	0.0002	0.0006	0.0001	0.0013	0.0010
CONNECTORS	15	0.00046	0%	100.00%	0.0069	0.0304	0.0023%	1.63E-07	7.13E-07	15.33%	0.00	0.00	0.0002	0.0000	0.0004	0.0003	0.0009	0.0001	0.0018	0.0014
PUMP SEALS	4	0.02866	0%	100.00%	0.1146	0.5021	0.0023%	2.69E-06	1.18E-05	15.33%	0.02	0.08	0.0032	0.0003	0.0069	0.0053	0.0142	0.0014	0.0304	0.0230
OTHER <sup>3</sup>	17	0.016535	0%	100.00%	0.2811	1.2312	0.0023%	6.59E-06	2.88E-05	15.33%	0.04	0.19	0.0079	0.0008	0.0170	0.0129	0.0348	0.0035	0.0745	0.0565
WATER/OIL																				
CONNECTORS	5	0.000243	0%	100.00%	0.0012	0.0053	0.0023%	2.85E-08	1.25E-07	15.3294%	0.000186252	0.000815785					0.0000	0.0000	0.0000	0.0000
PUMP SEALS	4	0.0000529	0%	100.00%	0.0002	0.0009	0.0023%	4.96E-09	2.17E-08	15.3294%	3.24E-05	1.42E-04					0.0000	0.0000	0.0000	0.0000
TOTAL EMISSIONS					0.55	2.41		2.41E-05	1.06E-04		0.07	0.30	0.01	0.00	0.03	0.02	0.055	0.013	0.11	0.085

<sup>1</sup> Fugitive emission source counts were calculated based on information provided by the facility.

<sup>2</sup> Factors are from TCEQ's "Air Permit Technical Guidance for Chemical Sources: Equipment Leak Fugitives," (October 2000). Emission factors pulled from Facility/Compound Specific Fugitive Emission Factors Table for Oil and Gas Production Operations.

<sup>3</sup> Includes compressors and sample points



**DEHYDRATOR EMISSIONS**  
**Uncontrolled Steady-State Emissions**  
**Unit: DEHY**

*Uncontrolled Regenerator Emissions<sup>1,2</sup>*

	VOC		H <sub>2</sub> S		Total HAP		n-Hexane		Benzene		Toluene		Ethylbenzene		Xylenes	
	lb/hr	tpy	lb/hr	tpy	lb/hr	tpy	lb/hr	tpy	lb/hr	tpy	lb/hr	tpy	lb/hr	tpy	lb/hr	tpy
Dehy Still Vent	180.41	790.21	0.03	0.13	121.45	531.93	1.66	7.25	26.75	117.17	49.39	216.31	11.24	49.22	32.41	141.97
Flash Tank	49.36	216.19	0.02	0.08	3.17	13.91	0.85	3.73	0.93	4.06	0.92	4.05	0.13	0.55	0.35	1.51
	229.77	1006.40	0.05	0.21	124.62	545.84	2.51	10.98	27.68	121.23	50.31	220.36	11.37	49.78	32.76	143.49

*Controlled Regenerator Emissions<sup>3</sup>*

	VOC		H <sub>2</sub> S		Total HAP		n-Hexane		Benzene		Toluene		Ethylbenzene		Xylenes	
	lb/hr	tpy	lb/hr	tpy	lb/hr	tpy	lb/hr	tpy	lb/hr	tpy	lb/hr	tpy	lb/hr	tpy	lb/hr	tpy
Post-Condenser Emissions	27.40	120.03	0.03	0.12	9.28	40.67	0.46	2.01	4.51	19.74	3.30	14.44	0.27	1.16	0.76	3.31
Post-Combustion Emissions	0.55	2.40	0.001	0.002	0.19	0.81	0.01	0.04	0.09	0.39	0.07	0.29	0.01	0.02	0.02	0.07

**Notes**

<sup>1</sup>Emissions are calculated using a Promax simulation.

<sup>2</sup>Flash tank off gas emissions are sent to the inlet or fuel.

<sup>3</sup>Dehydrator vent gas is controlled by a condenser and reboiler equipped with a glow plug, with a control efficiency of 98%

**DEHYDRATOR REBOILER EMISSIONS**  
**Uncontrolled Steady-State Emissions**  
Unit: H-1

Unit No(s): RB-1, RB-2  
Description: Dehydrator Reboiler

**Heater Data**

Heating rate: 0.75 MMBtu/hr  
Fuel heat value: 1020 Btu/scf  
Fuel usage: 0.0007 MMscf/hr      MMBtu/hr \* MMscf/MMBtu  
6.4 MMscf/yr  
Operating hours: 8760 hours/year

**Emission Rates**

NO <sub>x</sub>	CO	VOC	SO <sub>2</sub> <sup>1</sup>	PM <sup>2</sup>		
100	84	5.5		7.6	lb/MMscf	AP-42 Tables 1.4-1 and 1.4-2
0.098	0.082	0.005		0.0075	lb/MMBtu <sup>3</sup>	
<b>0.07</b>	<b>0.06</b>	<b>0.004</b>	<b>0.002</b>	<b>0.006</b>	<b>lb/hr</b>	
<b>0.32</b>	<b>0.27</b>	<b>0.018</b>	<b>0.008</b>	<b>0.024</b>	<b>tpy</b>	
HCOH	Benzene	Toluene	Hexane	Total HAPs		
0.075	0.0021	0.0034	1.8	1.88	lb/MMscf	AP-42 Tables 1.4-1 and 1.4-2
7.4E-05	2.1E-06	3.3E-06	1.8E-03	1.8E-03	lb/MMBtu <sup>3</sup>	
<b>0.00006</b>	<b>0.00000</b>	<b>0.00000</b>	<b>0.00132</b>	<b>0.001</b>	<b>lb/hr</b>	
<b>0.0002</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0058</b>	<b>0.0061</b>	<b>tpy</b>	
CO <sub>2</sub>	CH <sub>4</sub>	N <sub>2</sub> O	CO <sub>2</sub> e			
120000	2.3	2.2		lb/MMscf	AP-42 Table 1.4-2	
<b>386.47</b>	<b>0.007</b>	<b>0.007</b>	<b>388.77</b>	<b>tpy</b>		
1	25	298		GWP		

**Notes**

<sup>1</sup> SO<sub>2</sub> emissions are based on the conversion of H<sub>2</sub>S to SO<sub>2</sub> during the combustion process and a 1:1 molar ratio conversion of H<sub>2</sub>S to SO<sub>2</sub>. The fuel gas concentration is based on 15 ppm of H<sub>2</sub>S.

<sup>2</sup> It is assumed that TSP = PM<sub>10</sub> = PM<sub>2.5</sub>

<sup>3</sup> Emission factor divided by 1,020 to normalize per footnote a to AP-42 Tables 1.4-1 and 1.4-2.

**STORAGE TANK EMISSION TOTALS**  
**Uncontrolled Steady-State Emissions**  
**Storage Tanks**

Number of Tanks                      3  
VOC Emissions

EPN	Tank Description	Annual Throughput (gal/hr)	Breathing Losses <sup>1</sup> (lb/hr)	Working Losses <sup>1</sup> (lb/hr)	Flash Losses <sup>1</sup> (lb/hr)	Total VOC Losses (lb/hr)	Total H2S Losses (lb/hr)	Uncontrolled HAP emissions (lb/hr)	Control Efficiency (%)	Controlled Annual VOC Emissions (lb/hr)	Controlled H2S Emissions (lb/hr)	Controlled Annual HAP emissions (lb/hr)
TK-1	Storage Tank	14,194		32.7990	34.32	67.1169	0.0403	13.47	98.0%	1.34	0.0008	0.27
TK-2	Storage Tank	14,194		32.7990	34.32	67.1169	0.0403	13.47	98.0%	1.34	0.0008	0.27
TK-2a	Storage Tank	14,194		32.7990	34.32	67.1169	0.0403	13.47	98.0%	1.34	0.0008	0.27

<sup>1</sup>Breathing, working, and flash losses for the condensate tanks are calculated from ProMax

**STORAGE TANK EMISSION TOTALS**  
**Uncontrolled Steady-State Emissions**  
**Storage Tanks**

Number of Tanks                      3  
VOC Emissions

EPN	Tank Description	Annual Throughput (gal/yr)	Breathing Losses <sup>1</sup> (lb/yr)	Working Losses <sup>1</sup> (lb/yr)	Flash Losses <sup>1</sup> (lb/yr)	Total Losses (lb/yr)	Uncontrolled Annual VOC Emissions (tpy)	Uncontrolled Annual H <sub>2</sub> S Emissions (tpy)	Uncontrolled Annual HAP emissions (tpy)	Control Efficiency (%)	Controlled Annual VOC Emissions (tpy)	Controlled Annual H <sub>2</sub> S emissions (tpy)	Controlled Annual HAP emissions (tpy)
TK-1	Storage Tank	229,950		3051.4179	1,044.95	4,096.3701	2.048	0.0012	0.22	98.0%	4.10E-02	2.46E-05	4.33E-03
TK-2	Storage Tank	229,950		3051.4179	1,044.95	4,096.3701	2.048	0.0012	0.22	98.0%	4.10E-02	2.46E-05	4.33E-03
TK-2a	Storage Tank	229,950		3051.4179	1,044.95	4,096.3701	2.048	0.0012	0.22	98.0%	4.10E-02	2.46E-05	4.33E-03

<sup>1</sup>Breathing, working, and flash losses for the condensate tanks are calculated from ProMax

**CONDENSATE LOADING EMISSIONS**  
**Uncontrolled Steady-State Emissions**  
**Condensate Tanks**

**Equation<sup>1</sup>:**

$$L_L = 12.46 * \frac{SPM}{T}$$

**Variables<sup>1</sup>:**

L<sub>L</sub> - Loading Loss (lbs/1000 gal loaded)  
S - Saturation Factor (From Table 5.2-1 of AP-42, Section 5.2)  
P - True Vapor Pressure of Loaded Liquid (psia)  
M - Molecular Weight of Vapor (lb/lb mol)  
T- Temperature of Bulk Liquid ( °R = [°F + 460] )

**VOC Emissions**

EPN	Loading Method	S <sup>2</sup>	P <sub>max</sub> <sup>3</sup> (psia)	M <sup>3</sup> (lb/lbmol)	T <sup>3</sup> (°R)	L <sub>L</sub> (lbs/1000 gal)	Max Hourly Throughput <sup>4</sup> (gal/hr)	% Capture <sup>5</sup>	Max Hourly Emissions (lb/hr)
LOAD-1	Submerged	0.60	12.88	32.43	555.00	5.63	8,000	70	13.50

EPN	Loading Method	S <sup>2</sup>	P <sub>max</sub> (psia)	M (lb/lbmol)	T (°R)	L <sub>L</sub> (lbs/1000 gal)	Annual Throughput (gal/yr)	% Capture <sup>5</sup>	Annual Emissions (tpy)
LOAD-1	Submerged	0.60	12.88	32.43	535.32	5.83	689,850	70	0.60

<sup>1</sup> Loading Loss Equation and Variables are from AP-42, Section 5.2, Transportation and Marketing of Petroleum Liquids.

<sup>2</sup> The S-factor is based on submerged loading in dedicated normal service

<sup>3</sup> Vapor pressure and molecular weight obtained from ProMax storage tank simulations.

<sup>4</sup> The maximum hourly throughput is based on the capability of the tank truck to load liquids in one hour's time.

<sup>5</sup> Truck Loading Emissions are routed to the combustor.

HAPs	Uncontrolled Loadout Emission		Controlled Loadout Emission	
	lb/hr	tpy	lb/hr	tpy
Benzene	0.38	0.02	0.11	0.01
Toluene	0.82	0.04	0.25	0.01
Ethylbenzene	0.21	0.01	0.06	0.003
Xylenes	0.62	0.03	0.19	0.01
n-Hexane	0.04	0.002	0.01	0.001
<b>TOTAL HAPs</b>	<b>2.07</b>	<b>0.09</b>	<b>0.62</b>	<b>0.03</b>
H2S	2.31E-05	1.03E-06	6.93E-06	3.10E-07

**PRODUCED WATER LOADING EMISSIONS**  
**Uncontrolled Steady-State Emissions**  
**Produced Water Tanks**

**Equation<sup>1</sup>:**

$$L_L = 12.46 * \frac{SPM}{T}$$

**Variables<sup>1</sup>:**

L<sub>L</sub> - Loading Loss (lbs/1000 gal loaded)  
S - Saturation Factor (From Table 5.2-1 of AP-42, Section 5.2)  
P - True Vapor Pressure of Loaded Liquid (psia)  
M - Molecular Weight of Vapor (lb/lb mol)  
T- Temperature of Bulk Liquid ( °R = [°F + 460] )

**VOC Emissions**

EPN	Loading Method	S <sup>2</sup>	P <sub>max</sub> <sup>3</sup> (psia)	M <sup>3</sup> (lb/lbmol)	T <sup>3</sup> (°R)	L <sub>L</sub> (lbs/1000 gal)	Max Hourly Throughput <sup>4</sup> (gal/hr)	% Capture <sup>5</sup>	Max Hourly Emissions (lb/hr)
LOAD-1	Submerged	0.60	12.88	32.43	555.00	5.63	8,000	70	13.50

EPN	Loading Method	S <sup>2</sup>	P <sub>max</sub> (psia)	M (lb/lbmol)	T (°R)	L <sub>L</sub> (lbs/1000 gal)	Annual Throughput (gal/yr)	% Capture <sup>5</sup>	Annual Emissions (tpy)
LOAD-1	Submerged	0.60	12.88	32.43	535.32	5.83	689,850	70	0.60

<sup>1</sup> Loading Loss Equation and Variables are from AP-42, Section 5.2, Transportation and Marketing of Petroleum Liquids.

<sup>2</sup> The S-factor is based on submerged loading in dedicated normal service

<sup>3</sup> Vapor pressure and molecular weight obtained from ProMax storage tank simulations.

<sup>4</sup> The maximum hourly throughput is based on the capability of the tank truck to load liquids in one hour's time.

<sup>5</sup> Truck Loading Emissions are routed to the combustor.

HAPs	Uncontrolled Loadout Emission		Controlled Loadout Emission	
	lb/hr	tpy	lb/hr	tpy
Benzene	0.38	0.02	0.11	0.01
Toluene	0.82	0.04	0.25	0.01
Ethylbenzene	0.21	0.01	0.06	0.00
Xylenes	0.62	0.03	0.19	0.01
n-Hexane	0.04	0.00	0.01	0.00
<b>TOTAL HAPs</b>	<b>2.07</b>	<b>0.09</b>	<b>0.62</b>	<b>0.03</b>
H2S	0.00	0.00	0.00	0.00

Unit(s): HAUL  
 Description: Truck haul road emissions

#### Input Data

Empty vehicle weight <sup>1</sup>	16	tons
Load weight <sup>2</sup>	31.5	tons
Loaded vehicle <sup>3</sup>	47.5	tons
Mean vehicle weight <sup>4</sup>	31.8	tons
Vehicle frequency	1.0	trips/hour
Round-trip distance	0.20	mile/trip
Operating hours	8760	hours/yr
Surface silt content <sup>5</sup>	4.8	%
Annual wet days <sup>6</sup>	70	days/yr
Vehicle miles traveled <sup>7</sup>	0.2	mile/hr
Control percentage	0%	nominal, base course chemical treatment

#### Emission Factors and Constants

Parameter	PM <sub>30</sub>	PM <sub>10</sub>	PM <sub>2.5</sub>
k, lb/VMT <sup>8</sup>	4.9	1.5	0.15
a, lb/VMT <sup>8</sup>	0.70	0.90	0.90
b, lb/VMT <sup>8</sup>	0.45	0.45	0.45
Hourly EF, lb/VMT <sup>9</sup>	7.46	1.90	0.19
Annual EF, lb/VMT <sup>10</sup>	6.03	1.54	0.15

#### Uncontrolled Emissions

PM <sub>30</sub>	PM <sub>10</sub>	PM <sub>2.5</sub>	
1.49	0.38	0.038	lb/hr <sup>11</sup>
5.50E-02	0.01	0.001	ton/yr <sup>12</sup>

#### Notes

- <sup>1</sup> Empty vehicle weight includes driver and occupants and full fuel load.
- <sup>2</sup> Cargo, transported materials, etc. (5.7 lb/gal RVP5 \*7560 gal truck/ 2000lb/ton)
- <sup>3</sup> Loaded vehicle weight = Empty + Load Size
- <sup>4</sup> Mean Vehicle weight = (Loaded Weight + Empty Weight) / 2
- <sup>5</sup> AP-42 Table 13.2.2-1, Sand and gravel processing
- <sup>6</sup> AP-42 Figure 13.2.2-1
- <sup>7</sup> VMT/hr = Vehicle Miles Traveled per hour = Trips per hour \* Segment Length
- <sup>8</sup> Table 13.2.2-2, Industrial Roads
- <sup>9</sup> AP-42 13.2.2, Equation 1a
- <sup>10</sup> AP-42 13.2.2, Equation 2
- <sup>11</sup> lb/hr = Hourly EF (lb/VMT) \* VMT (mile/hr)
- <sup>12</sup> ton/yr = Annual EF (lb/VMT) \* Truck/day \* Mile/truck \* 365day/yr \* 1ton/2000lb
- <sup>13</sup> Uncontrolled emissions \* (1 - Control%)

**COMBUSTOR EMISSIONS**  
**Uncontrolled Steady-State Emissions**  
**Unit: FLARE**

Unit No(s): Flare  
Description: Steady State - Pilot Gas  
Periodic - MSS Flaring

**Flow Rate:**

Pilot	41.7 scf/hr	Flare pilot
	0.0010 MMscf/d	scf/hr * 24 (hr/day) / 1e6 SCF/MMscf
	1020 BTU/scf	Nominal, sweet natural gas
	5.000 MMBtu/hr	
	6.9444 Mscf/hr	MSS Gas Flow
	100 %	Safety Factor
	7.08 MMBtu/hr	

**Emission Calculations**

<i>Pilot Emissions</i>	NO <sub>x</sub>	CO	SO <sub>2</sub>	H <sub>2</sub> S	VOC*	HAPs	Units	
	0.138	0.2755		60	5.50		lb/MMBtu	TNRCC RG-109 (high Btu; other)/VOC factor in lb/MMscf
					-	-	ppm	Fuel H <sub>2</sub> S content of 60 ppm H <sub>2</sub> S.
							mol%	Assume no VOC content fuel (methane)
	<b>0.690</b>	<b>1.38</b>			0.0002		lb/hr	lb/MMBtu * MMBtu/hr
			<b>0.0004</b>	<b>4.5E-06</b>	-	-	lb/hr	98% combustion H <sub>2</sub> S; 100% conversion to SO <sub>2</sub>
	<b>3.02</b>	<b>6.03</b>	<b>0.002</b>	<b>0.00002</b>	<b>0.001</b>	-	tpy	8760 hrs/yr
<i>MSS Flaring</i>	NO <sub>x</sub>	CO	SO <sub>2</sub>	H <sub>2</sub> S	VOC	HAPs		
	0.1380	0.2755					lb/MMBtu	RG-109 Emission Factors for high-Btu, non-steam assisted
				0.486	4,689.96	169.20	lb/hr	Compressor, Dehy, Vessel, and Pipeline Blowdowns
				0.002	15.9	0.58	tpy	See Individual Tabs for Details
				98%	98%	98%		Estimated control efficiency for H <sub>2</sub> S and VOC
			100%					Estimated H <sub>2</sub> S conversion to SO <sub>2</sub> (1-1 molar ratio)
	<b>0.98</b>	<b>1.95</b>	<b>0.896</b>	<b>0.00971</b>	<b>93.80</b>	<b>3.38</b>	lb/hr	Based on pilot plus combusted gas
	<b>4.28</b>	<b>8.55</b>	<b>3.93</b>	<b>0.04254</b>	<b>0.32</b>	<b>0.01</b>	tpy	
<i>Total Pilot + Flaring</i>	NO <sub>x</sub>	CO	SO <sub>2</sub>	H <sub>2</sub> S	VOC	HAPs		
	<b>1.67</b>	<b>3.33</b>	<b>0.90</b>	<b>0.01</b>	<b>93.80</b>	<b>3.38</b>	lb/hr	
	<b>7.30</b>	<b>14.58</b>	<b>3.93</b>	<b>0.04</b>	<b>0.32</b>	<b>0.01</b>	tpy	



**PIPELINE/PIGGING BLOWDOWN EMISSIONS CALCULATIONS**  
**Uncontrolled Steady-State Emissions**

**Basis of Calculation:**

Emissions from blowdowns are calculated based on a mass balance as follows:

Maximum Uncontrolled Hourly Emissions (lb/hr) = [Volume of blowdown (scf/event/unit)] x [MW of stream (lb/lb-mol)] x [wt % VOC or speciated constituent] x [# compressors blowdown simultaneously (units)] / [event duration (hr/event)] / [379.5 (scf/lb-mol)]

Maximum Uncontrolled Annual Emissions (tpy) = [Volume of blowdown (scf/event)] x [MW of stream (lb/lb-mol)] x [wt % VOC or speciated constituent] x [# compressors blowdown at site (units)] x [frequency of events (events/yr/unit)] / [379.5 (scf/lb-mol)] / [2,000 (lb/ton)]

**Compressor Blowdown Emissions Sent to Flare**

Estimated Gas Vented per BlowDown Event for E1-3 <sup>1,2</sup> =	1,725	scf/event
Compressors at Site	3	units
Estimated Gas Vented per BlowDown Event for E4-7 <sup>1,2</sup> =	1,071	scf/event
Compressors at Site	4	units
Compressors Blowdown Simultaneously =	7	units
Assumed BlowDown Duration =	1	hrs/event
Compressor BlowDowns in One Year =	90	events/yr/unit
Molecular Weight of Stream =	21.80	lb/lb-mol

Compound	Composition (wt fraction)	Maximum Uncontrolled Hourly Emissions (lb/hr)	Maximum Uncontrolled Annual Emissions (tpy)
H2S	2.34E-05	7.76E-03	5.73E-04
Nitrogen	0.02	7.59	0.56
Carbon Dioxide	0.04	14.15	1.05
Methane	0.56	184.51	13.63
Ethane	0.15	48.92	3.61
Propane	0.11	37.16	2.74
i-Butane	0.02	6.32	0.47
n-Butane	0.04	14.36	1.06
i-Pentane	0.01	4.30	0.32
n-Pentane	0.01	4.01	0.30
2,2-Dimethylbutane	1.46E-04	0.05	3.57E-03
Cyclopentane	9.79E-04	0.32	0.02
2-Methylpentane	2.86E-03	0.95	0.07
3-Methylpentane	1.67E-03	0.55	0.04
n-Hexane	3.10E-03	1.03	0.08
2,2-Dimethylpentane	3.39E-04	0.11	8.29E-03
Methylcyclopentane	1.58E-03	0.52	0.04
2,2,3-Trimethylbutane	--	--	--
Benzene	1.73E-03	0.57	0.04
Cyclohexane	2.23E-03	0.74	0.05
2-Methylhexane	4.12E-04	0.14	0.01
3-Methylhexane	7.02E-04	0.23	0.02
1,1-Dimethylcyclopentane	2.05E-04	0.07	5.02E-03
Heptane	1.05E-03	0.35	0.03
Methylcyclohexane	1.89E-03	0.63	0.05
2,5-Dimethylhexane	6.11E-05	0.02	1.49E-03
Toluene	2.08E-03	0.69	0.05
2-Methylheptane	4.74E-04	0.16	0.01
Octane	1.38E-03	0.46	0.03
Ethylcyclohexane	2.97E-04	0.10	7.26E-03
Ethylbenzene	3.76E-04	0.12	9.21E-03
p-Xylene	7.98E-04	0.26	0.02
o-Xylene	2.23E-04	0.07	5.45E-03
Cyclooctane	5.66E-05	0.02	1.38E-03
Nonane	7.51E-04	0.25	0.02
Isopropylbenzene	9.57E-05	0.03	2.34E-03
Propylbenzene	4.82E-05	0.02	1.18E-03
1,3,5-Trimethylbenzene	1.03E-04	0.03	2.53E-03
Isobutylbenzene	1.04E-05	3.45E-03	2.55E-04
Butylbenzene	2.16E-05	7.15E-03	5.28E-04
Decane	8.47E-04	0.28	0.02
<b>TOTAL VOC</b>	<b>0.23</b>	<b>74.94</b>	<b>5.53</b>
<b>H<sub>2</sub>S</b>	<b>2.34E-05</b>	<b>7.76E-03</b>	<b>5.73E-04</b>
<b>TOTAL HAPs</b>	<b>8.31E-03</b>	<b>2.75</b>	<b>0.20</b>

**PIPELINE/PIGGING BLOWDOWN EMISSIONS CALCULATIONS**  
Uncontrolled Steady-State Emissions

<b>Basis of Calculation:</b>			
Emissions from blowdowns are calculated based on a mass balance as follows:			
Maximum Uncontrolled Hourly Emissions (lb/hr) = [Volume of blowdown (scf/event/unit)] x [MW of stream (lb/lb-mol)] x [wt % VOC or speciated constituent] / [event duration (hr/event)] / [379.5 (scf/lb-mol)]			
Maximum Uncontrolled Annual Emissions (tpy) = [Volume of blowdown (scf/event)] x [MW of stream (lb/lb-mol)] x [wt % VOC or speciated constituent] x [frequency of events (events/yr/unit)] / [379.5 (scf/lb-mol)] / [2,000 (lb/ton)]			

**Filter Change Blowdown Emissions Sent to Flare**

Vessel Blowdown Volume <sup>1</sup> =	33,196	scf/event
Assumed Blowdown Duration =	1	hrs/event
Site-wide Blowdowns in One Year=	5	events/yr/site
Molecular Weight of Stream =	21.80	lb/lb-mol

Compound	Composition (wt fraction)	Maximum Uncontrolled Hourly Emissions (lb/hr)	Maximum Uncontrolled Annual Emissions (tpy)
H2S	2.34E-05	0.04	1.12E-04
Nitrogen	0.02	43.70	0.11
Carbon Dioxide	0.04	81.49	0.20
Methane	0.56	1062.50	2.66
Ethane	0.15	281.74	0.70
Propane	0.11	213.98	0.53
i-Butane	0.02	36.38	0.09
n-Butane	0.04	82.72	0.21
i-Pentane	0.01	24.79	0.06
n-Pentane	0.01	23.12	0.06
2,2-Dimethylbutane	1.46E-04	0.28	6.96E-04
Cyclopentane	9.79E-04	1.87	4.67E-03
2-Methylpentane	2.86E-03	5.45	0.01
3-Methylpentane	1.67E-03	3.18	7.96E-03
n-Hexane	3.10E-03	5.92	0.01
2,2-Dimethylpentane	3.39E-04	0.65	1.62E-03
Methylcyclopentane	1.58E-03	3.01	7.52E-03
2,2,3-Trimethylbutane	--	--	--
Benzene	1.73E-03	3.30	8.25E-03
Cyclohexane	2.23E-03	4.25	0.01
2-Methylhexane	4.12E-04	0.79	1.97E-03
3-Methylhexane	7.02E-04	1.34	3.35E-03
1,1-Dimethylcyclopentane	2.05E-04	0.39	9.79E-04
Heptane	1.05E-03	2.01	5.02E-03
Methylcyclohexane	1.89E-03	3.60	9.00E-03
2,5-Dimethylhexane	6.11E-05	0.12	2.91E-04
Toluene	2.08E-03	3.98	9.94E-03
2-Methylheptane	4.74E-04	0.90	2.26E-03
Octane	1.38E-03	2.64	6.60E-03
Ethylcyclohexane	2.97E-04	0.57	1.41E-03
Ethylbenzene	3.76E-04	0.72	1.79E-03
p-Xylene	7.98E-04	1.52	3.81E-03
o-Xylene	2.23E-04	0.43	1.06E-03
Cyclooctane	5.66E-05	0.11	2.70E-04
Nonane	7.51E-04	1.43	3.58E-03
Isopropylbenzene	9.57E-05	0.18	4.56E-04
Propylbenzene	4.82E-05	0.09	2.30E-04
1,3,5-Trimethylbenzene	1.03E-04	0.20	4.93E-04
Isobutylbenzene	1.04E-05	0.02	4.97E-05
Butylbenzene	2.16E-05	0.04	1.03E-04
Decane	8.47E-04	1.62	4.04E-03
<b>TOTAL VOC</b>	<b>0.23</b>	<b>431.57</b>	<b>1.08</b>
<b>H<sub>2</sub>S</b>	<b>2.34E-05</b>	<b>0.04</b>	<b>1.12E-04</b>
<b>TOTAL HAPs</b>	<b>8.16E-03</b>	<b>15.57</b>	<b>0.04</b>

<sup>1</sup> This is a representative estimate of the amount of gas vented per blow down event.

