

August 29, 2025

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

**RE: Application to Modify Permit Number 1033-M7  
32-8#2 Central Delivery Point  
San Juan County, New Mexico  
Harvest Four Corners, LLC**

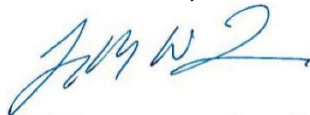
On behalf of Harvest Four Corners, LLC, Altamira-US is submitting an application for significant permit revision to modify the 32-8#2 Central Delivery Point construction permit. The purpose of this application is to add one triethylene glycol dehydrator (Unit 22) and update five existing compressor engines (Units 7-8 and 17-19) to Waukesha 7044GSI natural gas-fired compressor engines.

Attached are two copies of the 32-8#2 Central Delivery Point permit application and a check for \$500 to cover the permit filing fee.

Electronic versions of the application files will be provided to the state after the application is assigned to a permit reviewer.

Please don't hesitate to call me at (405) 702-1618 or email at [Laura.Worthen-Lodes@Altamira-us.com](mailto:Laura.Worthen-Lodes@Altamira-us.com) if you have any questions.

Sincerely,  
**Altamira-US, LLC**



Laura Worthen Lodes  
Chief Engineering Officer

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

## Universal Air Quality Permit Application

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

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

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

### Acknowledgements:

- ☒ I acknowledge that a pre-application meeting is available to me upon request. ☐ Title V Operating, Title IV Acid Rain, and NPR applications have no fees.
- ☒ \$500 NSR application Filing Fee enclosed **OR** ☐ The full permit fee associated with 10 fee points (required w/ streamline applications).
- ☒ Check No.: \_\_\_\_\_ 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: **20.2.72.219.D(1) NMAC**  
 (e.g. application for a new minor source would be 20.2.72.200.A NMAC, one example for a Technical Permit Revision is 20.2.72.219.B.1.b NMAC, a Title V acid rain application would be: 20.2.70.200.C NMAC)

## Section 1 – Facility Information

|                                         |                                                                                                                                                                                                                                                                                                                                                               |                                                |                                       |
|-----------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------|---------------------------------------|
| <b>Section 1-A: Company Information</b> |                                                                                                                                                                                                                                                                                                                                                               | AI # if known: <b>1236</b>                     | Updating Permit/NOI #: <b>1033-M7</b> |
| 1                                       | Facility Name:<br><b>32-8#2 Central Delivery Point</b>                                                                                                                                                                                                                                                                                                        | Plant primary SIC Code (4 digits): <b>1389</b> |                                       |
|                                         |                                                                                                                                                                                                                                                                                                                                                               | Plant NAIC code (6 digits): <b>213112</b>      |                                       |
| a                                       | Facility Street Address (If no facility street address, provide directions from a prominent landmark):<br><b>From the intersection of Highway 550 and Highway 173, go east on Highway 173 and drive 18 miles to Highway 511 (Sportsman' Inn), turn left on Highway 511 and drive 18.6 miles (crossing the dam) to mile marker 26.6, site is on the right.</b> |                                                |                                       |

|   |                                                                                                                                 |                                                    |
|---|---------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------|
| 2 | Plant Operator Company Name: <b>Harvest Four Corners, LLC</b>                                                                   | Phone/Fax: <b>(505) 619-0025</b>                   |
| a | Plant Operator Address: <b>1755 Arroyo Drive, Bloomfield, New Mexico 87413</b>                                                  |                                                    |
| b | Plant Operator's New Mexico Corporate ID or Tax ID: <b>Harvest Four Corners, LLC</b>                                            |                                                    |
| 3 | Plant Owner(s) name(s): <b>Harvest Four Corners, LLC</b>                                                                        | Phone/Fax: <b>(505) 619-0025</b>                   |
| a | Plant Owner(s) Mailing Address(s): <b>1755 Arroyo Drive, Bloomfield, New Mexico 87413</b>                                       |                                                    |
| 4 | Bill To (Company): <b>Harvest Four Corners, LLC</b>                                                                             | Phone/Fax: <b>(505) 619-0025</b>                   |
| a | Mailing Address: <b>1755 Arroyo Drive, Bloomfield, New Mexico 87413</b>                                                         | E-mail: <b>jdeal@harvestmidstream.com</b>          |
| 5 | <input type="checkbox"/> Preparer:<br><input checked="" type="checkbox"/> Consultant: <b>Laura Worthen-Lodes</b>                | Phone/Fax: <b>(405) 702-1618</b>                   |
| a | Mailing Address: <b>525 Central Park Dr., Suite 500 Oklahoma City, OK 73105</b>                                                 | E-mail: <b>Laura.Worthen-Lodes@Altamira-US.com</b> |
| 6 | Plant Operator Contact: <b>Brandon Pearson</b>                                                                                  | Phone/Fax: <b>(970) 385-3861</b>                   |
| a | Address: <b>1755 Arroyo Drive, Bloomfield, New Mexico 87413</b>                                                                 | E-mail: <b>brpearson@harvestmidstream.com</b>      |
| 7 | Air Permit Contact: <b>Jennifer Nygren</b>                                                                                      | Title: <b>Environmental Specialist</b>             |
| a | E-mail: <b>jdeal@harvestmidstream.com</b>                                                                                       | Phone/Fax: <b>(505) 619-0025</b>                   |
| b | Mailing Address: <b>1755 Arroyo Drive, Bloomfield, New Mexico 87413</b>                                                         |                                                    |
| 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?<br><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?<br><input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A |                                                                                                                                                                                                             |
| 6   | Does this facility have a Title V operating permit (20.2.70 NMAC)?<br><input checked="" type="checkbox"/> Yes <input type="checkbox"/> No                                                                                   | If yes, the permit No. is: <b>P207-R4</b>                                                                                                                                                                   |
| 7   | Has this facility been issued a No Permit Required (NPR)?<br><input type="checkbox"/> Yes <input checked="" type="checkbox"/> No                                                                                            | If yes, the NPR No. is: <b>N/A</b>                                                                                                                                                                          |
| 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: <b>N/A</b>                                                                                                                                                                          |
| 9   | Does this facility have a construction permit (20.2.72/20.2.74 NMAC)?<br><input checked="" type="checkbox"/> Yes <input type="checkbox"/> No                                                                                | If yes, the permit No. is: <b>1033-M7</b>                                                                                                                                                                   |
| 10  | Is this facility registered under a General permit (GCP-1, GCP-2, etc.)?<br><input type="checkbox"/> Yes <input checked="" type="checkbox"/> No                                                                             | If yes, the register No. is: <b>N/A</b>                                                                                                                                                                     |