**TANK DEGASSING EMISSIONS CALCULATIONS**  
Uncontrolled Steady-State Emissions

<b>Basis of Calculation:</b>			
Emissions from blowdowns are calculated based on a mass balance as follows:			
Maximum Uncontrolled Hourly Emissions (lb/hr) = [Volume of blowdown (scf/event/unit)] x [MW of stream (lb/lb-mol)] x [wt % VOC or speciated constituent] / [event duration (hr/event)] / [379.5 (scf/lb-mol)]			
Maximum Uncontrolled Annual Emissions (tpy) = [Volume of blowdown (scf/event)] x [MW of stream (lb/lb-mol)] x [wt % VOC or speciated constituent] x [frequency of events (events/yr/unit)] / [379.5 (scf/lb-mol)] / [2,000 (lb/ton)]			

**Storage Tank Degassing Emissions Sent to Flare**

Vessel Blowdown Volume <sup>1</sup> =	7,308	scf/event
Assumed Blowdown Duration =	1	hrs/event
Site-wide Blowdowns in One Year=	5	events/yr/site
Molecular Weight of Stream =	21.8	lb/lb-mol

Compound	Composition (wt fraction)	Maximum Uncontrolled Hourly Emissions (lb/hr)	Maximum Uncontrolled Annual Emissions (tpy)
H2S	2.34E-05	9.84E-03	2.46E-05
Nitrogen	0.02	9.62	0.02
Carbon Dioxide	0.04	17.94	0.04
Methane	0.56	233.91	0.58
Ethane	0.15	62.02	0.16
Propane	0.11	47.11	0.12
i-Butane	0.02	8.01	0.02
n-Butane	0.04	18.21	0.05
i-Pentane	0.01	5.46	0.01
n-Pentane	0.01	5.09	0.01
2,2-Dimethylbutane	1.46E-04	0.06	1.53E-04
Cyclopentane	9.79E-04	0.41	1.03E-03
2-Methylpentane	2.86E-03	1.20	3.00E-03
3-Methylpentane	1.67E-03	0.70	1.75E-03
n-Hexane	3.10E-03	1.30	3.26E-03
2,2-Dimethylpentane	3.39E-04	0.14	3.56E-04
Methylcyclopentane	1.58E-03	0.66	1.65E-03
2,2,3-Trimethylbutane	--	--	--
Benzene	1.73E-03	0.73	1.82E-03
Cyclohexane	2.23E-03	0.94	2.34E-03
2-Methylhexane	4.12E-04	0.17	4.33E-04
3-Methylhexane	7.02E-04	0.29	7.36E-04
1,1-Dimethylcyclopentane	2.05E-04	0.09	2.15E-04
Heptane	1.05E-03	0.44	1.10E-03
Methylcyclohexane	1.89E-03	0.79	1.98E-03
2,5-Dimethylhexane	6.11E-05	0.03	6.41E-05
Toluene	2.08E-03	0.88	2.19E-03
2-Methylheptane	4.74E-04	0.20	4.97E-04
Octane	1.38E-03	0.58	1.45E-03
Ethylcyclohexane	2.97E-04	0.12	3.11E-04
Ethylbenzene	3.76E-04	0.16	3.95E-04
p-Xylene	7.98E-04	0.34	8.38E-04
o-Xylene	2.23E-04	0.09	2.34E-04
Cyclooctane	5.66E-05	0.02	5.94E-05
Nonane	7.51E-04	0.32	7.88E-04
Isopropylbenzene	9.57E-05	0.04	1.00E-04
Propylbenzene	4.82E-05	0.02	5.06E-05
1,3,5-Trimethylbenzene	1.03E-04	0.04	1.09E-04
Isobutylbenzene	1.04E-05	4.38E-03	1.09E-05
Butylbenzene	2.16E-05	9.06E-03	2.27E-05
Decane	8.47E-04	0.36	8.89E-04
<b>TOTAL VOC</b>	<b>0.23</b>	<b>95.01</b>	<b>0.24</b>
<b>H<sub>2</sub>S</b>	<b>2.34E-05</b>	<b>9.84E-03</b>	<b>2.46E-05</b>
<b>TOTAL HAPs</b>	<b>8.16E-03</b>	<b>3.43</b>	<b>8.57E-03</b>

<sup>1</sup> This is a representative estimate of the amount of gas vented per blow down event.

**PIPELINE/PIGGING BLOWDOWN EMISSIONS CALCULATIONS**  
**Uncontrolled Steady-State Emissions**

**Basis of Calculation:**

Emissions from blowdowns are calculated based on a mass balance as follows:

Maximum Uncontrolled Hourly Emissions (lb/hr) = [Volume of blowdown (scf/event/unit)] x [MW of stream (lb/lb-mol)] x [wt % VOC or speciated constituent] / [event duration (hr/event)] / [379.5 (scf/lb-mol)]

Maximum Uncontrolled Annual Emissions (tpy) = [Volume of blowdown (scf/event)] x [MW of stream (lb/lb-mol)] x [wt % VOC or speciated constituent] x [frequency of events (events/yr/unit)] / [379.5 (scf/lb-mol)] / [2,000 (lb/ton)]

Total Volume of blowdown accounts for volume from the vessel, process skid, and extension skids, as applicable.

**Sources Sent to Flare**

**Coalescer Blowdown Emissions**

Coalescer Blowdown Volume <sup>1</sup> =	5,739	scf/event
Assumed Blowdown Duration =	1	hrs/event
Site-wide Blowdowns in One Year=	12	events/yr/site

**Scrubber Blowdown Emissions**

Scrubber Blowdown Volume <sup>1</sup> =	24,684	scf/event
Assumed Blowdown Duration =	1	hrs/event
Site-wide Blowdowns in One Year=	15	events/yr/site

**Pump Blowdown Emissions**

Scrubber Blowdown Volume <sup>1</sup> =	16	scf/event
Assumed Blowdown Duration =	1	hrs/event
Site-wide Blowdowns in One Year=	40	events/yr/site
Molecular Weight of Stream =	21.80	lb/lb-mol

Compound	Composition (wt fraction)	Maximum Uncontrolled Hourly Emissions (lb/hr)	Maximum Uncontrolled Annual Emissions (tpy)
H2S	2.34E-05	0.04	2.96E-04
Nitrogen	0.02	40.07	0.29
Carbon Dioxide	0.04	74.72	0.54
Methane	0.56	974.25	7.04
Ethane	0.15	258.34	1.87
Propane	0.11	196.21	1.42
i-Butane	0.02	33.36	0.24
n-Butane	0.04	75.85	0.55
i-Pentane	0.01	22.73	0.16
n-Pentane	0.01	21.20	0.15
2,2-Dimethylbutane	1.46E-04	0.26	1.84E-03
Cyclopentane	9.79E-04	1.71	0.01
2-Methylpentane	2.86E-03	5.00	0.04
3-Methylpentane	1.67E-03	2.92	0.02
n-Hexane	3.10E-03	5.43	0.04
2,2-Dimethylpentane	3.39E-04	0.59	4.28E-03
Methylcyclopentane	1.58E-03	2.76	0.02
2,2,3-Trimethylbutane	--	--	--
Benzene	1.73E-03	3.03	0.02
Cyclohexane	2.23E-03	3.90	0.03
2-Methylhexane	4.12E-04	0.72	5.21E-03
3-Methylhexane	7.02E-04	1.23	8.86E-03
1,1-Dimethylcyclopentane	2.05E-04	0.36	2.59E-03
Heptane	1.05E-03	1.84	0.01
Methylcyclohexane	1.89E-03	3.30	0.02
2,5-Dimethylhexane	6.11E-05	0.11	7.72E-04
Toluene	2.08E-03	3.65	0.03
2-Methylheptane	4.74E-04	0.83	5.99E-03
Octane	1.38E-03	2.42	0.02
Ethylcyclohexane	2.97E-04	0.52	3.75E-03
Ethylbenzene	3.76E-04	0.66	4.76E-03
p-Xylene	7.98E-04	1.40	0.01
o-Xylene	2.23E-04	0.39	2.82E-03
Cyclooctane	5.66E-05	0.10	7.15E-04
Nonane	7.51E-04	1.31	9.49E-03
Isopropylbenzene	9.57E-05	0.17	1.21E-03
Propylbenzene	4.82E-05	0.08	6.09E-04
1,3,5-Trimethylbenzene	1.03E-04	0.18	1.31E-03
Isobutylbenzene	1.04E-05	0.02	1.32E-04
Butylbenzene	2.16E-05	0.04	2.73E-04
Decane	8.47E-04	1.48	0.01
<b>TOTAL VOC</b>	<b>0.23</b>	<b>395.73</b>	<b>2.86</b>
<b>H<sub>2</sub>S</b>	<b>2.34E-05</b>	<b>0.04</b>	<b>2.96E-04</b>
<b>TOTAL HAPs</b>	<b>8.16E-03</b>	<b>14.27</b>	<b>0.10</b>

<sup>1</sup> This is a representative estimate of the amount of gas vented per blow down event.

**PIPELINE/PIGGING BLOWDOWN EMISSIONS CALCULATIONS**  
**Uncontrolled Steady-State Emissions**

**Basis of Calculation:**

Emissions from blowdowns are calculated based on a mass balance as follows:

Maximum Uncontrolled Hourly Emissions (lb/hr) = [Volume of blowdown (scf/event/unit)] x [MW of stream (lb/lb-mol)] x [wt % VOC or speciated constituent] / [event duration (hr/event)] / [379.5 (scf/lb-mol)]

Maximum Uncontrolled Annual Emissions (tpy) = [Volume of blowdown (scf/event)] x [MW of stream (lb/lb-mol)] x [wt % VOC or speciated constituent] x [frequency of events (events/yr/unit)] / [379.5 (scf/lb-mol)] / [2,000 (lb/ton)]

Total Volume of blowdown accounts for volume from the vessel, process skid, and extension skids, as applicable.

**Pipeline Blowdown Emissions to Flare**

Coalescer Blowdown Volume <sup>1</sup> =	281,946	scf/event
Assumed Blowdown Duration =	1	hrs/event
Site-wide Blowdowns in One Year=	3	events/yr/site

**Pigging Emissions to Flare**

Scrubber Blowdown Volume <sup>1</sup> =	2,096	scf/event
Assumed Blowdown Duration =	1	hrs/event
Site-wide Blowdowns in One Year=	50	events/yr/site
Molecular Weight of Stream =	21.80	lb/lb-mol

Compound	Composition (wt fraction)	Maximum Uncontrolled Hourly Emissions (lb/hr)	Maximum Uncontrolled Annual Emissions (tpy)
H2S	2.34E-05	0.38	6.40E-04
Nitrogen	0.02	373.95	0.63
Carbon Dioxide	0.04	697.27	1.17
Methane	0.56	9091.26	15.21
Ethane	0.15	2410.67	4.03
Propane	0.11	1830.93	3.06
i-Butane	0.02	311.29	0.52
n-Butane	0.04	707.81	1.18
i-Pentane	0.01	212.09	0.35
n-Pentane	0.01	197.82	0.33
2,2-Dimethylbutane	1.46E-04	2.38	3.98E-03
Cyclopentane	9.79E-04	15.98	0.03
2-Methylpentane	2.86E-03	46.61	0.08
3-Methylpentane	1.67E-03	27.24	0.05
n-Hexane	3.10E-03	50.64	0.08
2,2-Dimethylpentane	3.39E-04	5.53	9.26E-03
Methylcyclopentane	1.58E-03	25.73	0.04
2,2,3-Trimethylbutane	--	--	--
Benzene	1.73E-03	28.24	0.05
Cyclohexane	2.23E-03	36.38	0.06
2-Methylhexane	4.12E-04	6.73	0.01
3-Methylhexane	7.02E-04	11.45	0.02
1,1-Dimethylcyclopentane	2.05E-04	3.35	5.60E-03
Heptane	1.05E-03	17.18	0.03
Methylcyclohexane	1.89E-03	30.82	0.05
2,5-Dimethylhexane	6.11E-05	1.00	1.67E-03
Toluene	2.08E-03	34.01	0.06
2-Methylheptane	4.74E-04	7.73	0.01
Octane	1.38E-03	22.57	0.04
Ethylcyclohexane	2.97E-04	4.84	8.10E-03
Ethylbenzene	3.76E-04	6.14	0.01
p-Xylene	7.98E-04	13.03	0.02
o-Xylene	2.23E-04	3.64	6.09E-03
Cyclooctane	5.66E-05	0.92	1.55E-03
Nonane	7.51E-04	12.26	0.02
Isopropylbenzene	9.57E-05	1.56	2.61E-03
Propylbenzene	4.82E-05	0.79	1.32E-03
1,3,5-Trimethylbenzene	1.03E-04	1.69	2.82E-03
Isobutylbenzene	1.04E-05	0.17	2.85E-04
Butylbenzene	2.16E-05	0.35	5.90E-04
Decane	8.47E-04	13.83	0.02
<b>TOTAL VOC</b>	<b>0.23</b>	<b>3692.72</b>	<b>6.18</b>
<b>H<sub>2</sub>S</b>	<b>2.34E-05</b>	<b>0.38</b>	<b>6.40E-04</b>
<b>TOTAL HAPs</b>	<b>8.16E-03</b>	<b>133.19</b>	<b>0.22</b>

<sup>1</sup> This is a representative estimate of the amount of gas vented per blow down event.

# Section 6.a

## Green House Gas Emissions

(Submitting under 20.2.70, 20.2.72 20.2.74 NMAC)

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

### Calculating GHG Emissions:

1. Calculate the ton per year (tpy) GHG mass emissions and GHG CO<sub>2</sub>e emissions from your facility.
2. GHG mass emissions are the sum of the total annual tons of greenhouse gases without adjusting with the global warming potentials (GWPs). GHG CO<sub>2</sub>e emissions are the sum of the mass emissions of each individual GHG multiplied by its GWP found in Table A-1 in 40 CFR 98 Mandatory Greenhouse Gas Reporting.
3. Emissions from routine or predictable start up, shut down, and maintenance must be included.
4. Report GHG mass and GHG CO<sub>2</sub>e 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 CO<sub>2</sub>e 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 CO<sub>2</sub>e emissions are less than 75,000 tons per year.

### Sources for Calculating GHG Emissions:

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

### Global Warming Potentials (GWP):

Applicants must use the Global Warming Potentials codified in Table A-1 of the most recent version of 40 CFR 98 Mandatory Greenhouse Gas Reporting. The GWP for a particular GHG is the ratio of heat trapped by one unit mass of the GHG to that of one unit mass of CO<sub>2</sub> 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)

ESTIMATION OF FACILITY-WIDE GHG EMISSIONS  
IACX Roswell LLC, Bitter Lake Compressor Station

GHG Emission Source	Total GHG Emissions	
	(m.t. CO <sub>2</sub> e)	(tons CO <sub>2</sub> e)
Natural Gas Combustion	40,796	44,970
Fugitives	14	15
Dehy Unit	151	166
<b>tal Estimated Facility Emissions</b>	<b>40,961</b>	<b>45,152</b>

Conversion Factors		Global Warming Potential	
1.10231	ton/m.t.	CO <sub>2</sub>	1
0.001	m.t./kg	CH <sub>4</sub>	25
8.760	Hrs/yr	N <sub>2</sub> O	298

CO <sub>2</sub> (mol %)	CH <sub>4</sub> (mol %)	C <sub>2</sub> H <sub>6</sub> (mol %)	C <sub>3</sub> H <sub>8</sub> (mol %)	C <sub>4</sub> H <sub>10</sub> (mol %)	C <sub>5</sub> + (mol %)
2.35886	73.89146	11.56952	6.24368	2.75657	1.20219

\* Processing emissions for compressor, venting and flaring estimated using EPA's 40 CFR Subpart W Onshore Natural Gas Processing Screening T  
Mole % CO<sub>2</sub> for Acid gas venting used for screening obtained from process simulation data.

Note:  
Carbon Dioxide Equivalent (CQe) emissions are calculated in the tables below by multiplying emissions by global warming potentials for each pollutant.  
Emissions estimates converted to short tons in the tables below using conversion factor from 40 CFR 98 Subpart A for comparison to PSD/TV threshe  
Global Warming Potentials obtained from 40 CFR 98 Supart A, Table A-  
Mol % values obtained from the gas analysis from a representative facili

Natural Gas Combustion Emissions

Emissions Source	Emission Point Identification	Rated Horsepower	Capacity (MMBtu/hr)	Emissions Factors <sup>1</sup>			Emissions (m.t.)			Emissions (m.t. CO <sub>2</sub> e)			Total Emissions	
				CO <sub>2</sub> (kg/MMBtu)	CH <sub>4</sub> (kg/MMBtu)	N <sub>2</sub> O (kg/MMBtu)	CO <sub>2</sub>	CH <sub>4</sub>	N <sub>2</sub> O	CO <sub>2</sub>	CH <sub>4</sub>	N <sub>2</sub> O	(m.t. CO <sub>2</sub> e)	(tons CO <sub>2</sub> e)
Compressor Engine (Cooper Bess	C-891	919	11.97	73.96	0.0030	0.00060	7,757.63	0.31	0.063	7,757.63	7.87	18.75	7,784	8,581
Compressor Engine (Cooper Bess	C-893	919	11.97	73.96	0.0030	0.00060	7,757.63	0.31	0.063	7,757.63	7.87	18.75	7,784	8,581
Compressor Engine Caterpillar G3	C-894	919	11.97	73.96	0.0030	0.00060	7,757.63	0.315	0.0629	7,757.63	7.87	18.75	7,784	8,581
Compressor Engine Caterpillar G3	C-895	919	11.97	73.96	0.0030	0.00060	7,757.63	0.315	0.0629	7,757.63	7.87	18.75	7,784	8,581
Compressor Engine Caterpillar G3	C-896	919	11.97	73.96	0.0030	0.00060	7,757.63	0.315	0.0629	7,757.63	7.87	18.75	7,784	8,581
Dehydrator Reboile	RB-1	--	0.75	53.06	0.0010	0.00010	348.60	0.007	0.0007	348.60	0.16	0.20	349	385
Dehydrator Reboile	RB-2	--	0.75	53.06	0.0010	0.00010	348.60	0.007	0.0007	348.60	0.16	0.20	349	385
<b>Total Natural Gas Combustion:</b>													<b>39,619</b>	<b>43,673</b>

Notes:  
1. Emission factors for GHG obtained from 40 CFR 98 Supart C, Tables C-1 and C-

Source ID Number	Description	Maximum Hours of Operation	Annual Gas Usage (scf/hr)	Annual Gas Processed (scf/yr)	CO <sub>2</sub> (mol %)	CH <sub>4</sub> (mol %)	Emission Factor N <sub>2</sub> O (m.t./MMscf)	Emissions			Global Warming Potential			Emissions			Total Emissions	
								CO <sub>2</sub> (m.t.)	CH <sub>4</sub> (m.t.)	N <sub>2</sub> O (m.t.)	CO <sub>2</sub>	CH <sub>4</sub>	N <sub>2</sub> O	CO <sub>2</sub> (m.t. CO <sub>2</sub> e)	CH <sub>4</sub> (m.t. CO <sub>2</sub> e)	N <sub>2</sub> O (m.t. CO <sub>2</sub> e)	(m.t. CO <sub>2</sub> e)	(tons CO <sub>2</sub> e)
Tank-1	Flare 1: Steady State	8,760	49	425,833	0.043	0.56	7.10E-07	1,174.71	0.0908	0.0000003	1	25	298	1,174.71	2.27	0.00009	1,176.98	1,297.40
<b>Total Flare Combustion:</b>																	#REF!	1,297.40

Note - CO<sub>2</sub> and N<sub>2</sub>O Emissions estimated using API Compendium Section 4.6

Dehy Units

Source ID Number	Description	Maximum Days of Operation	Annual Gas Processed (MMscf/yr)	Conversion Factor (m.t./ton)	Emissions <sup>1</sup>			Global Warming Potential			Emissions			Total Emissions	
					CO <sub>2</sub> (tons)	CH <sub>4</sub> (tons)	N <sub>2</sub> O (tons)	CO <sub>2</sub>	CH <sub>4</sub>	N <sub>2</sub> O	CO <sub>2</sub> (m.t. CO <sub>2</sub> e)	CH <sub>4</sub> (m.t. CO <sub>2</sub> e)	N <sub>2</sub> O (m.t. CO <sub>2</sub> e)	(m.t. CO <sub>2</sub> e)	(tons CO <sub>2</sub> e)
DEHY	GLYCOL DEHYDRATOR	365	27,754	1.10231	25.82	5.63	--	1	25	298	23.42	127.59	--	151.01	166.46

<sup>1</sup> Emissions estimated using process simulation and a natural gas feed rate of 150 MMcf/day.

Fugitive Sources

Emissions Source	Emission Point Identification	Annual Condensate Production (bbl/yr)	Annual Condensate Production (1,000 gal/yr)	Default Liquid CH <sub>4</sub> Content <sup>1</sup> (mol %)	Emission Factor VOC (lb/1,000 gal)	Emissions		Control (%)	Controlled VOC (m.t.)	Emissions <sup>2</sup> (m.t.)	Total Emissions	
						VOC (tons)	VOC (m.t.)			CH <sub>4</sub>	(m.t. CO <sub>2</sub> e)	(tons CO <sub>2</sub> e)
Condensate Truck Loading 1	LOAD1	16,425	690	27.40	4.79	1.65	1.50	0%	1.50	0.41	10.26	10.26
Produced Water Loading	LOAD2	17,520	736	28.40	-	0.76	0.69	0%	0.69	0.20	4.90	4.90

Notes:  
1. Default CH<sub>4</sub> content for crude oil per API compendium Section 5.4 and Appendix B.  
2. Emissions estimated using API Compendium, Section 5.1

# Section 7

## Information Used To Determine Emissions

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**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.
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**Heaters and Reboilers (RB-1, RB-2)**

- AP-42 Chapter 1.4 *Natural Gas Combustion*
- 40 CFR 98 Subpart C Table C-1 and Table C-2

**TEG Glycol Dehydrators (DEHY)**

- BR&E ProMax

**Flares (FLARE)**

- TNRCC RG-109 Emission Factors

**Condensate Tanks (TK-1, TK-2, TK-2a)**

- BR&E ProMax

**Condensate Loading (LOAD-1 and LOAD-2)**

- AP-42 Chapter 5.2, *Transportation and Marketing of Petroleum Liquids*
- BR&E ProMax

**Fugitives (FUG)**

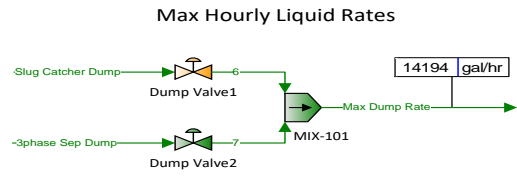
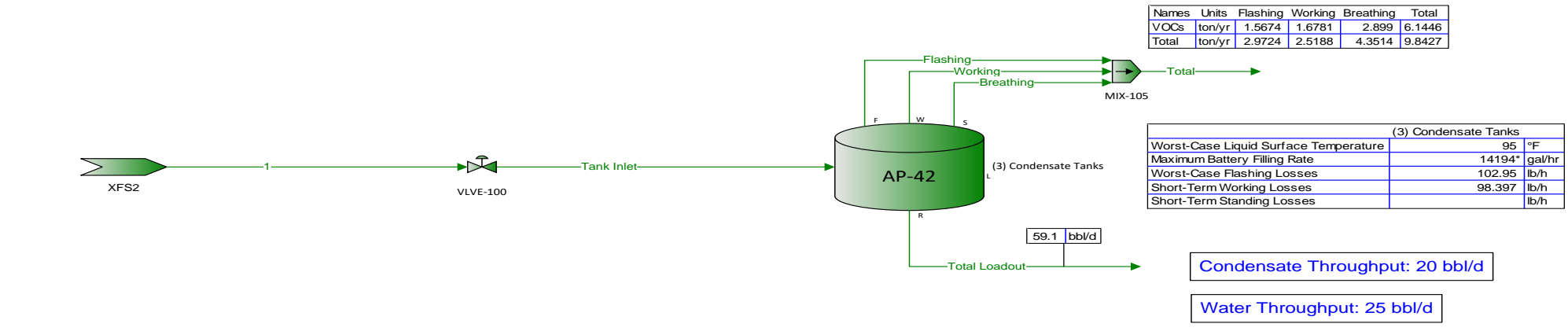
- Site Specific Analyses
- Table 2-4 of the EPA Protocol for Equipment Leak Emission Estimates, November 1995





Process Streams	Blowdown	Condenser Overheads	Condenser Recovered Liquids	DEHY 1 Wet Gas Feed	Dry Gas	Flash Gas	Still Overheads
Composition	Status:	Solved	Solved	Solved	Solved	Solved	Solved
Phase: Total	From Block:	TEG Makeup	BTEX Condenser	BTEX Condenser	SPLT-100	Gas/Glycol HEX	Rich Flash
	To Block:	--	--	BTEX Liquids	Glycol Contactor	--	Reflux
Mole Fraction		%	%	%	%	%	%
H2S	8.89784E-09	0.0997702	0.000233849	0.00149900	0.00148899	0.0130124	0.00262688
Nitrogen	3.06354E-14	0.0192060	7.38384E-07	1.78352	1.79149	0.367562	0.000462467
Carbon Dioxide	2.96058E-08	15.8858	0.0108915	2.11681	2.12068	8.98434	0.392553
Methane	2.37925E-10	9.70374	0.00140475	75.7151	76.0371	49.4992	0.234667
Ethane	3.25596E-09	10.8980	0.00822145	10.7114	10.7515	16.6975	0.270031
Propane	1.78173E-08	13.8997	0.0299817	5.54760	5.56592	11.8567	0.363434
i-Butane	6.44437E-09	2.31135	0.00982055	0.715573	0.717839	1.57838	0.0651535
n-Butane	6.06857E-08	9.23247	0.0620420	1.62705	1.63118	4.59521	0.282516
i-Pentane	6.31991E-08	2.60013	0.0460913	0.392757	0.393587	1.12014	0.107495
n-Pentane	1.07323E-07	2.77818	0.0639821	0.366328	0.366934	1.15145	0.129236
2,2-Dimethylbutane	5.28508E-09	0.0284646	0.000954089	0.00369116	0.00369604	0.0114808	0.00161549
Cyclopentane	1.47999E-06	1.16179	0.0499071	0.0304425	0.0301876	0.169914	0.0766389
2-Methylpentane	2.37659E-07	0.618326	0.0290037	0.0722722	0.0723153	0.235672	0.0431721
3-Methylpentane	2.87258E-07	0.445487	0.0238544	0.0422289	0.0422129	0.148787	0.0339912
n-Hexane	4.40947E-07	0.650384	0.0416778	0.0785072	0.0785159	0.254590	0.0563122
2,2-Dimethylpentane	1.82487E-08	0.0504544	0.00397377	0.00737673	0.00737890	0.0228030	0.00509125
Methylcyclopentane	2.63424E-06	1.14343	0.0865811	0.0408428	0.0404765	0.199731	0.111990
2,2,3-Trimethylbutane	0	0	0	0	0	0	0
Benzene	0.000596952	7.03507	0.855223	0.0482962	0.0442534	0.305490	1.00380
Cyclohexane	7.00661E-06	1.36844	0.142532	0.0577559	0.0571896	0.265809	0.172005
2-Methylhexane	4.47941E-08	0.0590975	0.00702867	0.00897245	0.00896618	0.0284335	0.00828050
3-Methylhexane	1.32367E-07	0.114538	0.0154422	0.0152664	0.0152391	0.0511744	0.0178247
1,1-Dimethylcyclopentane	5.15272E-07	0.0958659	0.0125804	0.00455760	0.00450926	0.0199218	0.0145828
Heptane	2.54510E-07	0.142407	0.0246186	0.0229048	0.0228630	0.0723656	0.0274505
Methylcyclohexane	7.16928E-06	0.602130	0.117387	0.0419360	0.0415214	0.163884	0.129041
2,5-Dimethylhexane	8.13084E-09	0.00408065	0.000978856	0.00116617	0.00116570	0.00314204	0.00105343
Toluene	0.00310551	4.36107	1.50230	0.0493219	0.0429768	0.258644	1.57103
2-Methylheptane	2.03506E-07	0.0368242	0.0129036	0.00904461	0.00901818	0.0266229	0.0134787
Octane	1.13371E-06	0.0927182	0.0456263	0.0264042	0.0262986	0.0735397	0.0467585
Ethylcyclohexane	5.91782E-06	0.0410686	0.0262215	0.00576429	0.00567324	0.0177371	0.0265785
Ethylbenzene	0.00173576	0.305257	0.310398	0.00773125	0.00647821	0.0307125	0.310275
p-Xylene	0.00344440	0.631465	0.643222	0.0163955	0.0137996	0.0660031	0.642939
o-Xylene	0.00268735	0.235917	0.252340	0.00457826	0.00355607	0.0178777	0.251945
Cyclooctane	0.0333694	0.0741868	0.119500	0.00109970	0.000617632	0.00474227	0.118411
Nonane	2.14459E-06	0.0269822	0.0331078	0.0127693	0.0126785	0.0297887	0.0329605
Isopropylbenzene	0.000389297	0.0357704	0.0675726	0.00173583	0.00146665	0.00593637	0.0668080
Propylbenzene	0.000374983	0.0171427	0.0409174	0.000874283	0.000711227	0.00289088	0.0403458
1,3,5-Trimethylbenzene	0.00146014	0.0343484	0.105377	0.00187634	0.00145632	0.00596734	0.103669
Isobutylbenzene	0.000106118	0.00209493	0.00805411	0.000169284	0.000137339	0.000486183	0.00791084
Butylbenzene	0.000608714	0.00332729	0.0225107	0.000350690	0.000261482	0.000910701	0.0220494
Decane	9.38198E-06	0.0142124	0.0473009	0.0129840	0.0128409	0.0246682	0.0465054
TEG	93.7631	1.43451E-10	1.87391E-05	0	0.000182979	0.000354300	1.82885E-05
Water	6.18900	13.1393	95.1182	0.395007	0.0136570	1.61638	93.1473
Molar Flow	lbmol/h	lbmol/h	lbmol/h	lbmol/h	lbmol/h	lbmol/h	lbmol/h
H2S	0	0.000818375	7.78667E-05	0.125147	0.123746	0.000505033	0.000896241
Nitrogen	0	0.000157539	2.45866E-07	148.901	148.887	0.0142657	0.000157785
Carbon Dioxide	0	0.130305	0.00362663	176.727	176.245	0.348698	0.133931
Methane	0	0.0795959	0.000467751	6321.26	6319.26	1.92115	0.0800636
Ethane	0	0.0893917	0.00273756	894.270	893.530	0.648059	0.0921293
Propane	0	0.114013	0.00998323	463.155	462.570	0.460179	0.123997
i-Butane	0	0.0189591	0.00327003	59.7413	59.6578	0.0612598	0.0222291
n-Butane	0	0.0757302	0.0206586	135.838	135.563	0.178348	0.0963888
i-Pentane	0	0.0213278	0.0153474	32.7902	32.7101	0.0434747	0.0366752
n-Pentane	0	0.0227883	0.0213046	30.5838	30.4950	0.0446896	0.0440929
2,2-Dimethylbutane	0	0.000233483	0.000317690	0.308165	0.307169	0.000445589	0.000551174
Cyclopentane	0	0.00952973	0.0166180	2.54156	2.50882	0.00659465	0.0261477
2-Methylpentane	0	0.00507188	0.00965758	6.03382	6.00995	0.00914684	0.0147295
3-Methylpentane	0	0.00365415	0.00794298	3.52558	3.50821	0.00577468	0.0115971
n-Hexane	0	0.00533483	0.0138778	6.55436	6.52527	0.00988108	0.0192126
2,2-Dimethylpentane	0	0.000413857	0.00132318	0.615864	0.613242	0.000885024	0.00173703
Methylcyclopentane	0	0.00937909	0.0288296	3.40986	3.36390	0.00775191	0.0382087
2,2,3-Trimethylbutane	0	0	0	0	0	0	0
Benzene	0	0.0577058	0.284770	4.03212	3.67779	0.0118566	0.342476
Cyclohexane	0	0.0112248	0.0474598	4.82189	4.75289	0.0103165	0.0586846
2-Methylhexane	0	0.000484753	0.00234039	0.749086	0.745158	0.00110355	0.00282514
3-Methylhexane	0	0.000939511	0.00514191	1.27455	1.26648	0.00198617	0.00608142
1,1-Dimethylcyclopentane	0	0.000786349	0.00418900	0.380502	0.374754	0.000773200	0.00497535
Heptane	0	0.00116810	0.00819746	1.91226	1.90009	0.00280863	0.00936556
Methylcyclohexane	0	0.00493903	0.0390871	3.50113	3.45074	0.00636062	0.0440262
2,5-Dimethylhexane	0	3.34719E-05	0.000325937	0.0973601	0.0968788	0.000121948	0.000359409
Toluene	0	0.0357721	0.500233	4.11776	3.57169	0.0100384	0.536006
2-Methylheptane	0	0.000302054	0.00429661	0.755111	0.749479	0.00103328	0.00459867
Octane	0	0.000760530	0.0151925	2.20442	2.18561	0.00285420	0.0159531
Ethylcyclohexane	0	0.000336869	0.00873119	0.481245	0.471489	0.000688408	0.00906806
Ethylbenzene	0	0.00250390	0.103356	0.645462	0.538388	0.00119201	0.105860
p-Xylene	0	0.00517965	0.214178	1.36882	1.14685	0.00256169	0.219358
o-Xylene	0	0.00193513	0.0840236	0.382227	0.295536	0.000693864	0.0859588
Cyclooctane	0	0.000608524	0.0397909	0.0918108	0.0513299	0.000184055	0.0403995
Nonane	0	0.000221324	0.0110242	1.06608	1.05368	0.00115615	0.0112455
Isopropylbenzene	0	0.000293410	0.0225002	0.144920	0.121889	0.000230401	0.0227936
Propylbenzene	0	0.000140614	0.0136246	0.0729916	0.0591083	0.000112200	0.0137652
1,3,5-Trimethylbenzene	0	0.000281746	0.0350881	0.156651	0.121031	0.000231603	0.0353699
Isobutylbenzene	0	1.71838E-05	0.00268184	0.0141331	0.0114139	1.88696E-05	0.00269902
Butylbenzene	0	2.72924E-05	0.00749555	0.0292782	0.0217312	3.53459E-05	0.00752284
Decane	0	0.000116579	0.0157501	1.08400	1.06718	0.000957414	0.0158667
TEG	0	1.17667E-12	6.23969E-06	0	0.0152069	1.37510E-05	6.23969E-06
Water	0	0.107777	31.6723	32.9781	1.13500	0.0627346	31.7800

Process Streams		Blowdown	Condenser Overheads	Condenser Recovered Liquids	DEHY 1 Wet Gas Feed	Dry Gas	Flash Gas	Still Overheads
Composition	Status:	Solved	Solved	Solved	Solved	Solved	Solved	Solved
Phase: Total	From Block:	TEG Makeup	BTEX Condenser	BTEX Condenser	SPLT-100	Gas/Glycol HEX	Rich Flash	Reflux
	To Block:	--	--	BTEX Liquids	Glycol Contactor	--	--	BTEX Condenser
Mass Fraction		%	%	%	%	%	%	%
H2S		2.13592E-09	0.0713727	0.000366620	0.00234301	0.00232800	0.0147666	0.00400364
Nitrogen		6.04477E-15	0.0112934	9.51518E-07	2.29143	2.30230	0.342854	0.000579362
Carbon Dioxide		9.17724E-09	14.6749	0.0220497	4.27260	4.28157	13.1658	0.772588
Methane		2.68844E-11	3.26761	0.00103667	55.7079	55.9599	26.4413	0.168355
Ethane		6.89586E-10	6.87838	0.0113720	14.7717	14.8309	16.7180	0.363108
Propane		5.53386E-09	12.8653	0.0608164	11.2193	11.2594	17.4090	0.716678
i-Butane		2.63822E-09	2.81987	0.0262571	1.90748	1.91404	3.05470	0.169349
n-Butane		2.48438E-08	11.2637	0.165881	4.33717	4.34936	8.89327	0.734323
i-Pentane		3.21166E-08	3.93772	0.152974	1.29962	1.30272	2.69102	0.346833
n-Pentane		5.45394E-08	4.20736	0.212352	1.21217	1.21450	2.76622	0.416981
2,2-Dimethylbutane		3.20793E-09	0.0514883	0.00378217	0.0145885	0.0146117	0.0329434	0.00622573
Cyclopentane		7.31089E-07	1.71030	0.161010	0.0979186	0.0971252	0.396793	0.240366
2-Methylpentane		1.44254E-07	1.11846	0.114976	0.285639	0.285887	0.676246	0.166375
3-Methylpentane		1.74359E-07	0.805821	0.0945628	0.166900	0.166882	0.426935	0.130994
n-Hexane		2.67645E-07	1.17645	0.165218	0.310282	0.310400	0.730531	0.217014
2,2-Dimethylpentane		1.28794E-08	0.106120	0.0183167	0.0339003	0.0339194	0.0760820	0.0228141
Methylcyclopentane		1.56152E-06	2.01991	0.335193	0.157646	0.156274	0.559709	0.421487
2,2,3-Trimethylbutane		0	0	0	0	0	0	0
Benzene		0.000328432	11.5347	3.07302	0.173019	0.158578	0.794561	3.50644
Cyclohexane		4.15337E-06	2.41741	0.551802	0.222927	0.220801	0.744879	0.647360
2-Methylhexane		3.16145E-08	0.124298	0.0323980	0.0412335	0.0412159	0.0948681	0.0371053
3-Methylhexane		9.34215E-08	0.240906	0.0711794	0.0701577	0.0700512	0.170743	0.0798730
1,1-Dimethylcyclopentane		3.56349E-07	0.197576	0.0568217	0.0205234	0.0203112	0.0651317	0.0640313
Heptane		1.79626E-07	0.299521	0.113477	0.105261	0.105097	0.241447	0.123007
Methylcyclohexane		4.95809E-06	1.24097	0.530197	0.188843	0.187026	0.535796	0.566604
2,5-Dimethylhexane		6.54184E-09	0.00978418	0.00514355	0.00610940	0.00610863	0.0119509	0.00538124
Toluene		0.00201541	8.43440	6.36748	0.208422	0.181658	0.793520	6.47335
2-Methylheptane		1.63735E-07	0.0882935	0.0678039	0.0473836	0.0472579	0.101261	0.0688534
Octane		9.12151E-07	0.222310	0.239750	0.138328	0.137812	0.279711	0.238857
Ethylcyclohexane		4.67727E-06	0.0967325	0.135353	0.0296655	0.0292048	0.0662733	0.133375
Ethylbenzene		0.00129796	0.680249	1.51590	0.0376439	0.0315513	0.108570	1.47309
p-Xylene		0.00257564	1.40718	3.14131	0.0798308	0.0672094	0.233324	3.05249
o-Xylene		0.00200954	0.525728	1.23236	0.0222918	0.0173194	0.0631985	1.19616
Cyclooctane		0.0263742	0.174739	0.616850	0.00565950	0.00317945	0.0177191	0.594205
Nonane		1.93735E-06	0.0726394	0.195332	0.0751114	0.0745971	0.127215	0.189048
Isopropylbenzene		0.000329568	0.0902439	0.373606	0.00956851	0.00808687	0.0237579	0.359092
Propylbenzene		0.000317450	0.0432487	0.226230	0.00481936	0.00392160	0.0115696	0.216858
1,3,5-Trimethylbenzene		0.00123611	0.0866566	0.582624	0.0103431	0.00802991	0.0238819	0.557220
Isobutylbenzene		0.000100320	0.00590201	0.0497277	0.00104206	0.000845643	0.00217282	0.0474829
Butylbenzene		0.000575458	0.00937394	0.138985	0.00215873	0.00161003	0.00407006	0.132346
Decane		9.40227E-06	0.0424461	0.309590	0.0847267	0.0838157	0.116869	0.295907
TEG		99.1775	4.52185E-10	0.000129452	0	0.00126059	0.00177165	0.000122821
Water		0.785328	4.96861	78.8268	0.326370	0.0112870	0.969614	75.0437
Mass Flow		lb/h	lb/h	lb/h	lb/h	lb/h	lb/h	lb/h
H2S		0	0.0278909	0.00265376	4.26513	4.21737	0.0172120	0.0305447
Nitrogen		0	0.00441320	6.88753E-06	4171.22	4170.82	0.399631	0.00442009
Carbon Dioxide		0	5.73465	0.159606	7777.68	7756.44	15.3460	5.89426
Methane		0	1.27691	0.00750387	101409	101376	30.8200	1.28442
Ethane		0	2.68792	0.0823158	26889.8	26867.6	19.4865	2.77024
Propane		0	5.02749	0.440217	20423.1	20397.3	20.2919	5.46771
i-Butane		0	1.10194	0.190061	3472.30	3467.44	3.56056	1.29200
n-Butane		0	4.40160	1.20072	7895.21	7879.24	10.3660	5.60233
i-Pentane		0	1.53878	1.10730	2365.78	2359.99	3.13665	2.64607
n-Pentane		0	1.64415	1.53710	2206.58	2200.18	3.22430	3.18125
2,2-Dimethylbutane		0	0.0201205	0.0273771	26.5563	26.4704	0.0383988	0.0474976
Cyclopentane		0	0.668348	1.16547	178.247	175.951	0.462502	1.83381
2-Methylpentane		0	0.437071	0.832246	519.967	517.909	0.788232	1.26932
3-Methylpentane		0	0.314897	0.684489	303.818	302.321	0.497635	0.999387
n-Hexane		0	0.459731	1.19592	564.824	562.317	0.851506	1.65565
2,2-Dimethylpentane		0	0.0414693	0.132585	61.7108	61.4481	0.0886812	0.174054
Methylcyclopentane		0	0.789339	2.42628	286.972	283.104	0.652396	3.21562
2,2,3-Trimethylbutane		0	0	0	0	0	0	0
Benzene		0	4.50751	22.2439	314.957	287.279	0.926139	26.7514
Cyclohexane		0	0.944671	3.99419	405.808	400.000	0.868230	4.93886
2-Methylhexane		0	0.0485732	0.234512	75.0599	74.6662	0.110578	0.283085
3-Methylhexane		0	0.0941409	0.515230	127.712	126.904	0.199018	0.609370
1,1-Dimethylcyclopentane		0	0.0772085	0.411301	37.3600	36.7956	0.0759175	0.488510
Heptane		0	0.117046	0.821401	191.613	190.393	0.281431	0.938448
Methylcyclohexane		0	0.484944	3.83781	343.762	338.815	0.624524	4.32275
2,5-Dimethylhexane		0	0.00382345	0.0372313	11.1213	11.0663	0.0139299	0.0410548
Toluene		0	3.29598	46.0907	379.404	329.090	0.924926	49.3867
2-Methylheptane		0	0.0345032	0.490796	86.2552	85.6119	0.118030	0.525299
Octane		0	0.0868742	1.73542	251.808	249.659	0.326031	1.82230
Ethylcyclohexane		0	0.0378010	0.979750	54.0018	52.9070	0.0772481	1.01755
Ethylbenzene		0	0.265827	10.9728	68.5255	57.1580	0.126549	11.2386
p-Xylene		0	0.549897	22.7383	145.321	121.756	0.271962	23.2882
o-Xylene		0	0.205443	8.92037	40.5791	31.3756	0.0736641	9.12581
Cyclooctane		0	0.0682841	4.46505	10.3023	5.75986	0.0206534	4.53333
Nonane		0	0.0283859	1.41390	136.730	135.139	0.148282	1.44229
Isopropylbenzene		0	0.0352654	2.70433	17.4181	14.6501	0.0276922	2.73960
Propylbenzene		0	0.0169006	1.63756	8.77298	7.10433	0.0134855	1.65446
1,3,5-Trimethylbenzene		0	0.0338635	4.21730	18.8281	14.5469	0.0278367	4.25116
Isobutylbenzene		0	0.00230638	0.359952	1.89692	1.53196	0.00253264	0.362258
Butylbenzene		0	0.00366313	1.00604	3.92966	2.91672	0.00474406	1.00970
Decane		0	0.0165870	2.24096	154.233	151.840	0.136222	2.25754
TEG		0	1.76704E-10	0.000937033	0	2.28367	0.00206503	0.000937033
Water		0	1.94163	570.584	594.110	20.4473	1.13018	572.526
Process Streams		Blowdown	Condenser Overheads	Condenser Recovered Liquids	DEHY 1 Wet Gas Feed	Dry Gas	Flash Gas	Still Overheads
Properties	Status:	Solved	Solved	Solved	Solved	Solved	Solved	Solved
Phase: Total	From Block:	TEG Makeup	BTEX Condenser	BTEX Condenser	SPLT-100	Gas/Glycol HEX	Rich Flash	Reflux
	To Block:	--	--	BTEX Liquids	Glycol Contactor	--	--	BTEX Condenser
Property	Units							
Temperature	°F		120*	120	124.742	134.240	141.396	203.906
Pressure	psia	12.91	12.91	12.91	1003.62	1007.91	57.91	13.41
Molecular Weight	lb/lbmol	141.975	47.6409	21.7386	21.8040	21.7981	30.0321	22.3613
Mass Density	lb/ft^3		0.100020	58.9596	4.20107	4.09254	0.274699	0.0424595
Mass Flow	lb/h	0	39.0779	723.846	182036	181159	116.560	762.924
Std Vapor Volumetric Flow	MMSCFD	0	0.00747061	0.303263	76.0371	75.6912	0.0353482	0.310734
Std Liquid Volumetric Flow	sgpm	0	0.123877	1.50658	1004.99	1002.83	0.527318	1.63046