### 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: <b>3.983 MMscf</b> | Daily: <b>95.59 MMscf</b> | Annually: <b>34,890 Bscf</b> |
| b | Proposed                                                                                                                                   | Hourly: <b>3.983 MMscf</b> | Daily: <b>95.59 MMscf</b> | Annually: <b>34,890 Bscf</b> |
| 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: <b>3.983 MMscf</b> | Daily: <b>95.59 MMscf</b> | Annually: <b>34,890 Bscf</b> |

|   |          |                            |                           |                             |
|---|----------|----------------------------|---------------------------|-----------------------------|
| b | Proposed | Hourly: <b>3.983 MMscf</b> | Daily: <b>95.59 MMscf</b> | Annually: <b>34,890 Bcf</b> |
|---|----------|----------------------------|---------------------------|-----------------------------|

### Section 1-D: Facility Location Information

|    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                |                                                                                   |                                 |
|----|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------|-----------------------------------------------------------------------------------|---------------------------------|
| 1  | Latitude (decimal degrees): <b>36.95694</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | Longitude (decimal degrees): <b>-107.66305</b> | County:<br><b>San Juan</b>                                                        | Elevation (ft):<br><b>6,720</b> |
| 2  | UTM Zone: <input type="checkbox"/> 12 or <input checked="" type="checkbox"/> 13                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                | Datum: <input type="checkbox"/> NAD 83 <input checked="" type="checkbox"/> WGS 84 |                                 |
| a  | UTM E (in meters, to nearest 10 meters): <b>758,787 m</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                                | UTM N (in meters, to nearest 10 meters): <b>4,080,438 m</b>                       |                                 |
| 3  | Name and zip code of nearest New Mexico town: <b>Aztec, New Mexico 87410</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                                |                                                                                   |                                 |
| 4  | Detailed Driving Instructions from nearest NM town (attach a road map if necessary): <b>From the intersection of Highway 550 and Highway 173, go east on Highway 173 and drive 18 miles to Highway 511 (Sportsman' Inn), turn left on Highway 511 and drive 18.6 miles (crossing the dam) to mile marker 26.6, site is on the right.</b>                                                                                                                                                                                                                       |                                                |                                                                                   |                                 |
| 5  | <b>The facility is approximately 17.4 miles east of Aztec, New Mexico.</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                                |                                                                                   |                                 |
| 6  | Land Status of facility (check one): <input checked="" type="checkbox"/> Private <input type="checkbox"/> Indian/Pueblo <input type="checkbox"/> Government <input type="checkbox"/> BLM <input type="checkbox"/> Forest Service <input type="checkbox"/> Military                                                                                                                                                                                                                                                                                             |                                                |                                                                                   |                                 |
| 7  | List all municipalities, Indian tribes, and counties within a ten (10) mile radius (20.2.72.203.B.2 NMAC) of the property on which the facility is proposed to be constructed or operated: <b>None, Southern Ute Tribe, Rio Arriba County, and San Juan County</b>                                                                                                                                                                                                                                                                                             |                                                |                                                                                   |                                 |
| 8  | 20.2.72 NMAC applications only: Will the property on which the facility is proposed to be constructed or operated be closer than 50 km (31 miles) to other states, Bernalillo County, or a Class I area (see <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:<br><b>Colorado – 4.7 km</b>                                   |                                                |                                                                                   |                                 |
| 9  | Name nearest Class I area: <b>Weminuche Wilderness Area</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                |                                                                                   |                                 |
| 10 | Shortest distance (in km) from facility boundary to the boundary of the nearest Class I area (to the nearest 10 meters): <b>51.52 km</b>                                                                                                                                                                                                                                                                                                                                                                                                                       |                                                |                                                                                   |                                 |
| 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: <b>~17,000 m</b>                                                                                                                                                                                                                                                                                                              |                                                |                                                                                   |                                 |
| 12 | Method(s) used to delineate the Restricted Area: <b>Fence</b><br>"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?<br><input type="checkbox"/> Yes <input checked="" type="checkbox"/> No<br>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<br>If yes, what is the name and permit number (if known) of the other facility? <b>N/A</b>                                                                                                                                                                                                                                                                                                |                                                |                                                                                   |                                 |