Process Streams	Breathing		Flashing	Max Dump Rate	Slug Catcher Dump	Tank Inlet	Total	Total Loadout	Working	1	3phase Sep Dump	6	7
Composition	Status:	Solvent	Solvent	Solvent	Solvent	Solvent	Solvent	Solvent	Solvent	Solvent	Solvent	Solvent	Solvent
Phase: Total	From Block:	(3) Condensate Tanks	(3) Condensate Tanks	MIX-101	MIX-105	MIX-105	MIX-105	MIX-105	MIX-105	MIX-105	MIX-105	MIX-101	MIX-101
To Block:	(3) Condensate Tanks	(3) Condensate Tanks	(3) Condensate Tanks	(3) Condensate Tanks	(3) Condensate Tanks	(3) Condensate Tanks	(3) Condensate Tanks	(3) Condensate Tanks	(3) Condensate Tanks	(3) Condensate Tanks	(3) Condensate Tanks	(3) Condensate Tanks	(3) Condensate Tanks
Mole Fraction	MIX-105	MIX-105	MIX-105	MIX-105	MIX-105	MIX-105	MIX-105	MIX-105	MIX-105	MIX-105	MIX-105	MIX-105	MIX-105
	%	%	%	%	%	%	%	%	%	%	%	%	%
H2S	0.0821630	0.0474760	2.88668E-06	2.17552E-05*	0.000235150	0.0697722	0.000118921	0.0821630	0.000235150	0	0*	2.17552E-05	0
Nitrogen	0.0208279	0.346221	4.55722E-05	0.000343451*	0.000228717	0.137064	0	0.0208279	0.000228717	0	0*	0.000343451	0
Carbon Dioxide	8.41963	7.35909	0.00451197	0.0340040*	0.0134177	8.04091	0	8.41963	0.0134177	0	0*	0.0340040	0
Methane	9.93299	41.2890	0.0223880	0.168725*	0.0352658	21.1340	0	9.93299	0.0352658	0	0*	0.168725	0
Ethane	27.0770	17.3521	0.0876921	0.660884*	0.0393859	23.6030	0	27.0770	0.0393859	0	0*	0.660884	0
Propane	23.7067	13.8678	0.279041	2.10297*	0.0882693	20.1921	0	23.7067	0.0882693	0	0*	2.10297	0
i-Butane	3.36085	2.01248	0.0977808	0.736916*	0.0272414	2.87918	0.0546664	3.36085	0.0272414	0	0*	0.736916	0
n-Butane	9.29868	5.63893	0.345456	2.60350*	0.120396	7.99135	0.107240	9.29868	0.120396	0	0*	2.60350	0
i-Pentane	2.20986	1.38040	0.243201	1.83286*	0.0847525	1.91356	0.0816957	2.20986	0.0847525	0	0*	1.83286	0
n-Pentane	2.14170	1.35174	0.296273	2.23283*	0.110544	1.85952	0.107621	2.14170	0.110544	0	0*	2.23283	0
2,2-Dimethylbutane	0.0213532	0.0135903	0.00508348	0.0383112*	0.00174754	0.0185801	0.00171940	0.0213532	0.00174754	0	0*	0.0383112	0
Cyclopentane	0.579295	0.370284	0.0416604	0.313970*	0.0554973	0.504632	0.0547466	0.579295	0.0554973	0	0*	0.313970	0
2-Methylpentane	0.424461	0.273364	0.146551	1.10447*	0.0517313	0.370487	0.0511985	0.424461	0.0517313	0	0*	1.10447	0
3-Methylpentane	0.275590	0.178277	0.0973715	0.733832*	0.0388363	0.240828	0.0384986	0.275590	0.0388363	0	0*	0.733832	0
n-Hexane	0.432219	0.282699	0.232988	1.75590*	0.0777841	0.378807	0.0772810	0.432219	0.0777841	0	0*	1.75590	0
2,2-Dimethylpentane	0.0369526	0.0241730	0.0285955	0.215508*	0.00842248	0.0323875	0.00838242	0.0369526	0.00842248	0	0*	0.215508	0
Methylcyclopentane	0.537195	0.348973	0.119833	0.903110*	0.103740	0.469958	0.103128	0.537195	0.103740	0	0*	0.903110	0
2,2,3-Trimethylbutane	0	0	0	0*	0	0	0	0	0	0	0*	0	0
Benzene	3.19804	2.10309	0.137972	1.03982*	0.858584	2.80690	0.855327	3.19804	0.858584	0	0*	1.03982	0
Cyclohexane	0.631600	0.415140	0.251116	1.89251*	0.179240	0.554276	0.178613	0.631600	0.179240	0	0*	1.89251	0
2-Methylhexane	0.0419799	0.0279089	0.0551518	0.415647*	0.0156052	0.0369534	0.0155695	0.0419799	0.0156052	0	0*	0.415647	0
3-Methylhexane	0.0740571	0.0495527	0.105177	0.792661*	0.0317477	0.0653037	0.0316917	0.0740571	0.0317477	0	0*	0.792661	0
1,1-Dimethylcyclopentane	0.0434110	0.0287965	0.0263481	0.198570*	0.0164785	0.0381904	0.0164423	0.0434110	0.0164785	0	0*	0.198570	0
Heptane	0.0991007	0.0669344	0.209848	1.58150*	0.0572605	0.0876103	0.0572097	0.0991007	0.0572605	0	0*	1.58150	0
Methylcyclohexane	0.288955	0.194330	0.402397	3.03263*	0.178451	0.255188	0.178322	0.288955	0.178451	0	0*	3.03263	0
2,5-Dimethylhexane	0.00412076	0.00281403	0.0169169	0.127493*	0.00362987	0.00365397	0.00362983	0.00412076	0.00362987	0	0*	0.127493	0
Toluene	1.59871	1.08841	0.552584	1.16450*	1.55702	1.41642	1.55726	1.59871	1.55702	0	0*	1.16450	0
2-Methylheptane	0.0317427	0.0219183	0.186401	1.40480*	0.0420558	0.0282333	0.0420789	0.0317427	0.0420558	0	0*	1.40480	0
Octane	0.0877945	0.0613817	0.833636	6.28262*	0.176219	0.0783593	0.176382	0.0877945	0.176219	0	0*	6.28262	0
Ethylcyclohexane	0.0236351	0.0164383	0.182441	1.37495*	0.0544492	0.0210642	0.0545050	0.0236351	0.0544492	0	0*	1.37495	0
Ethylbenzene	0.0997812	0.0704795	0.312229	2.35309*	0.352937	0.0893141	0.353377	0.0997812	0.352937	0	0*	2.35309	0
p-Xylene	0.206683	0.145529	0.705968	5.32047*	0.740672	0.184838	0.741601	0.206683	0.740672	0	0*	5.32047	0
o-Xylene	0.0712408	0.0503698	0.236728	1.78408*	0.284219	0.0637853	0.284587	0.0712408	0.284219	0	0*	1.78408	0
Cyclooctane	0.0222158	0.0157784	0.0749514	0.564865*	0.128733	0.0199163	0.128915	0.0222158	0.128733	0	0*	0.564865	0
Nonane	0.0390762	0.0282436	1.32965	10.0208*	0.242169	0.0352066	0.242515	0.0390762	0.242169	0	0*	10.0208	0
Isopropylbenzene	0.0120001	0.00867146	0.149403	1.12596*	0.0896781	0.0108110	0.0898100	0.0120001	0.0896781	0	0*	1.12596	0
Propylbenzene	0.00577665	0.00418793	0.0962846	0.725641*	0.0552199	0.00520913	0.0553035	0.00577665	0.0552199	0	0*	0.725641	0
1,3,5-Trimethylbenzene	0.0114852	0.00639385	0.279626	2.10737*	0.147204	0.0103809	0.147432	0.0114852	0.147204	0	0*	2.10737	0
Isobutylbenzene	0.000807410	0.000589212	0.0293453	0.221158*	0.0125508	0.00023465	0.0125285	0.000807410	0.0125508	0	0*	0.221158	0
Butylbenzene	0.00135392	0.00101535	0.131787	0.993199*	0.0428122	0.00123298	0.0428817	0.00135392	0.0428122	0	0*	0.993199	0
Decane	0.0402236	0.0300305	4.91272	37.0243*	0.821294	0.0365824	0.822806	0.0402236	0.821294	0	0*	37.0243	0
Water	4.80857	3.42329	96.7328	0.0131577*	93.0543	4.31372	93.2026	4.80857	93.0543	100*	0.0131577	100	0
Slur Flow	lbmol/h	lbmol/h	lbmol/h	lbmol/h	lbmol/h	lbmol/h	lbmol/h	lbmol/h	lbmol/h	lbmol/h	lbmol/h	lbmol/h	lbmol/h
H2S	1.89984E-05	9.63226E-06	9.39937E-05	9.39937E-05*	8.00370E-05	3.96279E-05	4.04091E-05	1.09972E-05	8.00370E-05	0	0*	9.39937E-05	0
Nitrogen	4.81601E-06	7.02436E-05	0.00148388	0.00148388*	7.78473E-05	7.78473E-05	0	2.78774E-06	7.78473E-05	0	0*	0.00148388	0
Carbon Dioxide	0.00194690	0.00140306	0.146915	0.146915*	0.00456693	0.00456693	0	0.00112696	0.00456693	0	0*	0.146915	0
Methane	0.00229679	0.00837700	0.728980	0.728980*	0.0120033	0.0120033	0	0.00132950	0.0120033	0	0*	0.728980	0
Ethane	0.00626097	0.00352051	2.85536	2.85536*	0.0134056	0.0134056	0	0.00362416	0.0134056	0	0*	2.85536	0
Propane	0.00548167	0.00281359	9.08590	9.08590*	0.0300439	0.0114683	0.0185755	0.00317306	0.0300439	0	0*	9.08590	0
i-Butane	0.000777124	0.000408306	3.18386	3.18386*	0.00927204	0.00163527	0.00763678	0.000449837	0.00927204	0	0*	3.18386	0
n-Butane	0.00215012	0.00114406	11.2485	11.2485*	0.0409788	0.00453878	0.0364400	0.00124460	0.0409788	0	0*	11.2485	0
i-Pentane	0.000510984	0.000280065	7.91891	7.91891*	0.0288469	0.00108683	0.0277600	0.000295782	0.0288469	0	0*	7.91891	0
n-Pentane	0.000495223	0.000274251	9.64698	9.64698*	0.0376255	0.00105613	0.0365693	0.000286660	0.0376255	0	0*	9.64698	0
2,2-Dimethylbutane	4.93747E-06	2.75729E-06	0.165524	0.165524*	0.000594803	1.05528E-05	0.000584250	2.85805E-06	0.000594803	0	0*	0.165524	0
Cyclopentane	0.000133950	7.15257E-05	1.35651	1.35651*	0.0188894	0.000286612	0.0186028	7.75367E-05	0.0188894	0	0*	1.35651	0
2-Methylpentane	9.81476E-05	5.54620E-05	4.77187	4.77187*	0.0176076	0.000210422	0.0173971	5.68127E-05	0.0176076	0	0*	4.77187	0
3-Methylpentane	6.37243E-05	3.61700E-05	3.17053	3.17053*	0.0132185	0.000136781	0.0130818	3.68867E-05	0.0132185	0	0*	3.17053	0
n-Hexane	9.99413E-05	5.73558E-05	7.58637	7.58637*	0.0264751	0.000215148	0.0262599	5.78510E-05	0.0264751	0	0*	7.58637	0
2,2-Dimethylpentane	8.54449E-06	4.90438E-06	0.931103	0.931103*	0.00286673	1.83949E-05	0.00284833	4.94597E-06	0.00286673	0	0*	0.931103	0
Methylcyclopentane	0.000124215	7.08020E-05	3.90190	3.90190*	0.0353097	0.000266918	0.0350427	7.19016E-05	0.0353097	0	0*	3.90190	0
2,2,3-Trimethylbutane	0	0	0	0*	0	0	0	0	0	0	0*	0	0
Benzene	0.000739479	0.000426689	4.49254	4.49254*	0.292233	0.00159421	0.290639	0.000428047	0.292233	0	0*	4.49254	0
Cyclohexane	0.000146044	8.42264E-05	8.17662	8.17662*	0.0610073	0.000314808	0.0606924	8.45374E-05	0.0610073	0	0*	8.17662	0
2-Methylhexane	9.70695E-06	5.66234E-06	1.79581	1.79581*	0.00531147	2.09881E-05	0.00529048	5.61886E-06	0.00531147	0	0*	1.79581	0
3-Methylhexane	1.71241E-05	1.00536E-05	3.42470	3.42470*	0.0108059	3.70900E-05	0.0107688	9.91229E-06	0.0108059	0	0*	3.42470	0
1,1-Dimethylcyclopentane	1.00379E-05	5.84242E-06	0.857925	0.857925*	0.00560873	2.16907E-05	0.00558704	5.81041E-06	0.00560873	0	0*	0.857925	0
Heptane	2.29149E-05	1.35801E-05	6.83291	6.83291*	0.0194895	4.97593E-05	0.0194398	1.32643E-05	0.0194895	0	0*	6.83291	0
Methylcyclohexane	6.68146E-05	3.94472E-05	13.1025	13.1025*	0.0607385	0.000144937	0.0605936	3.86756E-05	0.0607385	0	0*	13.1025	0
2,5-Dimethylhexane	9.52838E-07	5.70930E-07	0.550835	0.550835*	0.00123548	2.07532E-06	0.00123341	5.51550E-07	0.00123548	0	0*	0.550835	0
Toluene	0.000369668	0.000220823	17.9928	17.9928*	0.529957	0.000804474	0.529952	0.000213982	0.529957	0	0*	17.9928	0
2-Methylheptane	7.33983E-06	4.44694E-06	6.06945	6.06945*	0.0143144	1.60354E-05							

Process Streams	Breathing		Flashing	Max Dump Rate	Slug Catcher Dump	Tank Inlet	Total	Total Loadout	Working	1	3phase Sep Dump	6	7
Composition	Status:	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved
Phase: Total	From Block:	(3) Condensate Tanks	(3) Condensate Tanks	MIX-101	--	VLVE-100	MIX-105	(3) Condensate Tanks	(3) Condensate Tanks	XFS2	--	Dump Valve1	Dump Valve2
	To Block:	MIX-105	MIX-105	--	Dump Valve1	(3) Condensate Tanks	--	--	MIX-105	VLVE-100	--	MIX-101	MIX-101
Mass Flow		lb/h	lb/h	lb/h	lb/h	lb/h	lb/h	lb/h	lb/h	lb/h	lb/h	lb/h	lb/h
H2S		0.000647483	0.000328276	0.00320339	0.00320339*	0.00272773	0.00135055	0.00137718	0.000374795	0.00272773		0*	0.00320339
Nitrogen		0.000134913	0.00196776	0.0415686	0.0415686*	0.00218077	0.00218077	0	7.80941E-05	0.00218077		0*	0.0415686
Carbon Dioxide		0.0856823	0.0657090	6.46565	6.46565*	0.200988	0.200988	0	0.0495971	0.200988		0*	6.46565
Methane		0.0368462	0.134388	11.6946	11.6946*	0.192562	0.192562	0	0.0213284	0.192562		0*	11.6946
Ethane		0.188261	0.105658	85.8579	85.8579*	0.403094	0.403094	0	0.108975	0.403094		0*	85.8579
Propane		0.241718	0.124067	400.648	400.648*	1.32480	0.505703	0.819099	0.139918	1.32480		0*	400.648
i-Butane		0.0451681	0.0237316	185.053	185.053*	0.538912	0.0950453	0.443866	0.0261455	0.538912		0*	185.053
n-Butane		0.124970	0.0664956	653.786	653.786*	2.38178	0.263804	2.11797	0.0723387	2.38178		0*	653.786
i-Pentane		0.0368668	0.0202064	571.340	571.340*	2.08127	0.0784136	2.00285	0.0213403	2.08127		0*	571.340
n-Pentane		0.0357298	0.0197869	696.018	696.018*	2.71463	0.0761988	2.63843	0.0206821	2.71463		0*	696.018
2,2-Dimethylbutane		0.000425488	0.000237610	14.2641	14.2641*	0.0512574	0.000909392	0.0503480	0.000246293	0.0512574		0*	14.2641
Cyclopentane		0.00939428	0.00526878	95.1361	95.1361*	1.32477	0.0201009	1.30467	0.00543787	1.32477		0*	95.1361
2-Methylpentane		0.00845790	0.00477946	411.218	411.218*	1.51734	0.0181332	1.49920	0.00489585	1.51734		0*	411.218
3-Methylpentane		0.00549146	0.00311696	273.222	273.222*	1.13911	0.0117872	1.12733	0.00317873	1.13911		0*	273.222
n-Hexane		0.00861248	0.00494266	653.758	653.758*	2.28150	0.0185405	2.26296	0.00498533	2.28150		0*	653.758
2,2-Dimethylpentane		0.000856175	0.000491429	93.2984	93.2984*	0.287251	0.00184320	0.285408	0.000495596	0.287251		0*	93.2984
Methylcyclopentane		0.0104539	0.00595866	328.382	328.382*	2.97164	0.0224637	2.94918	0.00605120	2.97164		0*	328.382
2,2,3-Trimethylbutane		0	0	0	0*	0	0	0	0	0		0*	0
Benzene		0.0577621	0.0333294	350.921	350.921*	22.8268	0.124527	22.7023	0.0334355	22.8268		0*	350.921
Cyclohexane		0.0122910	0.00708845	688.140	688.140*	5.13434	0.0264941	5.10784	0.00711463	5.13434		0*	688.140
2-Methylhexane		0.000972655	0.000567377	179.943	179.943*	0.532220	0.00210305	0.530117	0.000563021	0.532220		0*	179.943
3-Methylhexane		0.00171587	0.00100739	343.162	343.162*	1.08277	0.00371649	1.07905	0.000993231	1.08277		0*	343.162
1,1-Dimethylcyclopentane		0.000985578	0.000573644	84.2363	84.2363*	0.550700	0.00212972	0.548570	0.000570501	0.550700		0*	84.2363
Heptane		0.00229612	0.00136075	684.671	684.671*	1.95289	0.00498598	1.94790	0.00132911	1.95289		0*	684.671
Methylcyclohexane		0.00656026	0.00387316	1286.49	1286.49*	5.96367	0.0142308	5.94944	0.00379740	5.96367		0*	1286.49
2,5-Dimethylhexane		0.000108841	6.52165E-05	62.9211	62.9211*	0.141127	0.000237061	0.140890	6.30027E-05	0.141127		0*	62.9211
Toluene		0.0340607	0.0203463	1657.83	1657.83*	48.8294	0.0741230	48.7552	0.0197160	48.8294		0*	1657.83
2-Methylheptane		0.000838418	0.000507967	693.304	693.304*	1.63511	0.00183170	1.63328	0.000485318	1.63511		0*	693.304
Octane		0.00231891	0.00142255	3100.64	3100.64*	6.85130	0.00508375	6.84621	0.00134230	6.85130		0*	3100.64
Ethylcyclohexane		0.000613254	0.000374243	666.598	666.598*	2.07960	0.00134248	2.07826	0.000354981	2.07960		0*	666.598
Ethylbenzene		0.00244947	0.00151809	1079.33	1079.33*	12.7533	0.00538543	12.7480	0.00141787	12.7533		0*	1079.33
p-Xylene		0.00507373	0.0013463	2440.43	2440.43*	26.7641	0.0111453	26.7530	0.00293693	26.7641		0*	2440.43
o-Xylene		0.00174885	0.00108494	818.337	818.337*	10.2702	0.00384610	10.2664	0.00101232	10.2702		0*	818.337
Cyclooctane		0.000576429	0.000359218	273.856	273.856*	4.91673	0.00126931	4.91546	0.00033666	4.91673		0*	273.856
Nonane		0.00115885	0.000734935	5552.81	5552.81*	10.5716	0.00256459	10.5690	0.000670801	10.5716		0*	5552.81
Isopropylbenzene		0.000333503	0.000211456	584.701	584.701*	3.66865	0.000738007	3.66792	0.000193048	3.66865		0*	584.701
Propylbenzene		0.000160543	0.000102124	376.818	376.818*	2.25900	0.000355597	2.25864	9.29303E-05	2.25900		0*	376.818
1,3,5-Trimethylbenzene		0.000319193	0.000204686	1094.34	1094.34*	6.02198	0.000708644	6.02127	0.000184765	6.02198		0*	1094.34
Isobutylbenzene		2.50580E-05	1.60449E-05	128.248	128.248*	0.571441	5.56077E-05	0.571386	1.45048E-05	0.571441		0*	128.248
Butylbenzene		4.20191E-05	2.76492E-05	575.948	575.948*	1.95580	9.39910E-05	1.95571	2.43227E-05	1.95580		0*	575.948
Decane		0.00132334	0.000868894	22760.0	22760.0*	39.7735	0.00295625	39.7705	0.000766014	39.7735		0*	22760.0
Water		0.0200308	0.0125123	50877.4	1.02413*	570.589	0.0441380	570.545	0.0115948	570.589	50876.4*	1.02413	50876.4

Process Streams	Breathing		Flashing	Max Dump Rate	Slug Catcher Dump	Tank Inlet	Total	Total Loadout	Working	1	3phase Sep Dump	6	7
Properties	Status:	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved	Solved
Phase: Total	From Block:	(3) Condensate Tanks	(3) Condensate Tanks	MIX-101	--	VLVE-100	MIX-105	(3) Condensate Tanks	(3) Condensate Tanks	XFS2	--	Dump Valve1	Dump Valve2
	To Block:	MIX-105	MIX-105	--	Dump Valve1	(3) Condensate Tanks	--	--	MIX-105	VLVE-100	--	MIX-101	MIX-101
Property	Units												
Temperature	*F	75.6517	75.6517	70.3587	70*	116.094	75.1974	75.6517	75.6517	116.094		70*	70.7913
Pressure	psia	12.88	12.88	12.91	12.91*	12.88	12.88	12.88	12.88	12.91		82.91*	12.91*
Molecular Weight	lb/lbmol	42.9653	33.4484	30.9698	115.646	23.7130	39.5657	23.6866	42.9653	23.7130		18.0153	18.0153
Mass Density	lb/ft^3	0.100216	0.0755546	52.9085	46.3342	19.9497	0.0912305	58.0709	0.100216	19.9497		62.2854	45.7438
Mass Flow	lb/h	0.993481	0.678624	100841	49964.8	807.111	2.24718	804.864	0.575076	807.111		50876.4	49964.8
Std Vapor Volumetric Flow	MMSCFD	0.000210594	0.000184782	29.6555	3.93496	0.309992	0.000517278	0.309475	0.000121902	0.309992		25.7205	3.93496
Std Liquid Volumetric Flow	sgpm	0.00376643	0.00286666	236.559	134.853	1.73291	0.00881328	1.72409	0.00218019	1.73291		101.706	134.853



Tank Losses Report (3) Condensate Tanks					
Stream Connections					
Stream	Connection Type	Other Block	Stream	Connection Type	Other Block
Tank Inlet	Inlet	VLVE-100	Flashing	Flashing Losses Stream	MIX-105
Working	Working Losses Stream	MIX-105	Breathing	Standing Losses Stream	MIX-105
Total Loadout	Residual Liquid Stream				
Working and Standing Properties : Scalar Data					
Tank Geometry	Vertical Cylinder		Roof Type	Cone	
Shell Length	20' ft		Slope of Coned Roof	0.0625	
Shell Diameter	12' ft		Breather Vent Pressure	0.25" psig	
Number of Storage Tanks	3*		Breather Vacuum Pressure	-0.0300000 psig	
Maximum Fraction Fill of Tank	90 %		Operating Pressure	0 psig	
Average Fraction Fill of Tank	50 %		Location	Roswell, NM*	
Minimum Fraction Fill of Tank	10 %		Time Frame	Year	
Material Category	Light Organics*		Known Liquid Bulk Temperature?	FALSE	
Insulation	Uninsulated		Liquid Bulk Temperature	64.2313 °F	
Bolted or Riveted Construction?	FALSE		Use AP 42 Raoult's Vapor Pressure?	FALSE	
Vapor Balanced Tank?	FALSE		Flashing Temperature	75.6517 °F	
Known Sum of Increases in Liquid Level?	FALSE		Average Daily Maximum Ambient Temperature	75.8 °F	
Sum of Increases in Liquid Level	357.849 ft/yr		Average Daily Minimum Ambient Temperature	47.6 °F	
Shell Color	Tan*		Atmospheric Pressure at Tank Location	12.88 psia	
Shell Paint Condition	Average*		Daily Solar Insolation	1722 Btu/(day*ft^2)	
Roof Color	Tan*		Average Wind Speed	8.7 mph	
Roof Paint Condition	Average*		Include Short Term Emissions	TRUE	
Composition Subset Properties : Scalar Data					
Component Subset	VOCs		Species in Results	Selected Species	
Atomic Basis	FALSE		Fraction Denominator	Selected Species	
Composition Subset Properties : Tabulated Data					
Index	Selected Components				
	H2S	FALSE			
	Nitrogen	FALSE			
	Carbon Dioxide	FALSE			
	Methane	FALSE			
	Ethane	FALSE			
	Propane	TRUE			
	i-Butane	TRUE			
	n-Butane	TRUE			
	i-Pentane	TRUE			
	n-Pentane	TRUE			
	2,2-Dimethylbutane	TRUE			
	Cyclopentane	TRUE			
	2-Methylpentane	TRUE			
	3-Methylpentane	TRUE			
	n-Hexane	TRUE			
	2,2-Dimethylpentane	TRUE			
	Methylcyclopentane	TRUE			
	2,2,3-Trimethylbutane	TRUE			
	Benzene	TRUE			
	Cyclohexane	TRUE			
	2-Methylhexane	TRUE			
	3-Methylhexane	TRUE			
	1,1-Dimethylcyclopentane	TRUE			
	Heptane	TRUE			
	Methylcyclohexane	TRUE			
	2,5-Dimethylhexane	TRUE			
	Toluene	TRUE			
	2-Methylheptane	TRUE			
	Octane	TRUE			
	Ethylcyclohexane	TRUE			
	Ethylbenzene	TRUE			
	p-Xylene	TRUE			
	o-Xylene	TRUE			
	Cyclooctane	TRUE			
	Nonane	TRUE			
	Isopropylbenzene	TRUE			
	Propylbenzene	TRUE			
	1,3,5-Trimethylbenzene	TRUE			
	Isobutylbenzene	TRUE			
	Butylbenzene	TRUE			
	Decane	TRUE			
	Water	FALSE			
Details Properties : Scalar Data					
Vapor Space Volume	1145.11 ft^3		Liquid Height	10 ft	
Vapor Density	0.0672708 lb/ft^3		Roof Outage	0.125 ft	
Vapor Space Expansion Factor	1 1/day		Tank Roof Height	0.375 ft	
Vented Vapor Saturation Factor	0.136811		Tank Shell Radius	6 ft	
Vapor Space Outage	10.125 ft		Vapor Molecular Weight	32.4320 lb/lbmol	
Average Daily Vapor Temperature Range	37.0819 °R		Average Vapor Temperature	528.201 °R	
Average Daily Vapor Pressure Range	2.14467 psi		Average Daily Ambient Temperature	521.37 °R	
Breather Vent Pressure Setting Range	0.28 psi		Net Working Loss Throughput	40471.8 ft^3/yr	
Vapor Pressure at Average Daily Liquid Surface Temperature	11.7575 psia		Working Loss Turnover (Saturation) Factor	1	
Average Daily Liquid Surface Temperature	526.051 °R		Number of Turnovers per Year	22.3656	
Average Daily Ambient Temperature Range	28.2 °R		Annual Net Throughput	21627.3 bbl/yr	
Tank Roof Surface Solar Absorptance	0.49		Maximum Liquid Height	18 ft	
Tank Shell Surface Solar Absorptance	0.49		Minimum Liquid Height	2 ft	
Vapor Pressure at Maximum Liquid Surface Temperature	12.8800 psia		Working Loss Product Factor	1	
Vapor Pressure at Minimum Liquid Surface Temperature	10.7353 psia		Vent Setting Correction Factor	0.817848	
Maximum Liquid Surface Temperature	535.322 °R		Annual Net Throughput Per Tank	7209.08 bbl/yr	
Minimum Liquid Surface Temperature	516.781 °R				
Results Properties : Scalar Data					
Flashing Losses	1.56743 ton/yr		Standing Losses per Tank	0.966342 ton/yr	
Working Losses	1.67810 ton/yr		Flashing Losses per Tank	0.522476 ton/yr	
Standing Losses	2.89903 ton/yr		Working and Standing Losses	4.57713 ton/yr	
Working Losses per Tank	0.559367 ton/yr		Working and Standing Losses per Tank	1.52571 ton/yr	
Results Properties : Tabulated Data					
Index	Flashing Losses Mass Flows ton/yr	Working Losses Mass Flows ton/yr	Standing Losses Mass Flows ton/yr	Working and Standing Losses Mass Flows ton/yr	
	Propane	0.543414	0.612841	1.05872	1.67156
	i-Butane	0.103944	0.114517	0.197836	0.312354
	n-Butane	0.291251	0.316843	0.547368	0.864211
	i-Pentane	0.0885040	0.0934707	0.161477	0.254947
	n-Pentane	0.0866666	0.0905878	0.156496	0.247084
	2,2-Dimethylbutane	0.00104073	0.00107877	0.00196364	0.00294240
	Cyclopentane	0.0230773	0.0238179	0.0411469	0.0649648
	2-Methylpentane	0.0209340	0.0214438	0.0370456	0.0584694
	3-Methylpentane	0.0136523	0.0139228	0.0240526	0.0379754
	n-Hexane	0.0216489	0.0218357	0.0377227	0.0595584
	2,2-Dimethylpentane	0.00215246	0.00217071	0.00375005	0.00592076
	Methylcyclopentane	0.0260989	0.0265043	0.0457879	0.0722921
	2,2,3-Trimethylbutane	0	0	0	0
	Benzene	0.145983	0.146448	0.252998	0.399445
	Cyclohexane	0.0310474	0.0311621	0.0538345	0.0849966
	2-Methylhexane	0.00248511	0.00246603	0.00426023	0.00672626
	3-Methylhexane	0.00441236	0.00435035	0.00751552	0.0118659
	1,1-Dimethylcyclopentane	0.00251256	0.00249879	0.00431683	0.00681562
	Heptane	0.00596010	0.00582149	0.0100570	0.0158785
	Methylcyclohexane	0.0169645	0.0166326	0.0287339	0.0453665
	2,5-Dimethylhexane	0.000285648	0.000275952	0.000476725	0.000752677
	Toluene	0.0891168	0.0863561	0.149186	0.235542
	2-Methylheptane	0.00222490	0.00212569	0.00367227	0.00579796
	Octane	0.00623076	0.00587927	0.0101568	0.0160361
	Ethylcyclohexane	0.00163918	0.00155462	0.00268605	0.00424087
	Ethylbenzene	0.00664924	0.00621028	0.0107287	0.0169390
	p-Xylene	0.0137297	0.0128637	0.0222229	0.0350867
	o-Xylene	0.00475203	0.00443395	0.00765995	0.0120939
	Cyclooctane	0.00157337	0.00146146	0.00252476	0.00398622
	Nonane	0.00321901	0.00293811	0.00507577	0.00801388
	Isopropylbenzene	0.000926177	0.000845551	0.00146074	0.00230630
	Propylbenzene	0.000447303	0.000407035	0.000703179	0.00111021
	1,3,5-Trimethylbenzene	0.000896526	0.000809269	0.00139806	0.00220733
	Isobutylbenzene	7.02766E-05	6.35311E-05	0.000109754	0.000173285
	Butylbenzene	0.000121103	0.000106534	0.000184044	0.000290577
	Decane	0.00379699	0.00335514	0.00579623	0.00915137

Tank Losses Report (3) Condensate Tanks			
Short Term Properties : Scalar Data			
Maximum Battery Filling Rate	337.952* bbl/hr	Worst-Case Flashing Losses per Tank	34.3179 lb/h
Short-Term Number of Storage Tanks	3	Short-Term Working Losses per Tank	32.7990 lb/h
Worst-Case Liquid Surface Temperature	95 °F	Short-Term Vapor Molecular Weight	38.1017 lb/lbmol
Worst-Case Flashing Losses	102.954 lb/h	Vapor Pressure at Worst-Case Temperature	12.8800 psia
Short-Term Working Losses	98.3971 lb/h		
Short Term Properties : Tabulated Data			
Index	Worst-Case Flashing Losses Mass Flows lb/h	Short-Term Working Losses Mass Flows lb/h	
Propane	30.4159	29.0698	
i-Butane	6.33996	6.05937	
n-Butane	18.4913	17.6729	
i-Pentane	6.06123	5.79297	
n-Pentane	6.07183	5.80310	
2,2-Dimethylbutane	0.0743585	0.0710676	
Cyclopentane	1.66466	1.59099	
2-Methylpentane	1.53391	1.46602	
3-Methylpentane	1.00942	0.964747	
n-Hexane	1.63575	1.56336	
2,2-Dimethylpentane	0.162836	0.155629	
Methylcyclopentane	1.94835	1.86212	
2,2,3-Trimethylbutane	0	0	
Benzene	11.1609	10.6669	
Cyclohexane	2.37236	2.26737	
2-Methylhexane	0.194179	0.185586	
3-Methylhexane	0.349086	0.333636	
1,1-Dimethylcyclopentane	0.195568	0.186913	
Heptane	0.480357	0.459098	
Methylcyclohexane	1.35786	1.29777	
2,5-Dimethylhexane	0.0235217	0.0224807	
Toluene	7.30055	6.97745	
2-Methylheptane	0.187321	0.179030	
Octane	0.537472	0.513685	
Ethylcyclohexane	0.140015	0.133818	
Ethylbenzene	0.585397	0.559490	
p-Xylene	1.20181	1.14862	
o-Xylene	0.419277	0.400721	
Cyclooctane	0.140094	0.133894	
Nonane	0.296375	0.283258	
Isopropylbenzene	0.0852397	0.0814672	
Propylbenzene	0.0414416	0.0396075	
1,3,5-Trimethylbenzene	0.0843923	0.0806573	
Isobutylbenzene	0.00660000	0.00630790	
Butylbenzene	0.0119862	0.0114558	
Decane	0.372278	0.355802	
Notes:			

# Section 8

## Map(s)

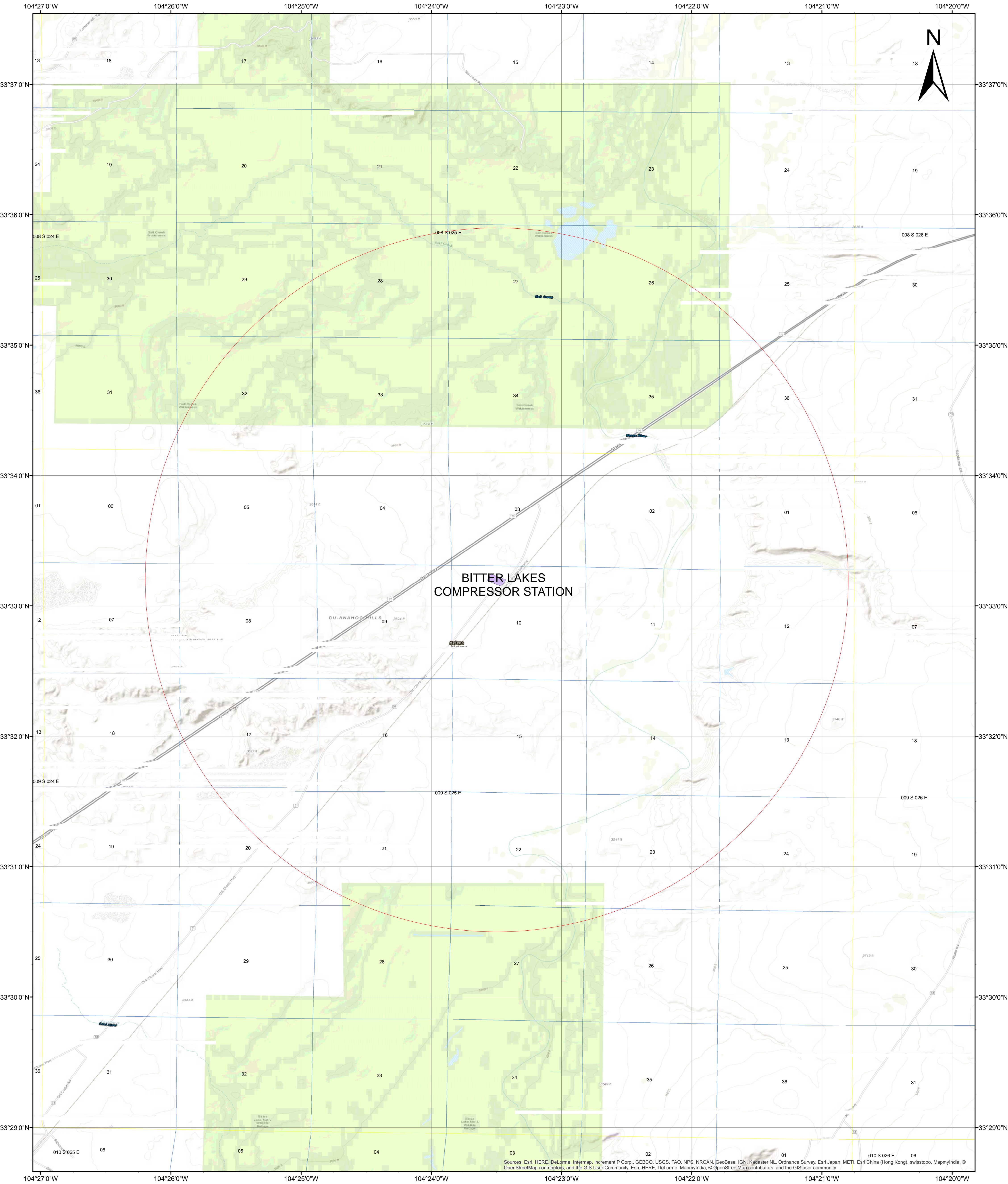
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**A map** such as a 7.5 minute topographic quadrangle showing the exact location of the source. The map shall also include the following:

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	

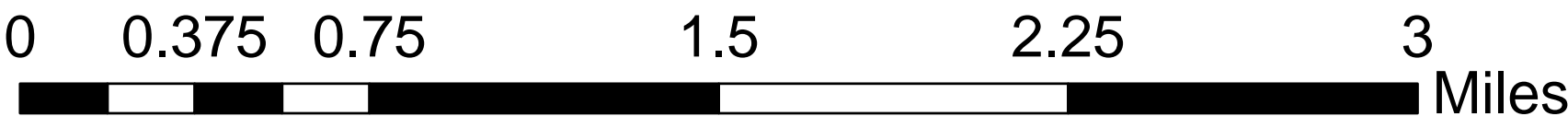
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Legend

- Occupied Structures
- Bitter Lakes Compressor Station
- Radius
- Township lines
- Section lines



Coordinate System: WGS\_1984  
Unit: Degrees Minutes Seconds  
County: Chaves  
State: New Mexico

Drafting: A. Anderson  
Date: 8/17/2016  
Scale: 1:24000



THIS MAP HAS BEEN CAREFULLY COMPILED AND PRINTED BY IACX ROSWELL LLC FROM AVAILABLE INFORMATION. IACX ROSWELL LLC DOES NOT GUARANTEE THE ACCURACY OF THIS MAP OR INFORMATION DELINEATED THEREON. NOR DOES IACX ROSWELL LLC ASSUME RESPONSIBILITY FOR ANY RELIANCE THEREON. RECIPIENT AGREES NOT TO COPY, DISTRIBUTE OR DIGITIZE THIS MAP WITHOUT EXPRESS CONSENT FROM IACX ROSWELL LLC OR ITS AFFILIATES.

BITTER LAKES COMPRESSOR STATION  
7.5 MINUTE QUADRANGLE MAP



# Section 9

## Proof of Public Notice

(for NSR applications submitting under 20.2.72 or 20.2.74 NMAC)

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

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☒ **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.

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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.

# NOTICE OF AIR QUALITY PERMIT APPLICATION

IACX Roswell LLC announces its application submittal to the New Mexico Environment Department for an air quality permit for the modification of its gas plant. The expected date of application submittal to the Air Quality Bureau is February 4, 2025

The exact location for the facility, known as Bitter Lake Compressor Station, is at latitude 33 deg, 33 min, 11.001 sec and longitude -104 deg, 23 min, 26.9988 sec. The approximate location of this facility is 13.31 miles northeast of Roswell in Chaves County.

The proposed modification consists of adding one (1) natural gas compressor engine and one (1) flare to control SSM events.

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

Pollutant:	Pounds per hour	Tons per year
Particulate Matter (PM)	1.2	5.0
PM <sub>10</sub>	1.2	5.0
PM <sub>2.5</sub>	1.2	5.0
Sulfur Dioxide (SO <sub>2</sub> )	1.1	4.5
Nitrogen Oxides (NO <sub>x</sub> )	23.2	99
Carbon Monoxide (CO)	25.0	99.40
Volatile Organic Compounds (VOC)	133.0	68.0
Total sum of all Hazardous Air Pollutants (HAPs)	8.6	15.0
Toxic Air Pollutant (TAP)	n/a	n/a
Green House Gas Emission as Total CO <sub>2</sub> e	4,000	16,000

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

The owner/operator of the Facility is: IACX Roswell LLC; 5001 LBJ Freeway, Suite 300, Dallas, TX 75244

If you have any comments about the construction or operation of this facility, and you want your comments to be made as part of the permit review process, you must submit your comments in writing to this address: Permit Programs Manager; New Mexico Environment Department; Air Quality Bureau; 525 Camino de los Marquez, Suite 1; Santa Fe, New Mexico; 87505-1816. Other comments and questions may be submitted verbally. (505) 476-4300; 1 800 224-7009.

Please refer to the company name and site name, or send a copy of this notice along with your comments, since the Department may have not yet received the permit application. Please include a legible return mailing address with your comments. Once the Department has performed a preliminary review of the application and its air quality impacts, the Department's notice will be published in the legal section of a newspaper circulated near the facility location.

General information about air quality and the permitting process, and links to the regulations can be found at the Air Quality Bureau's website: [www.env.nm.gov/air-quality/permitting-section-home-page/](http://www.env.nm.gov/air-quality/permitting-section-home-page/). The regulation dealing with public participation in the permit review process is 20.2.72.206 NMAC.

**Atención**

Este es un aviso de la oficina de Calidad del Aire del Departamento del Medio Ambiente de Nuevo México, acerca de las emisiones producidas por un establecimiento en esta área. Si usted desea información en español, por favor comuníquese con esa oficina al teléfono 505-629-3395.

**Notice of Non-Discrimination**

NMED does not discriminate on the basis of race, color, national origin, disability, age or sex in the administration of its programs or activities, as required by applicable laws and regulations. NMED is responsible for coordination of compliance efforts and receipt of inquiries concerning non-discrimination requirements implemented by 40 C.F.R. Part 7, including Title VI of the Civil Rights Act of 1964, as amended; Section 504 of the Rehabilitation Act of 1973; the Age Discrimination Act of 1975, Title IX of the Education Amendments of 1972, and Section 13 of the Federal Water Pollution Control Act Amendments of 1972. If you have any questions about this notice or any of NMED's non-discrimination programs, policies or procedures, or if you believe that you have been discriminated against with respect to a NMED program or activity, you may contact: Non-Discrimination Coordinator, NMED, 1190 St. Francis Dr., Suite N4050, P.O. Box 5469, Santa Fe, NM 87502, (505) 827-2855, [nd.coordinator@env.nm.gov](mailto:nd.coordinator@env.nm.gov). You may also visit our website at <https://www.env.nm.gov/non-employee-discrimination-complaint-page/> to learn how and where to file a complaint of discrimination.

## General Posting of Notices – Certification

I, Homer Trujillo, the undersigned, certify that on 2-7-25,  
posted a true and correct copy of the attached Public Notice in the following publicly accessible  
and conspicuous places in, or near, **Roswell, Chaves** County, state of New Mexico on the  
following dates:

1. IACX Roswell LLC  
Bitter Lake Compressor Station  
Date: 2-7-25
2. Roswell Public Library  
301 N Pennsylvania Ave.  
Roswell, NM 88201  
Date: 2-7-25
3. Roswell Public Health Division  
200 E Chisum St.  
Roswell, NM 88203  
Date: 2-7-25

Signed this 7<sup>th</sup> day of February, 2025.

Homer Trujillo

Signature

2-7-25

Date

Homer J. Trujillo

Printed Name

EHS Manager

Title

### PUBLIC SERVICE ANNOUNCEMENT

Targa Midstream Services LLC announces its application to the New Mexico Environment Department for an air quality permit for the modification of its gas plant. The proposed modification consists of adding one (1) natural gas compressor engine and one (1) flare to control SSM events. The expected date of application submittal to the Air Quality Bureau is February 4, 2024. This notice is a requirement according to New Mexico air quality regulations.

The exact location for the facility, known as Bitter Lake Compressor Station, is at latitude 33 deg, 33 min, 11.001 sec and longitude -104 deg, 23 min, 26.9988 sec. The approximate location of this facility is 13.31 miles northeast of Roswell in Chaves County.

The owner and/or operator of the Facility is:

IACX Roswell LLC  
5001 LBJ Freeway, Suite 300  
Dallas, TX 75244

Notices were posted at the Bitter Lake Compressor Station site and the following three locations:

Roswell Fire Station #4  
10 E Challenger St.  
Roswell, NM 88203

Roswell Public Library  
301 N Pennsylvania Ave.  
Roswell, NM 88201

Roswell Public Health Division  
200 E Chisum St.  
Roswell, NM 88203

The address for submitting comments to the NMED is as follows:

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

## **Submittal of Public Service Announcement – Certification**

I, Angie Dawson, the undersigned, certify that on **February 4, 2025**, submitted a public service announcement to **KMOU, KOOL FM, Hot 97, KSF Radio** that serves the City\Town\Village of **Roswell and the surrounding areas**, Chaves County, New Mexico, in which the source is or is proposed to be located and that **KMOU, KOOL FM, Hot 97, KSF Radio** has not responded that it will air the announcement.

Signed this 4th day of February, 2025,

Angie Dawson

Signature

2/4/2025

Date

Angie Dawson

Printed Name

Consultant

Title {APPLICANT OR RELATIONSHIP TO APPLICANT}



Gary L Key  
Account: R012444

Hondo Resources  
Account # R045426

Hondo Resources  
Account # R045426

33.553056, -104.390833

Bitter Lakes Plant

BLM  
Account # R042873

Hondo Resources  
Account: R045425



9589 0710 5270 2046 1850 21

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Extra Services & Fees (check box, add fee as appropriate)		
<input checked="" type="checkbox"/> Return Receipt (hardcopy)	\$	4.10
<input type="checkbox"/> Return Receipt (electronic)	\$	
<input type="checkbox"/> Certified Mail Restricted Delivery	\$	
<input type="checkbox"/> Adult Signature Required	\$	
<input type="checkbox"/> Adult Signature Restricted Delivery	\$	
Postage	\$	0.69
Total Postage and Fees	\$	9.64

Postmark  
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2/4/25

Sent To	Bureau of Land Management
Street and Apt. No., or P.O. Box No.	7909 W 17th St
City, State, ZIP+4 <sup>®</sup>	Roswell, NM 88201

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

February 4, 2025

Bureau Of Land Management  
2909 W 2<sup>nd</sup> ST.  
Roswell, NM 88201  
(575) 627-0272

Certified Mail 9589 0710 5270 2046 1850 21

Dear Mr. Williams,

IACX Roswell LLC announces its application submittal to the New Mexico Environment Department for an air quality permit for its compressor station. The expected date of application submittal to the Air Quality Bureau is February 4, 2025.

The exact location for the facility, known as Bitter Lake Compressor Station, is at latitude 33 deg, 33 min, 11.001 sec and longitude -104 deg, 23 min, 26.9988 sec. The approximate location of this facility is 13.31 miles northeast of Roswell in Chaves County.

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PM <sub>2.5</sub>	1.2	5.0
Sulfur Dioxide (SO <sub>2</sub> )	1.1	4.5
Nitrogen Oxides (NO <sub>x</sub> )	23.2	99
Carbon Monoxide (CO)	25.0	99.40
Volatile Organic Compounds (VOC)	133.0	68.0
Total sum of all Hazardous Air Pollutants (HAPs)	8.6	15.0
Toxic Air Pollutant (TAP)	n/a	n/a
Green House Gas Emission as Total CO <sub>2</sub> e	4,000	16,000

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

The owner/operator of the Facility is: IACX Roswell LLC; 5001 LBJ Freeway, Suite 300, Dallas, TX 75244

If you have any comments about the construction or operation of this facility, and you want your comments to be made as part of the permit review process, you must submit your comments in writing to this address: Permit Programs Manager; New Mexico Environment Department; Air Quality Bureau; 525 Camino de los Marquez, Suite 1; Santa Fe, New Mexico; 87505-1816. Other comments and questions may be submitted verbally. (505) 476-4300; 1 800 224-7009.

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### **Notice of Non-Discrimination**

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Sincerely,

**Altamira-US, LLC**



Laura Worthen Lodes  
Chief Engineering Officer



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Extra Services & Fees (check box, add fee as appropriate)		
<input checked="" type="checkbox"/> Return Receipt (hardcopy)	\$	4.10
<input type="checkbox"/> Return Receipt (electronic)	\$	
<input type="checkbox"/> Certified Mail Restricted Delivery	\$	
<input type="checkbox"/> Adult Signature Required	\$	
<input type="checkbox"/> Adult Signature Restricted Delivery	\$	
Postage	\$	0.69
Total Postage and Fees	\$	9.64

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2/4/25

Sent To	Gary L. Key
Street and Apt. No., or PO Box No.	1011 E 2nd St
City, State, ZIP+4®	Roswell NM 88201

February 4, 2025

Gary L. Key  
1012 E 2<sup>nd</sup> St.  
Roswell, NM 88201

Certified Mail 9589 0710 5270 2046 1851 06

Dear Mr. Williams,

IACX Roswell LLC announces its application submittal to the New Mexico Environment Department for an air quality permit for its compressor station. The expected date of application submittal to the Air Quality Bureau is February 4, 2025.

The exact location for the facility, known as Bitter Lake Compressor Station, is at latitude 33 deg, 33 min, 11.001 sec and longitude -104 deg, 23 min, 26.9988 sec. The approximate location of this facility is 13.31 miles northeast of Roswell in Chaves County.

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Nitrogen Oxides (NO <sub>x</sub> )	23.2	99
Carbon Monoxide (CO)	25.0	99.40
Volatile Organic Compounds (VOC)	133.0	68.0
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Toxic Air Pollutant (TAP)	n/a	n/a
Green House Gas Emission as Total CO <sub>2</sub> e	4,000	16,000

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

The owner/operator of the Facility is: IACX Roswell LLC; 5001 LBJ Freeway, Suite 300, Dallas, TX 75244

If you have any comments about the construction or operation of this facility, and you want your comments to be made as part of the permit review process, you must submit your comments in writing to this address: Permit Programs Manager; New Mexico Environment Department; Air Quality Bureau; 525 Camino de los Marquez, Suite 1; Santa Fe, New Mexico; 87505-1816. Other comments and questions may be submitted verbally. (505) 476-4300; 1 800 224-7009.

Please refer to the company name and facility name or send a copy of this notice along with your comments, since the Department may have not yet received the permit application. Please include a legible return mailing address with your comments. Once the Department has performed a preliminary review of the application and its air quality impacts, the Department's notice will be published in the legal section of a newspaper circulated near the facility location.

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Sincerely,

**Altamira-US, LLC**



Laura Worthen Lodes  
Chief Engineering Officer



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Extra Services & Fees (check box, add fee as appropriate)		
<input checked="" type="checkbox"/> Return Receipt (hardcopy)	\$	4.10
<input type="checkbox"/> Return Receipt (electronic)	\$	
<input type="checkbox"/> Certified Mail Restricted Delivery	\$	
<input type="checkbox"/> Adult Signature Required	\$	
<input type="checkbox"/> Adult Signature Restricted Delivery	\$	
Postage	\$	0.69
Total Postage and Fees	\$	9.64

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Sent To	Bill Williams - Chaves County Manager
Street and Apt. No., or PO Box No.	1 St. Mary's Place
City, State, ZIP+4®	Boswell, NM 88103

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

February 4, 2025

Chaves County Manager  
Bill Williams  
1 St. Mary's Place  
Roswell, NM 88203  
(575) 624-6602

Certified Mail 9589 0710 5270 2046 1850 90

Dear Mr. Williams,

IACX Roswell LLC announces its application submittal to the New Mexico Environment Department for an air quality permit for its compressor station. The expected date of application submittal to the Air Quality Bureau is February 4, 2025.

The exact location for the facility, known as Bitter Lake Compressor Station, is at latitude 33 deg, 33 min, 11.001 sec and longitude -104 deg, 23 min, 26.9988 sec. The approximate location of this facility is 13.31 miles northeast of Roswell in Chaves County.

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Toxic Air Pollutant (TAP)	n/a	n/a
Green House Gas Emission as Total CO <sub>2</sub> e	4,000	16,000

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Sincerely,

**Altamira-US, LLC**



Laura Worthen Lodes  
Chief Engineering Officer



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Extra Services & Fees (check box, add fee as appropriate)		
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<input type="checkbox"/> Certified Mail Restricted Delivery	\$	
<input type="checkbox"/> Adult Signature Required	\$	
<input type="checkbox"/> Adult Signature Restricted Delivery	\$	
Postage	\$	0.69
Total Postage and Fees	\$	9.64

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2/4/25

Sent To	Hondo Resources Inc
Street and Apt. No., or PO Box No.	PO Box 2613
City, State, ZIP+4®	Heswell, NM 88201

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

February 4, 2025

Hondo Resources Inc.  
PO Box 2623  
Roswell, NM 88202  
(575) 623-9555

Certified Mail 9589 0710 5270 2046 1850 83

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Este es un aviso de la oficina de Calidad del Aire del Departamento del Medio Ambiente de Nuevo México, acerca de las emisiones producidas por un establecimiento en esta área. Si usted desea información en español, por favor comuníquese con esa oficina al teléfono 505-629-3395.

### **Notice of Non-Discrimination**

NMED does not discriminate on the basis of race, color, national origin, disability, age or sex in the administration of its programs or activities, as required by applicable laws and regulations. NMED is responsible for coordination of compliance efforts and receipt of inquiries concerning non-discrimination requirements implemented by 40 C.F.R. Part 7, including Title VI of the Civil Rights Act of 1964, as amended; Section 504 of the Rehabilitation Act of 1973; the Age Discrimination Act of 1975, Title IX of the Education Amendments of 1972, and Section 13 of the Federal Water Pollution Control Act Amendments of 1972. If you have any questions about this notice or any of NMED's non-discrimination programs, policies or procedures, or if you believe that you have been discriminated against with respect to a NMED program or activity, you may contact: Non-Discrimination Coordinator, NMED, 1190 St. Francis Dr., Suite N4050, P.O. Box 5469, Santa Fe, NM 87502, (505) 827-2855, [nd.coordinator@env.nm.gov](mailto:nd.coordinator@env.nm.gov). You may also visit our website at <https://www.env.nm.gov/non-employee-discrimination-complaint-page/> to learn how and where to file a complaint of discrimination.

Sincerely,

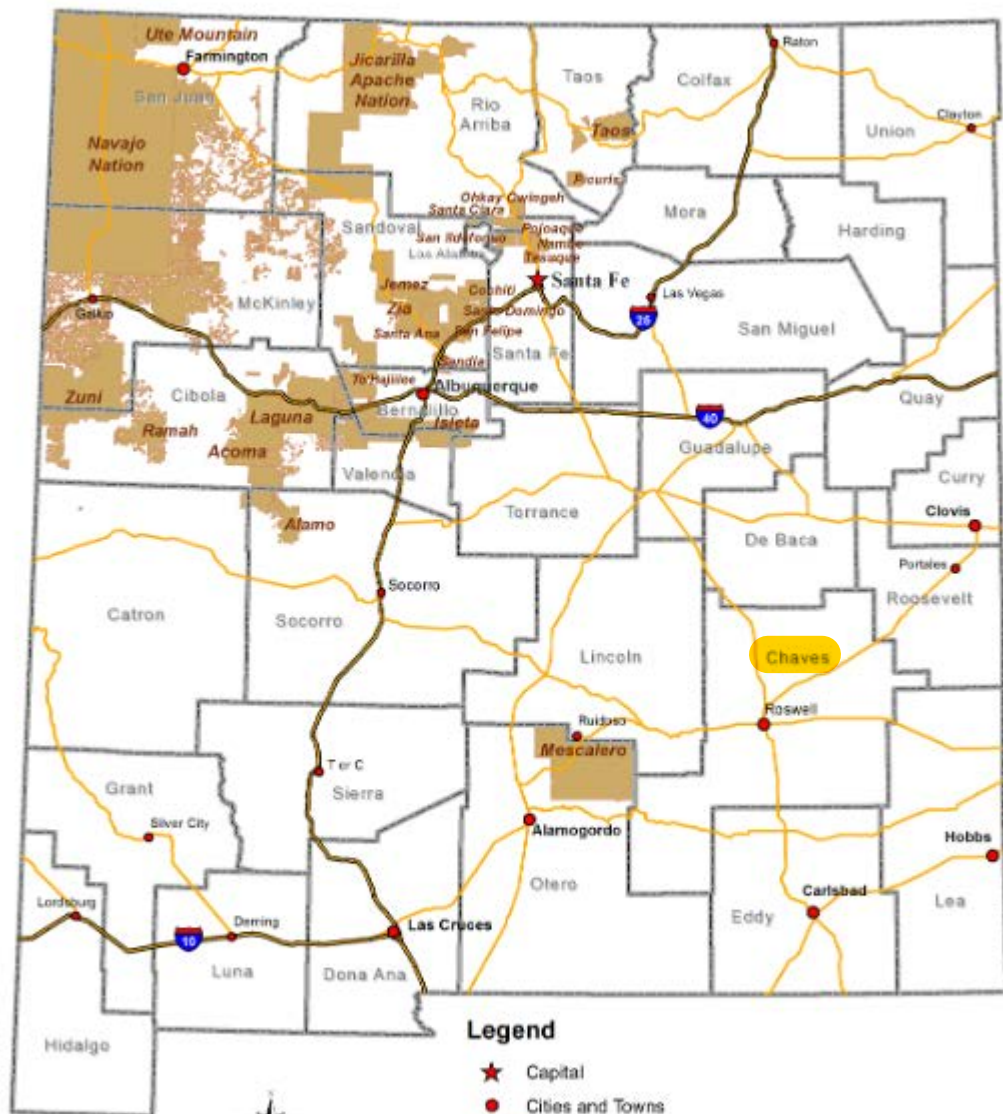
**Altamira-US, LLC**



Laura Worthen Lodes  
Chief Engineering Officer



# Native Nation Lands New Mexico



## Legend

- ★ Capital
- Cities and Towns
- Interstate
- US Highway
- Native Nation Boundary
- New Mexico County Boundary

# Municipalities in New Mexico

Search for your municipality to reference population and housing data sourced from the U.S. Census Bureau. If you can't find your municipality in the table below, please contact [mmp@re-trac.com](mailto:mmp@re-trac.com).

Municipality	Population	1 Unit (Detached)	1 Unit (Attached)	2 Units	3 to 4 Units	5 to 9 Units	10 to 19 Units	20+ Units	Mobile Homes	Boats, RVs, Vans
Alamogordo city	30963	10309	169	142	992	322	376	99	2498	31
Albuquerque city	556718	152173	14177	4192	14652	11492	14017	23198	9284	217
Angel Fire village	743	1701	27	15	86	216	293	156	44	0
Anthony city	9397	1480	57	74	130	184	18	28	980	0
Artesia city	11842	4003	87	242	182	148	0	106	457	0
Aztec city	6635	1645	93	99	96	124	49	25	745	41
Bayard city	2571	868	0	62	0	0	17	30	290	0
Belen city	7125	2063	47	151	208	49	70	47	587	25
Bernalillo town	8991	2150	197	38	66	76	45	13	1088	33
Bloomfield city	8039	1501	88	78	20	128	25	41	1108	27
Bosque Farms village	3819	1154	0	0	0	0	0	0	434	0
Capitan village	1321	268	0	26	0	0	0	0	488	0
Carlsbad city	28393	8786	125	205	420	407	237	627	1173	0
Carrizozo town	878	454	0	6	29	0	0	0	78	0
Causey village	68	24	9	0	0	0	0	0	10	0
Chama village	1068	400	16	9	21	9	0	0	316	0
Cimarron village	974	311	3	33	0	0	0	3	175	0
Clayton town	2987	1101	0	64	2	15	0	0	135	0
Cloudcroft village	613	843	46	26	21	31	6	8	26	0
Clovis city	39255	12415	281	439	1110	628	330	262	969	114
Columbus village	995	275	0	6	24	5	0	0	324	0
Corona village	145	105	0	2	0	0	0	0	15	0
Corrales village	8463	3325	222	9	19	0	0	9	353	0
Cuba village	660	147	2	20	15	0	0	0	166	0
Deming city	14339	3550	98	173	245	255	193	546	1236	60
Des Moines village	56	46	0	0	0	0	0	0	23	0

Municipality	Population	1 Unit (Detached)	1 Unit (Attached)	2 Units	3 to 4 Units	5 to 9 Units	10 to 19 Units	20+ Units	Mobile Homes	Boats, RVs, Vans
Dexter town	1159	307	0	24	18	0	4	23	63	0
Dora village	124	49	0	0	0	0	0	0	25	0
Eagle Nest village	279	191	19	4	16	0	0	0	94	0
Edgewood town	3845	1221	0	0	73	9	0	0	222	0
Elephant Butte city	1393	587	10	0	10	0	0	0	919	5
Elida town	153	80	0	0	0	0	0	0	4	0
Encino village	61	78	0	0	0	0	0	0	33	0
Española city	10069	2266	83	223	147	173	19	72	1561	0
Estancia town	1657	382	12	14	0	0	0	0	147	0
Eunice city	3065	889	12	22	11	19	0	0	219	7
Farmington city	45857	10917	632	407	1076	452	535	342	3325	34
Floyd village	126	40	0	0	0	0	0	0	6	0
Folsom village	41	26	0	0	0	0	0	0	14	0
Fort Sumner village	1181	457	0	8	31	0	0	0	92	0
Gallup city	22063	4848	165	320	696	548	67	195	1500	0
Grady village	185	39	0	0	0	0	0	0	27	3
Grants city	9094	2167	78	28	221	279	85	217	664	0
Grenville village	16	17	0	0	0	0	0	0	5	0
Hagerman town	863	324	0	0	0	0	0	10	68	0
Hatch village	1637	372	11	10	0	0	0	0	247	0
Hobbs city	37427	9183	393	147	389	565	289	1111	1771	60
Hope village	79	24	0	0	0	0	0	0	10	7
House village	33	30	0	0	0	0	0	0	8	0
Hurley town	1412	558	0	0	0	0	0	0	137	0
Jal city	2071	849	0	19	0	0	0	0	59	26
Jemez Springs village	280	116	0	0	0	0	0	0	19	0
Kirtland town	718	239	0	0	0	0	40	0	18	0
Lake Arthur town	452	132	0	0	0	0	0	0	41	0
Las Cruces city	101014	26133	2055	2059	2773	2840	1842	2668	4226	8
Las Vegas city	13445	3519	190	435	491	192	46	116	1175	0
Logan village	924	477	3	0	0	0	0	0	740	0
Lordsburg city	2689	884	25	6	10	0	0	12	356	10



Municipality	Population	1 Unit (Detached)	1 Unit (Attached)	2 Units	3 to 4 Units	5 to 9 Units	10 to 19 Units	20+ Units	Mobile Homes	Boats, RVs, Vans
Los Lunas village	15258	4628	306	124	311	173	57	156	653	0
Los Ranchos de Albuquerque village	6097	2325	105	27	44	97	126	130	210	0
Loving village	1331	386	0	0	0	0	11	0	176	0
Lovington city	11558	2847	37	176	48	0	9	99	659	79
Magdalena village	693	328	4	0	0	0	0	0	171	0
Maxwell village	190	63	0	7	8	0	0	0	66	0
Melrose village	632	309	6	0	0	0	0	0	101	0
Mesilla town	2485	901	67	51	43	14	0	0	31	0
Milan village	3644	529	10	0	63	43	15	12	616	0
Moriarty city	2276	701	5	20	0	20	0	9	292	0
Mosquero village	95	72	0	0	0	0	0	0	18	0
Mountainair town	1128	430	3	0	0	9	0	0	191	0
Pecos village	1545	337	0	57	11	11	0	0	433	0
Peralta town	3590	1067	0	0	0	0	0	0	541	0
Portales city	12123	3635	47	403	441	152	12	41	438	29
Questa village	2266	781	14	24	0	0	3	10	402	0
Raton city	6249	2515	118	111	176	85	0	0	791	0
Red River town	408	389	35	21	51	122	64	56	67	0
Reserve village	571	187	0	4	0	0	0	0	123	0
Rio Communities city	4593	1631	233	11	27	28	41	12	166	0
Rio Rancho city	93317	31184	930	244	1047	579	232	916	879	16
Roswell city	48163	15567	700	453	541	338	296	1121	1051	23
Roy village	212	111	0	2	0	0	0	1	62	0
Ruidoso Downs city	2607	416	15	20	132	190	12	55	625	0
Ruidoso village	7740	5367	380	134	302	429	198	116	1484	0
San Jose	226	62	0	6	0	0	0	0	25	0
San Ysidro village	136	49	0	2	0	0	0	0	36	0
Santa Clara village	1742	460	0	10	17	8	15	0	339	0
Santa Fe city	82980	23856	3686	1219	2504	2389	1893	2485	3448	4
Santa Rosa city	3135	702	0	58	125	0	7	64	428	0
Silver City town	9882	2828	120	195	248	141	62	127	1050	0
Socorro city	8608	1822	53	167	53	36	64	242	1138	7



Municipality	Population	1 Unit (Detached)	1 Unit (Attached)	2 Units	3 to 4 Units	5 to 9 Units	10 to 19 Units	20+ Units	Mobile Homes	Boats, RVs, Vans
Springer town	952	385	9	58	27	0	0	0	145	0
Sunland Park city	16051	2843	150	115	206	141	78	144	1163	12
Taos Ski Valley village	152	163	2	2	2	16	92	46	0	0
Taos town	5687	1634	272	352	355	170	120	39	416	0
Tatum town	664	207	0	0	0	6	0	0	88	0
Texico city	1284	275	13	8	21	5	0	0	145	0
Tijeras village	596	240	0	2	12	0	0	0	10	0
Truth or Consequences city	6029	1863	35	33	251	234	168	89	1261	75
Tucumcari city	5004	2141	10	140	36	84	52	0	255	0
Tularosa village	2902	1105	0	0	0	53	0	0	371	0
Vaughn town	310	214	0	7	0	0	0	0	59	0
Virden village	165	33	3	0	0	0	0	0	32	0
Wagon Mound village	394	176	7	6	0	0	0	0	53	0
Willard village	214	68	0	0	0	0	0	0	50	0
Williamsburg village	374	131	0	0	0	0	0	0	167	13
Showing 1 to 105 of 105 entries										

Select **Classification Year**(per statute, done biennially on even years)  
 Select **Valuation Data**(most current final tax year valuations)  
 Select **Population Data**(most current annual data or estimate from US census)  
 Select **Square Mileage Data**(most current info available)

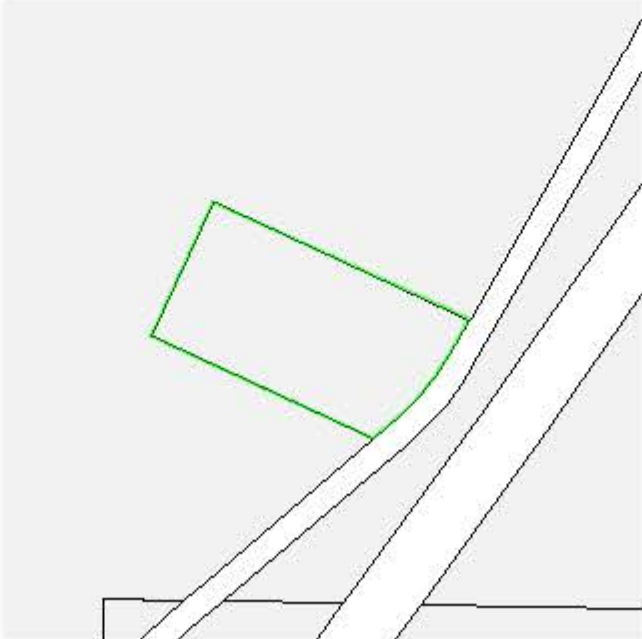
2024  
 2022-23 Final  
 2022  
 2010 data

## 2024 County Classification

		Maximum Allowable Salaries					
County	CLASSIFICATION	Commissioners	Treasurer	Assessor	Sheriff	Clerk	Probate Judge
Bernalillo	A	\$39,106	\$86,626	\$86,626	\$90,338	\$86,626	\$38,114
Catron	B-Intermediate	\$21,534	\$64,844	\$64,844	\$67,814	\$64,844	\$15,098
Chaves	B-High	\$30,196	\$75,733	\$75,733	\$78,952	\$75,733	\$26,482
Cibola	B-High	\$30,196	\$75,733	\$75,733	\$78,952	\$75,733	\$26,482
Colfax	B-High	\$30,196	\$75,733	\$75,733	\$78,952	\$75,733	\$26,482
Curry	B-High	\$30,196	\$75,733	\$75,733	\$78,952	\$75,733	\$26,482
De Baca	B-Intermediate	\$21,534	\$64,844	\$64,844	\$67,814	\$64,844	\$15,098
Dona Ana	A	\$39,106	\$86,626	\$86,626	\$90,338	\$86,626	\$38,114
Eddy	B-High	\$30,196	\$75,733	\$75,733	\$78,952	\$75,733	\$26,482
Grant	B-High	\$30,196	\$75,733	\$75,733	\$78,952	\$75,733	\$26,482
Guadalupe	B-Intermediate	\$21,534	\$64,844	\$64,844	\$67,814	\$64,844	\$15,098
Harding	B-Intermediate	\$21,534	\$64,844	\$64,844	\$67,814	\$64,844	\$15,098
Hidalgo	B-Intermediate	\$21,534	\$64,844	\$64,844	\$67,814	\$64,844	\$15,098
Lea	B-High	\$30,196	\$75,733	\$75,733	\$78,952	\$75,733	\$26,482
Lincoln	B-High	\$30,196	\$75,733	\$75,733	\$78,952	\$75,733	\$26,482
Los Alamos	H	n/a	\$75,733	\$75,733	\$78,952	\$75,733	n/a
Luna	B-High	\$30,196	\$75,733	\$75,733	\$78,952	\$75,733	\$26,482
McKinley	B-High	\$30,196	\$75,733	\$75,733	\$78,952	\$75,733	\$26,482
Mora	B-Intermediate	\$21,534	\$64,844	\$64,844	\$67,814	\$64,844	\$15,098
Otero	B-High	\$30,196	\$75,733	\$75,733	\$78,952	\$75,733	\$26,482
Quay	B-Intermediate	\$21,534	\$64,844	\$64,844	\$67,814	\$64,844	\$15,098
Rio Arriba	B-High	\$30,196	\$75,733	\$75,733	\$78,952	\$75,733	\$26,482
Roosevelt	B-High	\$30,196	\$75,733	\$75,733	\$78,952	\$75,733	\$26,482
San Juan	A	\$39,106	\$86,626	\$86,626	\$90,338	\$86,626	\$38,114
San Miguel	B-High	\$30,196	\$75,733	\$75,733	\$78,952	\$75,733	\$26,482
Sandoval	A	\$39,106	\$86,626	\$86,626	\$90,338	\$86,626	\$38,114
Santa Fe	A	\$39,106	\$86,626	\$86,626	\$90,338	\$86,626	\$38,114
Sierra	B-High	\$30,196	\$75,733	\$75,733	\$78,952	\$75,733	\$26,482
Socorro	B-High	\$30,196	\$75,733	\$75,733	\$78,952	\$75,733	\$26,482
Taos	B-High	\$30,196	\$75,733	\$75,733	\$78,952	\$75,733	\$26,482
Torrance	B-High	\$30,196	\$75,733	\$75,733	\$78,952	\$75,733	\$26,482
Union	B-Intermediate	\$21,534	\$64,844	\$64,844	\$67,814	\$64,844	\$15,098
Valencia	B-High	\$30,196	\$75,733	\$75,733	\$78,952	\$75,733	\$26,482
(Counties will be reclassified April 2026)							
In accordance with Section 4-44-1, 4-44-2, 4-44-3, 4-44-4, 4-44-4.1, 4-44-5, 4-44-12.3, 4-44-14 NMSA 1978.							
Pursuant to Section 4-44-14A "the governing body of an H class county shall designate whether the office of treasurer, assessor, sheriff or county clerk is part-time or full-							
Maximum Allowable Salaries for Part-Time (applies to H class - Los Alamos)							
		Commissioners	Treasurer	Assessor	Sheriff	Clerk	Probate Judge
		\$15,844	\$7,922	\$7,922	\$7,922	\$7,922	\$4,636

Location		Owner Information	Assessment History		
Parcel Number 4-143-050-179-069-000000		Owner Name IACX ROSWELL, LLC	Actual Value (2024)		\$0
Tax Area 11N_8_10 - 11N-FC-CSW		Owner Address 5001 LBJ FREEWAY, SUITE 300	Primary Taxable		\$0
Situs Address		DALLAS, TX 75244	Tax Area: 11N 8 10		Tax Rate: 0.022276
Legal Summary S: 10 T: 9S R: 25E NE4NW4 5.10 AC THEREIN BK: 793 PG: 1693 SWD (CORR)		USA	Type	Actual	Assessed Acres
			Exempt Land		5.100

Images

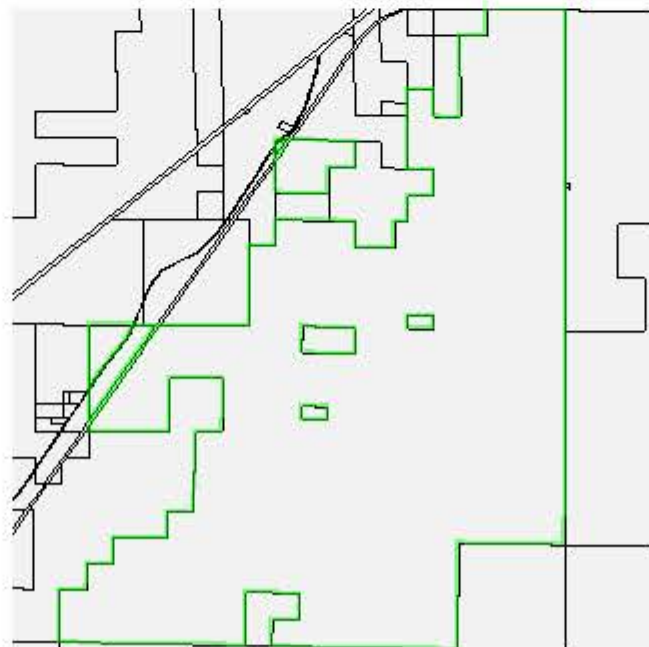
Tax Year	Taxes	GIS
*2025	\$0.00	
2024	\$0.00	

\* Estimated

Account: R042873 \* Tax Rate does not include the Pecos Valley Artesian Conservancy District

Location		Owner Information	Assessment History			
Parcel Number 4-144-052-068-322-000000		Owner Name UNITED STATES OF AMERICA	Actual Value (2024)		\$33,208	
Tax Area 11N_8_10 - 11N-FC-CSW		In Care Of Name BUREAU OF LAND MANAGEMENT-ROSWELL FIELD OFFICE	Primary Taxable		\$11,070	
Situs Address		Owner Address 2809 W 2ND ST	Exempt		(\$11,070)	
Legal Summary S: 1 T: 9S R: 25E ALL LESS LOT 4 S: 2 T: 9S R: 25E SW4SE4 S: 10 T: 9S R: 25E SE4NW4-NE4SW4-S2NE4-NW4SE4 LESS HWY & RR R/W'S (ADDED TO ACCOUNT) S: 11 T: 9S R: 25E NE4-NE4SE4-S2SE4 S: 12 T: 9S R: 25E ALL S: 13 T: 9S R: 25E ALL S: 14 T: 9S R: 25E ALL LESS S2SW4SE4-W2NE4NW4-NW4NW4 S: 15 T: 9S R: 25E ALL LESS NW4NW4 S: 20 T: 9S R: 25E E2 LESS HWY & RR R/W S: 21 T: 9S R: 25E N2-W2SW4-E2SE4 S: 22 T: 9S R: 25E ALL LESS N2NE4-N2SW4SE4 S: 23 T: 9S R: 25E ALL S: 24 T: 9S R: 25E ALL S: 25 T: 9S R: 25E ALL S: 26 T: 9S R: 25E ALL S: 27 T: 9S R: 25E ALL S: 28 T: 9S R: 25E E2-SE4SW4 S: 32 T: 9S R: 25E NE4NE4-S2NE4-SE4-E2SW4 S: 33 T: 9S R: 25E ALL S: 34 T: 9S R: 25E N2-SE4-SE4SW4 S: 35 T: 9S R: 25E ALL		UNITED STATES OF AMERICA	Adjusted Taxable Total		\$0	
			Tax Area: 11N 8 10		Tax Rate: 0.022276	
		Type	Actual	Assessed	Acres	SQFT
		Exempt Land	\$32,906	\$10,969	10445.850	0.000
		Tax Area: 11N 8 15 Tax Rate: 0.021276				
		Type	Actual	Assessed	Acres	
		Exempt Land	\$302	\$101	95.839	

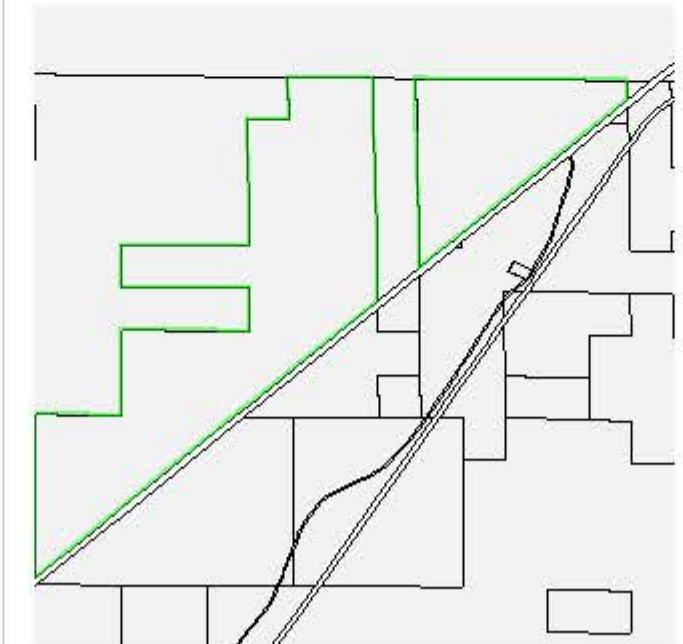
Images

Tax Year		Taxes	GIS
*2025		\$0.00	
2024		\$0.00	
* Estimated			



Location		Owner Information	Assessment History					
Parcel Number 4-143-049-114-198-000000		Owner Name KEY,GARY L ; KEY,JERI L	Actual Value (2024)		\$27,448			
Tax Area 11N_8_10 - 11N-FC-CSW		Owner Address 1012 E SECOND ST	Primary Taxable		\$9,150			
Situs Address		ROSWELL, NM 88201	Tax Area: 11N_8_10 Tax Rate: 0.022276					
Legal Summary S: 3 T: 9S R: 25E NE4 - SE4NW4 - SW4 N & W OF HWY 70 - N2NW4 - SW4NW4 S: 4 T: 9S R: 25E E2E2 N & W OF HWY 70 - W2 S: 5 T: 9S R: 25E SE4NE4 - E2SE4 S: 6 T: 9S R: 25E NW4 (LOTS 3 4 5) S: 8 T: 9S R: 25E N2N2 - SE4NE4 - S2 THAT PT N & W OF HWY 70 S: 9 T: 9S R: 25E NW4 - NW4SW4 N & W OF HWY 70 - E2NE4 N & W OF HWY 70 S: 17 T: 9S R: 25E NW4 N & W OF HWY 70 S: 18 T: 9S R: 25E E2 N & W OF HWY 70 BK 731 PG 1793 WD		UNITED STATES OF AMERICA	Type	Actual	Assessed	Acres	SQFT	Units
			Agriculture Land	\$6,041	\$2,014	1917.910	0.000	
			Non-Residential Improvement	\$21,407	\$7,136			69960.000

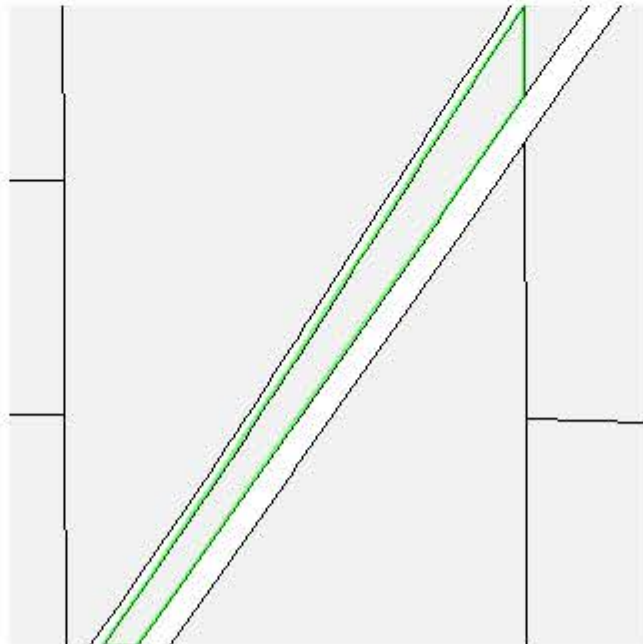
Images

Tax Year		Taxes	GIS
*2025		\$203.82	
2024		\$203.82	

\* Estimated

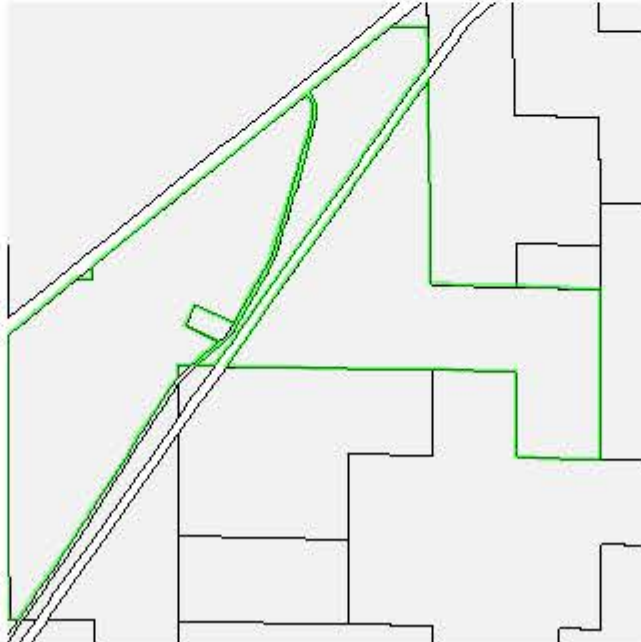
Location		Owner Information	Assessment History				
Parcel Number 4-143-050-031-338-000000		Owner Name HONDO RESOURCES INC	Actual Value (2024)		\$506		
Tax Area 11N_8_10 - 11N-FC-CSW		Owner Address PO BOX 2623	Primary Taxable		\$169		
Situs Address		ROSWELL, NM 88202-2623	Tax Area: 11N_8_10		Tax Rate: 0.022276		
Legal Summary S: 9 T: 9S R: 25E SE1/4SE1/4 S & E OF OLD CLOVIS HWY & N & W OF AT & SF		UNITED STATES OF AMERICA	Type	Actual	Assessed	Acres	SQFT
RR R/W S: 10 T: 9S R: 25E W1/2W1/2 S & E OF OLD CLOVIS HWY & N & W OF AT & SF RR R/W			Non-Residential Land	\$506	\$169	20.227	0.000
BK: 425 PG: 488 WD							

Images

Tax Year		Taxes	GIS
*2025		\$3.76	
2024		\$3.76	
* Estimated			

Location		Owner Information	Assessment History			
Parcel Number 4-143-050-061-098-000000		Owner Name HONDO RESOURCES INC	Actual Value (2024)		\$10,593	
Tax Area 11N_8_10 - 11N-FC-CSW		Owner Address PO BOX 2623	Primary Taxable		\$3,531	
Situs Address		ROSWELL, NM 88202-2623	Tax Area: 11N 8 10		Tax Rate: 0.022276	
Legal Summary S: 3 T: 9S R: 25E S1/2N1/2 & S1/2 S & E OF HWY 70 & N & W OF OLD CLOVIS HWY: S: 9 T: 9S R: 25E E2E2 S & E OF HWY 70 & N & W OF OLD CLOVIS HWY S: 10 T: 9S R: 25E W1/2 N & W OF OLD CLOVIS HWY LESS 5.10 AC IN NE4NW4 BK: 425 PG: 488 WD		UNITED STATES OF AMERICA	Type	Actual	Assessed	Acres SQFT
			Non-Residential Land	\$10,593	\$3,531	321.582 0.000

Images

Tax Year		Taxes	GIS
*2025		\$78.66	
2024		\$78.66	
* Estimated			

# Section 10

## Written Description of the Routine Operations of the Facility

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

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Bitter Lake is an extension of a local gas transportation system that gathers casinghead gas from multiple wells in the area. The facility compresses the gas for delivery to a main line. The site operates natural gas-fired engines (Units C-891, C-893, C-894, C-895, and C-896) to raise the discharge pressure of the gas in the pipeline to overcome the effect of frictional losses in the pipeline upstream of the station or from pressure losses/changes within the facility in order to maintain the required suction pressure at the next downstream facility. The volume of gas flowing and the amount of subsequent frictional losses in the pipeline are dependent on field conditions and downstream plant conditions causing pressure variations. The glycol dehydrator (Unit DEHY) has a capacity of 30 MMscf/day and the two associated reboilers operate a 0.75 MMBtu/hr (Units RB-1, RB-2). Only one of the two reboilers operates under normal operating conditions. The second reboiler may be used either as a backup unit or as a second unit in series to accommodate higher production rates and the resultant increased heat load on the glycol system. The helium recovery unit (Unit HRU) re-injects gas into the pipeline for further separation at another facility further downstream; therefore, there are no emissions associated with the unit. There are three condensate tanks located at the facility (Units TK-1, TK-2, and TK-2a), which contain hydrocarbons and water that drop out of the line prior to compression. There are associated loading emissions with the three condensate and produced water tanks (Unit LOAD-1 and LOAD-2). There are also lube oil tanks (Units TK-3 and TK-10) along with used lube oil tanks (Units TK-6 and TK-12). Additional emissions result from facility-wide fugitives (Unit FUG), haul roads (Unit Haul), venting emissions during Startup, Shutdown, and Maintenance (Unit SSM), and Malfunction emissions (Unit M).



# Section 11

## Source Determination

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

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

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

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

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

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

☐ Yes ☒ No

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

☐ Yes ☒ No

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

☐ Yes ☒ No

### C. Make a determination:

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

# Section 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. Project increase are less than 250 tpy.** The “project” emissions listed below **do** only result from changes described in this permit application, thus no emissions from other **revisions or modifications, past or future** to this facility. Also, specifically discuss whether this project results in “de-bottlenecking”, or other associated emissions resulting in higher emissions. **Debottlenecked emissions are not accounted for since the source is an existing minor NSR site.** 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: **91.64** TPY
- b. CO: **99.4** TPY
- c. VOC: **61.39**TPY
- d. SOx: **4.02** TPY
- e. PM: **4.52** TPY
- f. PM10: **4.52** TPY
- g. PM2.5: **4.52** TPY
- h. Fluorides: **0** TPY
- i. Lead: **0** TPY
- j. Sulfur compounds (listed in Table 2): **0.77** TPY
- k. **GHG: XX.X** TPY

B. Netting **N/A**

C. BACT **N/A**

D. 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. **N/A**

# 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/>

### **Example of a Table for State Regulations:**

<a href="#">State Regulation Citation</a>	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	If subject, this would normally apply to the entire facility. 20.2.3 NMAC is a State Implementation Plan (SIP) approved regulation that limits the maximum allowable concentration of, Sulfur Compounds, Carbon Monoxide and Nitrogen Dioxide. Title V applications, see exemption at 20.2.3.9 NMAC The TSP NM ambient air quality standard was repealed by the EIB effective November 30, 2018.
20.2.7 NMAC	Excess Emissions	Yes	Facility	If subject, this would normally apply to the entire facility. If your entire facility or individual pieces of equipment are subject to emissions limits in a permit or numerical emissions standards in a federal or state regulation, this applies. This would not apply to Notices of Intent since these are not permits.
20.2.23 NMAC	Fugitive Dust Control	No for permitted facilities, possible for NOIs	Facility	This regulation may apply if, this is an application for a notice of intent (NOI) per 20.2.73 NMAC, if the activity or facility is a fugitive dust source listed at 20.2.23.108.A NMAC, <b>and</b> if the activity or facility is located in an area subject to a mitigation plan pursuant to 40 CFR 51.930.  As of January 2019, the only areas of the State subject to a mitigation plan per 40 CFR 51.930 are in Doña Ana and Luna Counties.  Sources exempt from 20.2.23 NMAC are activities and facilities subject to a permit issued pursuant to the NM Air Quality Control Act, the Mining Act, or the Surface Mining Act (20.2.23.108.B NMAC).  <b>20.2.23.108 APPLICABILITY:</b> <b>A.</b> This part shall apply to persons owning or operating the following fugitive dust sources in areas requiring a mitigation plan in accordance with 40 CFR Part 51.930: <b>(1)</b> disturbed surface areas or inactive disturbed surface areas, or a combination thereof, encompassing an area equal to or greater than one acre; <b>(2)</b> any commercial or industrial bulk material processing, handling, transport or storage operations. <b>B.</b> The following fugitive dust sources are exempt from this part: <b>(1)</b> agricultural facilities, as defined in this part; <b>(2)</b> roadways, as defined in this part; <b>(3)</b> operations issued permits pursuant to the state of New Mexico Air Quality Control Act, Mining Act or Surface Mining Act; and <b>(4)</b> lands used for state or federal military activities. [20.2.23.108 NMAC - N, 01/01/2019]
20.2.33 NMAC	Gas Burning Equipment - Nitrogen Dioxide	No	N/A	<b>This regulation does not apply to internal combustion equipment such as engines. It only applies to external combustion equipment such as heaters or boilers.</b> <b>Choose all that apply:</b> This facility has new gas burning equipment ( <b>external combustion emission sources, such as gas fired boilers and heaters</b> ) having a heat input of greater than 1,000,000 million British Thermal Units per year per unit This facility has existing gas burning equipment having a heat input of greater than 1,000,000 million British Thermal Units per year per unit Note: "New gas burning equipment" means gas burning equipment, the construction or modification of which is commenced after February 17, 1972.
20.2.34 NMAC	Oil Burning Equipment: NO <sub>2</sub>	No	N/A	<b>This regulation does not apply to internal combustion equipment such as engines. It only applies to external combustion equipment such as heaters or boilers.</b>

<a href="#">State Regulation Citation</a>	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.)
				This facility has oil burning equipment ( <b>external combustion emission sources, such as oil fired boilers and heaters</b> ) having a heat input of greater than 1,000,000 million British Thermal Units per year per unit.
20.2.35 NMAC	Natural Gas Processing Plant – Sulfur	No	Facility	This regulation could apply to existing (prior to July 1, 1974) or new (on or after July 1, 1974) natural gas processing plants that use a Sulfur Recovery Unit to reduce sulfur emissions. No SRU is at the site. <b>See ‘Guidance and Clarification Regarding Applicability of 20.2.35 NMAC’ located with the Air Quality Bureau’s Permit Section website guidance documents.</b>
20.2.37 and 20.2.36 NMAC	Petroleum Processing Facilities and Petroleum Refineries	No	N/A	<b>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.</b>
20.2.38 NMAC	Hydrocarbon Storage Facility	No	N/A	The Bitter Lake Compressor Station is not a petroleum processing facility, therefore, this section is not applicable.
20.2.39 NMAC	Sulfur Recovery Plant - Sulfur	No	N/A	The Bitter Lake Compressor Station is not a sulfur recover plant; therefore, this section is not applicable.
20.2.50 NMAC	Oil and Gas Sector – Ozone Precursor Pollutants			<p>This regulation establishes emission standards for volatile organic compounds (VOC) and oxides of nitrogen (NOx) for oil and gas production, processing, compression, and transmission sources. 20.2.50 NMAC subparts below:</p> <p>Include the construction status of applicable units as “New”, “Existing”, “Relocation of Existing”, or “Reconstructed” as defined by this Part in your justification:</p> <p>Check the box for the subparts that are applicable:</p> <p><input checked="" type="checkbox"/> 113 – Engines and Turbines  <input type="checkbox"/> 114 – Compressor Seals  <input checked="" type="checkbox"/> 115 – Control Devices and Closed Vent Systems  <input checked="" type="checkbox"/> 116 – Equipment Leaks and Fugitive Emissions  <input type="checkbox"/> 117 – Natural Gas Well Liquid Unloading  <input checked="" type="checkbox"/> 118 – Glycol Dehydrators  <input type="checkbox"/> 119 – Heaters  <input type="checkbox"/> 120 – Hydrocarbon Liquid Transfers  <input type="checkbox"/> 121 – Pig Launching and Receiving  <input checked="" type="checkbox"/> 122 – Pneumatic Controllers and Pumps  <input type="checkbox"/> 123 – Storage Vessels  <input type="checkbox"/> 124 – Well Workovers  <input type="checkbox"/> 125 – Small Business Facilities  <input type="checkbox"/> 126 – Produced Water Management Unit  <input type="checkbox"/> 127 – Flowback Vessels and Preproduction Operations</p>
20.2.61.109 NMAC	Smoke & Visible Emissions	Yes	C-891, C-893, C-894, C-895, C-986	The visible emissions from the stationary combustion equipment at the Bitter Lake Compressor Station will not exceed an opacity of 20 percent.
20.2.70 NMAC	Operating Permits	No	N/A	The Facility is not a major source. Therefore, this section is not applicable.
20.2.71 NMAC	Operating Permit Fees		Facility	If subject to 20.2.70 NMAC and your permit includes numerical ton per year emission limits, you are subject to 20.2.71 NMAC and normally applies to the entire facility.
20.2.72 NMAC	Construction Permits	No	N/A	The Bitter Lake Compressor Station has previously been issued a construction permit.

<a href="#">State Regulation Citation</a>	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.)
20.2.73 NMAC	NOI & Emissions Inventory Requirements	Yes	Facility	The Bitter Lake Compressor Station has been issued a construction permit and therefore, will submit an emission inventory report every 3 years upon request by the department.
20.2.74 NMAC	Permits – Prevention of Significant Deterioration (PSD)	No	N/A	This regulation establishes requirements for obtaining a prevention of significant deterioration permit. The facility currently does not have the potential to emit greater than 250 tons per year of any criteria pollutant and, therefore, is not subject to this regulation.
20.2.75 NMAC	Construction Permit Fees	Yes	Facility	his is a 20.2.73 NMAC application and it is subject to the filing fee at 20.2.75.10 NMAC.
20.2.77 NMAC	New Source Performance	Yes	C-891, C893, C-894, C-895, C-896	This is a stationary source which is subject to the requirements of 40 CFR Part 60
20.2.78 NMAC	Emission Standards for HAPS	No	N/A	Facility is not subject to the requirements of 40 CFR part 61; therefore, the Bitter Lake Compressor Station is exempt from this rule.
20.2.79 NMAC	Permits – Nonattainment Areas	No	N/A	This regulation establishes the requirements for obtaining a nonattainment area permit. The facility is not located in a non-attainment area and therefore is not subject to this regulation
20.2.80 NMAC	Stack Heights	No	N/A	This regulation establishes requirements for the evaluation of stack heights and other dispersion techniques. This regulation does not apply as all stacks at the facility follow good engineering practice.
20.2.82 NMAC	MACT Standards for source categories of HAPS	Yes	C-891, C-893, C-894, C-895, C-896	This regulation applies to all sources emitting hazardous air pollutants, which are subject to the requirements of 40 CFR Part 63.

**Example of a Table for Applicable Federal Regulations (Note: This is not an exhaustive list):**

<a href="#">Federal Regulation Citation</a>	Title	Applies? Enter Yes or No	Unit(s) or Facility	Justification:
40 CFR 50	NAAQS	Yes	Facility	The Bitter Lake Compressor Station complies with the national primary and secondary ambient air quality standards..
NSPS 40 CFR 60, Subpart A	General Provisions	Yes		New stationary sources at the Facility will comply with the standards of performance in 40 CFR 60, Subpart A.

<u><a href="#">Federal Regulation Citation</a></u>	<b>Title</b>	<b>Applies? Enter Yes or No</b>	<b>Unit(s) or Facility</b>	<b>Justification:</b>
NSPS 40 CFR60.40a, Subpart Da	Subpart Da, Performance Standards for <b>Electric Utility Steam Generating Units</b>	No	N/A	This regulation establishes standards of performance for electric utility steam generating units. This regulation does not apply because the facility does not operate any electric utility steam generating units.
NSPS 40 CFR60.40b Subpart Db	<b>Electric Utility Steam Generating Units</b>	No	N/A	This regulation does not apply because the facility does not operate any electric utility steam generating units.
40 CFR 60.40c, Subpart Dc	Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units	No	N/A	The facility does not have any boilers.
NSPS 40 CFR 60, Subpart Ka	Standards of Performance for <b>Storage Vessels for Petroleum Liquids</b> for which Construction, Reconstruction, or Modification Commenced After May 18, 1978, and <b>Prior</b> to July 23, 1984	No	N/A	Except as provided in paragraph (b) of this section, the affected facility to which this subpart applies is each storage vessel with a storage capacity greater than 151,416 liters (40,000 gallons) that is used to store petroleum liquids for which construction is commenced after May 18, 1978 and prior to July 23, 1984. The condensate tanks at this facility were constructed after July 23, 1984, therefore, this subpart does not apply.
NSPS 40 CFR 60, Subpart Kb	Standards of Performance for <b>Volatile Organic Liquid Storage Vessels</b> (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced <b>After</b> July 23, 1984	No	N/A	Except as provided in paragraph (b) of this section, the affected facility to which this subpart applies is each storage vessel with a capacity greater than or equal to 75 cubic meters (m3) that is used to store volatile organic liquids (VOL) for which construction, reconstruction, or modification is commenced after July 23, 1984. The tanks at this facility have a design capacity less than or equal to 1,589.874 m3 used for petroleum or condensate stored, processed, or treated prior to custody transfer. The tanks are not subject.
NSPS 40 CFR 60.330 Subpart GG	<b>Stationary Gas Turbines</b>	No	N/A	The provisions of this subpart are applicable to the following affected facilities: All stationary gas turbines with a heat input at peak load equal to or greater than 10.7 gigajoules (10 million Btu) per hour, based on the lower heating value of the fuel fired. The facility does not contain the affected units. This regulation does not apply.
NSPS 40 CFR 60, Subpart KKK	Leaks of VOC from <b>Onshore Gas Plants</b>	No	N/A	The compressor station is not located at an onshore natural gas processing plant; therefore, this section is not applicable



<u><a href="#">Federal Regulation Citation</a></u>	<b>Title</b>	<b>Applies? Enter Yes or No</b>	<b>Unit(s) or Facility</b>	<b>Justification:</b>
NSPS 40 CFR Part 60 Subpart LLL	Standards of Performance for <b>Onshore Natural Gas Processing:</b> SO <sub>2</sub> Emissions	No	N/A	The facility is not a natural gas processing plant.
NSPS 40 CFR Part 60 Subpart OOOO	Standards of Performance for Crude Oil and Natural Gas Production, Transmission, and Distribution for which construction, modification or reconstruction commenced after August 23, 2011 and before September 18, 2015	No	N/A	The Facility does not have equipment that is subject to 40 CFR 60, Subpart OOOO.
NSPS 40 CFR Part 60 Subpart OOOOa	Standards of Performance for Crude Oil and Natural Gas Facilities for which Construction, Modification or Reconstruction Commenced <b>After</b> September 18, 2015 and before December 6, 2022	Yes	FUG	The Facility does not have equipment that is subject to 40 CFR 60, Subpart OOOOa.
NSPS 40 CFR Part 60 Subpart OOOOb	Standards of Performance for Crude Oil and Natural Gas Facilities for which Construction, Modification or Reconstruction Commenced <b>After</b> December 6, 2022	Yes	FUG	Since the modification of the Bitter Lake Compressor Station started after the December 6, 2022 applicability date, the fugitive emission components are subject to NSPS OOOOb (per 60.5365b(j)). The facility will follow all applicable standards.
NSPS 40 CFR 60 Subpart IIII	Standards of performance for Stationary Compression Ignition Internal Combustion Engines	No	N/A	This facility has stationary spark ignition (SI) internal combustion engines (ICE) which do not meet the criteria listed in the subpart and therefore they are not subject to this regulation.
NSPS 40 CFR Part 60 Subpart JJJJ	Standards of Performance for Stationary Spark Ignition Internal Combustion Engines	Yes	N/A	This regulation establishes standards of performance for stationary spark ignition internal combustion engines. Units 894 and 895 were reconstructed and are subject this standard. If the new engine is subject, IACX will comply as required.
NSPS 40 CFR 60	Standards of Performance for	No	N/A	The facility does not operate an affected source under this subpart.



<b><u>Federal Regulation Citation</u></b>	<b>Title</b>	<b>Applies? Enter Yes or No</b>	<b>Unit(s) or Facility</b>	<b>Justification:</b>
Subpart TTTT	Greenhouse Gas Emissions for Electric Generating Units			
NSPS 40 CFR 60 Subpart UUUU	Emissions Guidelines for Greenhouse Gas Emissions and Compliance Times for Electric Utility Generating Units	No	N/A	The facility does not operate an affected source under this subpart
NSPS 40 CFR 60, Subparts WWW, XXX, Cc, and Cf	Standards of performance for Municipal Solid Waste (MSW) Landfills	No	N/A	The facility does not operate an affected source under this subpart.
NESHAP 40 CFR 61 Subpart A	General Provisions	No	N/A	NSPS 40 CFR 61 does not apply to the facility because the facility does not emit or have the triggering substances on site and/or the facility is not involved in the triggering activity. The facility is not subject to this regulation. None of the subparts of Part 61 apply to the facility.
NESHAP 40 CFR 61 Subpart E	National Emission Standards for <b>Mercury</b>	No	N/A	The facility does not operate an affected source under this subpart.
NESHAP 40 CFR 61 Subpart V	National Emission Standards for <b>Equipment Leaks</b> (Fugitive Emission Sources)	No	N/A	This regulation establishes national emission standards for equipment leaks (fugitive emission sources). The facility does not have equipment that operates in volatile hazardous air pollutant (VHAP) service [40 CFR Part 61.240]. The regulated activities subject to this regulation do not take place at this facility. The facility is not subject to this regulation.
MACT 40 CFR 63, Subpart A	General Provisions	Yes	C-891, C-893, C-894, C-895, C-896	The engines will comply with MACT 40 CFR 63, Subpart A
MACT 40 CFR 63.760 Subpart HH	<b>Oil and Natural Gas Production Facilities</b>	Yes	DEHY	This subpart applies to owners and operators of emissions points including glycol dehydration units, and storage vessels with the potential for flash emissions This facility is subject to the requirements of 40 CFR 63 Subpart HH, which includes requirements applicable to area sources with TEG Dehydrators. The site is not a major source of hazardous air pollutants (HAPs) but an area source of HAPs and therefore subject to this subpart. The dehydrator has the potential to emit less than 1 tpy (0.90 megagram per year) of benzene, and it is therefore subject to the operating requirements of §63.764(e)(1)(ii).
MACT 40 CFR 63 Subpart HHH				This subpart applies to owners and operators of natural gas transmission and storage facilities that transport or store natural gas prior to entering the pipeline to a local distribution company or to a final end user (if there is no local distribution company), and that are major sources of hazardous air pollutants (HAP) emissions as defined in §63.1271.
MACT 40 CFR 63 Subpart DDDDD	National Emission Standards for Hazardous Air Pollutants for Major Industrial, Commercial, and Institutional Boilers & Process Heaters	No	N/A	Facility is not a major source of hazardous air pollutants and hence not subject to this regulation.

<b><u>Federal Regulation Citation</u></b>	<b>Title</b>	<b>Applies? Enter Yes or No</b>	<b>Unit(s) or Facility</b>	<b>Justification:</b>
MACT 40 CFR 63 Subpart UUUUU	National Emission Standards for Hazardous Air Pollutants Coal & Oil Fire Electric Utility Steam Generating Unit	No	N/A	Facility is does not have a coal and oil fire electric utility steam generating unit.
MACT 40 CFR 63 Subpart ZZZZ	National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines ( <b>RICE MACT</b> )	Yes	C-891, C-893, C-894, C-895, C-896	The engine(s) meet the requirements of MACT ZZZZ.
40 CFR 64	<b>Compliance Assurance Monitoring</b>			<p><b>Applies only to Title V Major Sources</b></p> <p>Emissions for Unit <b>XX</b> are major in and of itself (XXXX TPY SO2).</p> <p>OR SRU is actually exempt because of 40 CFR64.2 (b) (vI)</p> <p>(b) Exemptions—(1) Exempt emission limitations or standards. The requirements of this part shall not apply to any of the following emission limitations or standards: (vi) Emission limitations or standards for which a part 70 or 71 permit specifies a continuous compliance determination method, as defined in §64.1. The exemption provided in this paragraph (b)(1)(vi) shall not apply if the applicable compliance method includes an assumed control device emission reduction factor that could be affected by the actual operation and maintenance of the control device (such as a surface coating line controlled by an incinerator for which continuous compliance is determined by calculating emissions on the basis of coating records and an assumed control device efficiency factor based on an initial performance test; in this example, this part would apply to the control device and capture system, but not to the remaining elements of the coating line, such as raw material usage).</p>
40 CFR 68	<b>Chemical Accident Prevention</b>	No	N/A	This regulation defines compliance assurance monitoring. This regulation does not apply to this facility because the units do not have potential pre-control device emissions that are equal to or greater than 100 tons per year.
Title IV – Acid Rain 40 CFR 72	<b>Acid Rain</b>	No	N/A	The facility does not operate an affected source under this subpart.
Title IV – Acid Rain 40 CFR 73	<b>Sulfur Dioxide Allowance Emissions</b>	No	N/A	The facility does not operate an affected source under this subpart.
Title IV-Acid Rain 40 CFR 75	<b>Continuous Emissions Monitoring</b>	No	N/A	This regulation establishes sulfur dioxide allowance emissions for certain types of facilities. This part does not apply because the facility is not the type covered by this regulation [40 CFR Part 73.2].
Title IV – Acid Rain 40 CFR 76	<b>Acid Rain Nitrogen Oxides Emission Reduction Program</b>	No	N/A	Except as provided in paragraphs (b) through (d) of this section, the provisions apply to each coal-fired utility unit that is subject to an Acid Rain emissions limitation or reduction requirement for SO2 under Phase I or Phase II pursuant to sections 404, 405, or 409 of the Act.
Title VI – 40 CFR 82	<b>Protection of Stratospheric Ozone</b>		N/A	This regulation establishes an acid rain nitrogen oxides emission reduction program. This regulation applies to each coal-fired utility unit that is subject to an acid rain emissions limitation or reduction requirement for SO2. This part does not apply because the facility does not operate any coal-fired units [40 CFR Part 76.1].

<a href="#">Federal Regulation Citation</a>	Title	Applies? Enter Yes or No	Unit(s) or Facility	Justification:
		No		

# 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.

- 
- The Bitter Lake Compressor Station has an NGL Flash Drum planned to ensure offloading of the process streams. In the event that the 3rd party pipeline offloads have issues or outages, and they cannot take the residue gas or NGL, the inlet gas will be appropriately curtailed to ensure that gas is not flared.
  - Emission from the condensate tanks and produced water tanks are controlled by the vapor recovery unit (VRU) to reduce VOC emissions.
  - The Bitter Lake Compressor Station has modern process and safety systems in place that monitor fire and hazardous gases continuously. The Bitter Lake Compressor Station has fulltime monitors to observe and locate any safety and/or process issues that could result in an incident. This safeguards health and safety of not only the employees working at the facility but the surrounding area and environment.

# Section 15

## Alternative Operating Scenarios

(Submitting under 20.2.70, 20.2.72, 20.2.74 NMAC)

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

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

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

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There are no alternative operating scenarios at Bitter Lake Compressor Station.

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

**Check each box that applies:**

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

# Universal Application 4

## Air Dispersion Modeling Report

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

### 16-A: Identification

1	Name of facility:	Bitter Lake Compressor Station
2	Name of company:	IACX Roswell LLC
3	Current Permit number:	0274-M8
4	Name of applicant's modeler:	Christopher Mendiola-Coignet
5	Phone number of modeler:	210-239-8948
6	E-mail of modeler:	Chris.Mendiola@Altamira-US.com

### 16-B: Brief

1	Was a modeling protocol submitted and approved?	Yes☒	No☐
2	Why is the modeling being done?	Adding New Equipment	
3	Describe the permit changes relevant to the modeling.		
	Installation of an engine and a flare.		
4	What geodetic datum was used in the modeling?	NAD83	
5	How long will the facility be at this location?	Permanent	
6	Is the facility a major source with respect to Prevention of Significant Deterioration (PSD)?	Yes☐	No☒

7	Identify the Air Quality Control Region (AQCR) in which the facility is located	155
8	List the PSD baseline dates for this region (minor or major, as appropriate).	
	NO2	March 16, 1988
	SO2	July 28, 1978
	PM10	February 20, 1979
	PM2.5	November 13, 2013
9	Provide the name and distance to Class I areas within 50 km of the facility (300 km for PSD permits).	
	The nearest Class I area is Salt Creek Wilderness located approximately 1.8 km from the facility.	
10	Is the facility located in a non-attainment area? If so describe below	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
11	Describe any special modeling requirements, such as streamline permit requirements.	
	There are no special modeling requirements.	

### 16-C: Modeling History of Facility

1	Describe the modeling history of the facility, including the air permit numbers, the pollutants modeled, the National Ambient Air Quality Standards (NAAQS), New Mexico AAQS (NMAAQs), and PSD increments modeled. (Do not include modeling waivers).			
	Pollutant	Latest permit and modification number that modeled the pollutant facility-wide.	Date of Permit	Comments
	CO	0274M8	03/02/2022	
	NO <sub>2</sub>	0274M8	03/02/2022	
	SO <sub>2</sub>	0274M8	03/02/2022	
	H <sub>2</sub> S	0274M8	03/02/2022	
	PM2.5	0274M8	03/02/2022	
	PM10	0274M8	03/02/2022	
	Lead	N/A	N/A	
	Ozone (PSD only)	N/A	N/A	Not a PSD facility
	NM Toxic Air Pollutants (20.2.72.402 NMAC)	N/A	N/A	Facility does not require TAL modeling

### 16-D: Modeling performed for this application

1	For each pollutant, indicate the modeling performed and submitted with this application. Choose the most complicated modeling applicable for that pollutant, i.e., culpability analysis assumes ROI and cumulative analysis were also performed.					
	Pollutant	ROI	Cumulative analysis	Culpability analysis	Waiver approved	Pollutant not emitted or not changed.
	CO	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>



	NO <sub>2</sub>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	SO <sub>2</sub>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	H <sub>2</sub> S	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
	PM <sub>2.5</sub>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	PM <sub>10</sub>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Lead	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
	Ozone	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
	State air toxic(s) (20.2.72.402 NMAC)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

### 16-E: New Mexico toxic air pollutants modeling

1	List any New Mexico toxic air pollutants (NMTAPs) from Tables A and B in 20.2.72.502 NMAC that are modeled for this application. N/A					
2	List any NMTAPs that are emitted but not modeled because stack height correction factor. Add additional rows to the table below, if required. N/A					
	Pollutant	Emission Rate (pounds/hour)	Emission Rate Screening Level (pounds/hour)	Stack Height (meters)	Correction Factor	Emission Rate/ Correction Factor

### 16-F: Modeling options

1	Was the latest version of AERMOD used with regulatory default options? If not explain below.	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>

### 16-G: Surrounding source modeling

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

### 16-H: Building and structure downwash

1	How many buildings are present at the facility?	3
2	How many above ground storage tanks are present at the facility?	There are a number of Tanks/Process Vessels of varied sizes, however, none were within receptors reach.

3	Was building downwash modeled for all buildings and tanks? If not explain why below.	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
4	Building comments	N/A	

### 16-I: Receptors and modeled property boundary

1	<p>"Restricted Area" is an area to which public entry is effectively precluded. Effective barriers include continuous fencing, continuous walls, or other continuous barriers approved by the Department, such as rugged physical terrain with a steep grade that would require special equipment to traverse. If a large property is completely enclosed by fencing, a restricted area within the property may be identified with signage only. Public roads cannot be part of a Restricted Area. A Restricted Area is required in order to exclude receptors from the facility property. If the facility does not have a Restricted Area, then receptors shall be placed within the property boundaries of the facility.</p> <p>Describe the fence or other physical barrier at the facility that defines the restricted area.</p> <p>The restricted area is defined by a fence with an entry gate.</p>					
2	Receptors must be placed along publicly accessible roads in the restricted area. Are there public roads passing through the restricted area?				Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
3	Are restricted area boundary coordinates included in the modeling files?				Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
4	Describe the receptor grids and their spacing. The table below may be used, adding rows as needed.					
	Grid Type	Shape	Spacing	Start distance from restricted area or center of facility	End distance from restricted area or center of facility	Comments
	Fenceline	Fenceline Following	100m	0m	1000m	
250m			1000m	2500m		
500m			2500m	5000m		
1000m			5000m	10,000m		
5	Describe receptor spacing along the fence line.					
	50m along the fence line.					
6	Describe the PSD Class I area receptors.					
	Receptors are spread out throughout the Class 1, Salt Creek Wilderness, area due to proximity to site..					

### 16-J: Modeling Scenarios N/A

1	Identify, define, and describe all modeling scenarios. Examples of modeling scenarios include using different production rates, times of day, times of year, simultaneous or alternate operation of old and new equipment during transition periods, etc. Alternative operating scenarios should correspond to all parts of the Universal Application and should be fully described in Section 15 of the Universal Application (UA3).
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	Sources are intended to run loads as close to 100 percent.											
2	Which scenario produces the highest concentrations? Why?											
3	Were emission factor sets used to limit emission rates or hours of operation? (This question pertains to the "SEASON", "MONTH", "HROFDY" and related factor sets, not to the factors used for calculating the maximum emission rate.)										Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
4	If so, describe factors for each group of sources. List the sources in each group before the factor table for that group. (Modify or duplicate table as necessary. It's ok to put the table below section 16-K if it makes formatting easier.) Sources:											
5	Hour of Day	Factor	Hour of Day	Factor								
	1		13									
	2		14									
	3		15									
	4		16									
	5		17									
	6		18									
	7		19									
	8		20									
	9		21									
	10		22									
	11		23									
	12		24									
	If hourly, variable emission rates were used that were not described above, describe them below.											
N/A												
6	Were different emission rates used for short-term and annual modeling? If so describe below.										Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>

## 16-K: NO<sub>2</sub> Modeling

1	Which types of NO <sub>2</sub> modeling were used? Check all that apply.	
	<input checked="" type="checkbox"/>	ARM2
	<input type="checkbox"/>	100% NO <sub>x</sub> to NO <sub>2</sub> conversion
	<input type="checkbox"/>	PVMRM
	<input type="checkbox"/>	OLM
	<input type="checkbox"/>	Other:
Describe the NO <sub>2</sub> modeling.		

2	NO2 emissions from all sources were modeled, using the ARM2 method.		
3	Were default NO <sub>2</sub> /NO <sub>x</sub> ratios (0.5 minimum, 0.9 maximum or equilibrium) used? If not describe and justify the ratios used below.	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
4	Describe the design value used for each averaging period modeled.		
	1-hour: 98th percentile as calculated by AERMOD Annual One Year Annual Average:		

**16-L: Ozone Analysis****N/A**

1	NMED has performed a generic analysis that demonstrates sources that are minor with respect to PSD do not cause or contribute to any violations of ozone NAAQS. The analysis follows. The basis of the ozone SIL is documented in <a href="#">Guidance on Significant Impact Levels for Ozone and Fine Particles in the Prevention of Significant Deterioration Permitting Program</a> , EPA, April 17, 2018 and associated documents. NMED accepts this SIL basis and incorporates it into this permit record by reference. Complete documentation of the ozone concentration analysis using MERPS is included in the New Mexico Air Quality Bureau Air Dispersion Modeling Guidelines.			
2	<p>The MERP values presented in Table 10 and Table 11 of the NM AQB Modeling Guidelines that produce the highest concentrations indicate that facilities emitting no more than 250 tons/year of NO<sub>x</sub> and no more than 250 tons/year of VOCs will cause less formation of O<sub>3</sub> than the O<sub>3</sub> significance level.</p> $[O_3]_{8-hour} = \left( \frac{250 \frac{ton}{yr}}{340_{MERP_{NOX}}} + \frac{250 \frac{ton}{yr}}{4679_{MERP_{VOC}}} \right) \times 1.96 \mu g/m^3$ <p>=1.546 μg/m<sup>3</sup>, which is below the significance level of 1.96 μg/m<sup>3</sup>.</p> <p>Sources that produce ozone concentrations below the ozone SIL do not cause or contribute to air contaminant levels exceeding the ozone NAAQS.</p>			
3	Does the facility emit at least 250 tons per year of NO <sub>x</sub> or at least 250 tons per year of VOCs? Sources that emit at least 250 tons per year of NO <sub>x</sub> or at least 250 tons per year of VOCs are covered by the analysis above and require an individual analysis.		Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
5	For new PSD Major Sources or PSD major modifications, if MERPs were used to account for ozone fill out the information below. If another method was used describe below.			
	NO <sub>x</sub> (ton/yr)	MERP <sub>NOX</sub>	VOCs (ton/yr)	MERP <sub>VOC</sub>

**16-M: Particulate Matter Modeling**

1	Select the pollutants for which plume depletion modeling was used.	
	<input type="checkbox"/>	PM2.5
	<input type="checkbox"/>	PM10
	<input checked="" type="checkbox"/>	None
2	Describe the particle size distributions used. Include the source of information.	
	N/A – No particle size distributions were used.	

3	Does the facility emit at least 40 tons per year of NO <sub>x</sub> or at least 40 tons per year of SO <sub>2</sub> ? Sources that emit at least 40 tons per year of NO <sub>x</sub> or at least 40 tons per year of SO <sub>2</sub> are considered to emit significant amounts of precursors and must account for secondary formation of PM <sub>2.5</sub> .			Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
4	Was secondary PM modeled for PM <sub>2.5</sub> ?			Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
5	If MERPs were used to account for secondary PM <sub>2.5</sub> fill out the information below. If another method was used describe below.				
	Pollutant	NO <sub>x</sub>	SO <sub>2</sub>		[PM <sub>2.5</sub> ] <sub>24-hour</sub>
	MERP <sub>annual</sub>	359	1820		0.01833
	MERP <sub>24-hour</sub>	2649	10397		[PM <sub>2.5</sub> ] <sub>annual</sub>
	Emission rate (ton/yr)	11.4	3.94		0.00065
Emission rates represented above are project increases only for comparison to the SIL.					

### 16-N: Setback Distances

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

### 16-O: PSD Increment and Source IDs

1	The unit numbers in the Tables 2-A, 2-B, 2-C, 2-E, 2-F, and 2-I should match the ones in the modeling files. Do these match? If not, provide a cross-reference table between unit numbers if they do not match below.				Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
	Unit Number in UA-2		Unit Number in Modeling Files			
2	The emission rates in the Tables 2-E and 2-F should match the ones in the modeling files. Do these match? If not, explain why below.				Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
3	Have the minor NSR exempt sources or Title V Insignificant Activities" (Table 2-B) sources been modeled?				Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
4	Which units consume increment for which pollutants? All sources were modeled to consume increment for all applicable pollutants.					
	Unit ID	NO <sub>2</sub>	SO <sub>2</sub>	PM <sub>10</sub>	PM <sub>2.5</sub>	

5	PSD increment description for sources. (for unusual cases, i.e., baseline unit expanded emissions after baseline date).	PSD Increment was modeled by using baseline dates (3/16/1988 for NO <sub>2</sub> , 7/28/1978 for SO <sub>2</sub> , 2/20/1979 for PM <sub>10</sub> , and 11/13/2013 for PM <sub>2.5</sub> ). Once those were established, the pollutants were run for their respective time (Annual, 24-Hour, and/or 3-Hour). Project increases were modeled for comparison to the SIL and all pollutants were under this level, so no further PSD modeling was required.	
6	Are all the actual installation dates included in Table 2A of the application form, as required? This is necessary to verify the accuracy of PSD increment modeling. If not please explain how increment consumption status is determined for the missing installation dates below.	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>

### 16-P: Flare Modeling

1	For each flare or flaring scenario, complete the following			
	Flare ID (and scenario)	Average Molecular Weight	Gross Heat Release (cal/s)	Effective Flare Diameter (m)
	FLARE	18.72840817	350000	0.5266

### 16-Q: Volume and Related Sources N/A

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

### 16-R: Background Concentrations

1	Were NMED provided background concentrations used? Identify the background station used below. If non-NMED provided background concentrations were used describe the data that was used.	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
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	CO: Del Norte High School (350010023)			
	NO <sub>2</sub> : Outside Carlsbad (350151005)			
	PM <sub>2.5</sub> : Hobbs-Jefferson (350450019)			
	PM <sub>10</sub> : Hobbs-Jefferson (350250008)			
	SO <sub>2</sub> : Amarillo (483751025)			
	Other:			
	Comments:			
2	Were background concentrations refined to monthly or hourly values? If so describe below.		Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>

### 16-S: Meteorological Data

1	Was NMED provided meteorological data used? If so select the station used.	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
	Carlsbad		
2	If NMED provided meteorological data was not used describe the data set(s) used below. Discuss how missing data were handled, how stability class was determined, and how the data were processed.		

### 16-T: Terrain

1	Was complex terrain used in the modeling? If not, describe why below.	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
2	What was the source of the terrain data?		
	USGS National Elevation Data (NED) 1 Arc Second n34w105 TIFF		

### 16-U: Modeling Files

1	Describe the modeling files:		
	File name (or folder and file name)	Pollutant(s)	Purpose (ROI/SIA, cumulative, culpability analysis, other)
	SIL (folder)	CO, SO <sub>2</sub> , NO <sub>x</sub> , PM <sub>10</sub> , PM <sub>2.5</sub>	ROI Significant Impact Level (SIL) Analysis
	NAAQS/Increment (folder)	NO <sub>x</sub> , PM <sub>2.5</sub>	ROI NAAQS Analysis
	Class I	CO, SO <sub>2</sub> , NO <sub>x</sub> , PM <sub>10</sub> , PM <sub>2.5</sub>	ROI Significant Impact Level (SIL) Analysis

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16-V: PSD New or Major Modification Applications		N/A	
1	A new PSD major source or a major modification to an existing PSD major source requires additional analysis. Was preconstruction monitoring done (see 20.2.74.306 NMAC and PSD Preapplication Guidance on the AQB website)?	Yes <input type="checkbox"/>	No <input type="checkbox"/>
2	If not, did AQB approve an exemption from preconstruction monitoring?	Yes <input type="checkbox"/>	No <input type="checkbox"/>
3	Describe how preconstruction monitoring has been addressed or attach the approved preconstruction monitoring or monitoring exemption.		
4	Describe the additional impacts analysis required at 20.2.74.304 NMAC.		
5	If required, have ozone and secondary PM2.5 ambient impacts analyses been completed? If so describe below.	Yes <input type="checkbox"/>	No <input type="checkbox"/>



**16-W: Modeling Results**

1	If ambient standards are exceeded because of surrounding sources, a culpability analysis is required for the source to show that the contribution from this source is less than the significance levels for the specific pollutant. Was culpability analysis performed? If so describe below.							Yes <input type="checkbox"/>	No <input type="checkbox"/>	
2 Identify the maximum concentrations from the modeling analysis. Rows may be modified, added and removed from the table below as necessary.										
Pollutant, Time Period and Standard	Modeled Facility Concentration (µg/m3)	Modeled Concentration with Surrounding Sources (µg/m3)	Secondary PM (µg/m3)	Background Concentration (µg/m3)	Cumulative Concentration (µg/m3)	Value of Standard (µg/m3)	Percent of Standard	Location		
								UTM E (m)	UTM N (m)	Elevation (m)
NOx – 1hr - Class II SIL	106.75				106.7	7.52	1419.53	556551.53	3712819.1	1082.4
NOx-24-hr- Class II SIL	68.66				68.7	5	1373.11	556551.53	3712819.1	1082.4
NOx - annual- Class II SIL	6.70				6.7	1	669.90	556551.53	3712819.1	1082.4
NOx - annual- Class I SIL	0.08				0.1	0.1	81.69	556498	3714605	3576
CO-1 hr- SIL	222.09				222.1	2,000.00	11.10	556551.53	3712819.1	1082.4
CO-8 hr- SIL	182.21				182.2	500.00	36.44	556551.53	3712819.1	1082.4
PM10 – 24hr- Class I SIL	0.05				0.1	0.3	17.16	556498	3714605	3576
PM10 – Annual- Class I SIL	0.01				0.0	0.2	2.66	556498	3714605	3576
PM10 – 24hr- Class II SIL	2.78				2.8	5	55.66	556551.53	3712819.1	1082.4
PM10 – Annual- Class II SIL	0.30				0.3	1	29.73	556507.39	3712839.49	1082.33
PM2.5 – 24hr- Class I SIL	0.05		0.0174		0.1	0.27	25.52	556498	3714605	3576
PM2.5 – Annual- Class I SIL	0.01		0.0007		0.0	0.05	12.10	556498	3714605	3576
PM2.5 – 24hr- Class II SIL	2.78		0.0174		2.8	1.2	233.38	556551.53	3712819.1	1082.4

Pollutant, Time Period and Standard	Modeled Facility Concentration (µg/m3)	Modeled Concentration with Surrounding Sources (µg/m3)	Secondary PM (µg/m3)	Background Concentration (µg/m3)	Cumulative Concentration (µg/m3)	Value of Standard (µg/m3)	Percent of Standard	Location		
								UTM E (m)	UTM N (m)	Elevation (m)
PM2.5 – Annual-Class II SIL	0.30		0.0007		0.3	0.13	229.27	556507.39	3712839.49	1082.33
SO2-1hr- Class II SIL	0.98				1.0	7.8	12.54	556463.25	3712859.88	1082.4
SO2-3hr- Class II SIL	0.65				0.7	25	2.61	556463.25	3712859.88	1082.4
SO2-24hr- Class II SIL	0.33				0.3	5	6.58	556463.25	3712859.88	1082.4
SO2-Annual- Class II SIL	0.05				0.0	1	4.56	556463.25	3712859.88	1082.4
SO2-3hr- Class I SIL	0.03				0.0	1	2.96	556498	3714605	3576
NOx – 1hr-NMAAQS	106.03			54.5	160.5	188.03	85.37	556551.53	3712819.1	1082.4
NOx-24-hr-NMAAQS	71.95				71.9	188.03	38.26	556551.53	3712819.1	1082.4
NOx - annual-NMAAQS	9.91			9.3	19.2	94.02	20.43	556551.53	3712819.1	1082.4
PM2.5 – 24hr-NMAAQS	1.97	1.97	0.0174	16.5	18.5	35	52.83	556551.53	3712819.1	1082.4
PM2.5 – Annual-NMAAQS	0.42	0.42	0.0007	7.1	8.0	9	88.89	556500	3712900	1082.25
NOx - annual-Class II PSD	9.91			9.3	19.21	25	76.83	556551.53	3712819.1	1082.4
PM2.5 – 24hr-Class II PSD	1.97	1.97	0.0174		1.99	9	22.13	556551.53	3712819.1	1082.4
PM2.5 – Annual-Class II PSD	0.42	0.42	0.0007		0.42	4	10.49	556500	3712900	1082.25

**16-X: Summary/conclusions**

1

A statement that modeling requirements have been satisfied and that the permit can be issued.

Project emissions of CO, SO<sub>2</sub>, PM<sub>10</sub>, and PM<sub>2.5</sub> are below significant impacts levels. Sitewide NO<sub>2</sub> levels, combined with background concentration values, are below the NAAQS and NMAAQs.

# Section 17

## Compliance Test History

(Submitting under 20.2.70, 20.2.72, 20.2.74 NMAC)

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

**Compliance Test History Table**

Unit No.	Test Description	Test Date
C-891, C-893	Tested in accordance with EPA test methods for NOx and CO as required by Title V permit P500.	4/13/2004
C-894	Tested in accordance with EPA test methods for NOx and CO as required by NSR permit 2923M1.	5/12/2005
C-891	Tested in accordance with EPA test methods for NOx and CO as required by NSR permit 2923M1.	5/16/2018
C-893	Tested in accordance with EPA test methods for NOx and CO as required by NSR permit 2923M1.	6/22/2018
C-893	Tested in accordance with EPA test methods for NOx and CO as required by NSR permit 2923M1.	9/25/2019
C-891	Tested in accordance with EPA test methods for NOx and CO as required by NSR permit 2923M1.	1/28/2020
C-895	Tested in accordance with EPA test methods for NOx and CO as required by NSR permit 2923M1.	4/6/2021
C-894	Tested in accordance with EPA test methods for NOx and CO as required by NSR permit 2923M1.	4/6/2021
C-891	Tested in accordance with EPA test methods for NOx and CO as required by NSR permit 2923M1.	4/7/2021
C-893	Tested in accordance with EPA test methods for NOx and CO as required by NSR permit 2923M1.	5/3/2021
C-895	Tested in accordance with EPA test methods for NOx and CO as required by NSR permit 2923M1.	9/9/2021
C-894	Tested in accordance with EPA test methods for NOx and CO as required by NSR permit 2923M1.	9/9/2021

# Section 20

## Other Relevant Information

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**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.

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To save paper and to standardize the application format, delete this sentence, and begin your submittal for this attachment on this page.

## Section 22: Certification

Company Name: IACX Roswell LLC

I, Justin Wheeler, 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 31<sup>st</sup> day of January, 2025, upon my oath or affirmation, before a notary of the State of

Texas

Justin Wheeler  
\*Signature

1/31/25  
Date

Justin Wheeler  
Printed Name

Director of EHS  
Title

Scribed and sworn before me on this 31<sup>st</sup> day of January, 2025.

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

28<sup>th</sup> day of January, 2028.

[Signature]  
Notary's Signature

1-31-2025  
Date

Kimberly Caples  
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.