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

|   |                                                                                                                                     |                                                 |                                                   |                                                                                               |
|---|-------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------|---------------------------------------------------|-----------------------------------------------------------------------------------------------|
| 1 | Facility maximum operating ( $\frac{\text{hours}}{\text{day}}$ ): <b>24</b>                                                         | ( $\frac{\text{days}}{\text{week}}$ ): <b>7</b> | ( $\frac{\text{weeks}}{\text{year}}$ ): <b>52</b> | ( $\frac{\text{hours}}{\text{year}}$ ): <b>8,760</b>                                          |
| 2 | Facility's maximum daily operating schedule (if less than 24 $\frac{\text{hours}}{\text{day}}$ )? Start: <b>N/A</b>                 |                                                 | AM PM                                             | End: <b>N/A</b> <input checked="" type="checkbox"/> AM <input checked="" type="checkbox"/> PM |
| 3 | Month and year of anticipated start of construction: <b>N/A</b>                                                                     |                                                 |                                                   |                                                                                               |
| 4 | Month and year of anticipated construction completion: <b>N/A</b>                                                                   |                                                 |                                                   |                                                                                               |
| 5 | Month and year of anticipated startup of new or modified facility: <b>N/A</b>                                                       |                                                 |                                                   |                                                                                               |
| 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: <b>N/A</b>                                                                                                                                                                                                                                                                                                                         | NOV Tracking No: <b>N/A</b> |                                                       |
| 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<br>If Yes, provide the 1c & 1d info below:                                                                                                                                                                                    |                             |                                                       |
| c | Document Title: <b>N/A</b>                                                                                                                                                                                                                                                                                                                                                   | Date: <b>N/A</b>            | Requirement # (or page # and paragraph #): <b>N/A</b> |
| d | Provide the required text to be inserted in this permit: <b>N/A</b>                                                                                                                                                                                                                                                                                                          |                             |                                                       |
| 2 | Is air quality dispersion modeling or modeling waiver being submitted with this application? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No                                                                                                                                                                                                             |                             |                                                       |
| 3 | Does this facility require an "Air Toxics" permit under 20.2.72.400 NMAC & 20.2.72.502, Tables A and/or B? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No                                                                                                                                                                                               |                             |                                                       |
| 4 | Will this facility be a source of federal Hazardous Air Pollutants (HAP)? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No                                                                                                                                                                                                                                |                             |                                                       |
| a | If Yes, what type of source? <input type="checkbox"/> Major ( <input type="checkbox"/> ≥10 tpy of any single HAP OR <input type="checkbox"/> ≥25 tpy of any combination of HAPS)<br>OR <input checked="" type="checkbox"/> Minor ( <input checked="" type="checkbox"/> <10 tpy of any single HAP AND <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: <b>N/A</b><br><br>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.) |
|---|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

**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): <b>Michelle McCracken</b>                                                                                                                                                                                       |                                                             | Phone: <b>(713) 515-3924</b> |
| a | R.O. Title: <b>EH&amp;S Director</b>                                                                                                                                                                                                                                | R.O. e-mail: <b>michelle.mccracken@harvestmidstream.com</b> |                              |
| b | R. O. Address: <b>1111 Travis Houston, TX 77002</b>                                                                                                                                                                                                                 |                                                             |                              |
| 2 | Alternate Responsible Official (20.2.70.300.D.2 NMAC): <b>Nathan Work</b>                                                                                                                                                                                           |                                                             | Phone: <b>(970)385-3817</b>  |
| a | A. R.O. Title: <b>Area Operations Manager</b>                                                                                                                                                                                                                       | A. R.O. e-mail: <b>nwork@harvestmidstream.com</b>           |                              |
| b | A. R. O. Address: <b>1755 Arroyo Drive, Bloomfield, New Mexico 87413</b>                                                                                                                                                                                            |                                                             |                              |
| 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): <b>N/A</b> |                                                             |                              |
| 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.): <b>Harvest Midstream Company</b>                                                                                     |                                                             |                              |
| a | Address of Parent Company: <b>1111 Travis Street, Houston, Texas 77002</b>                                                                                                                                                                                          |                                                             |                              |
| 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.): <b>N/A</b>                                                                    |                                                             |                              |
| 6 | Telephone numbers & names of the owners' agents and site contacts familiar with plant operations: <b>N/A</b>                                                                                                                                                        |                                                             |                              |

|   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|---|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 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: <b>Yes, Colorado (≈ 4.7 km), Southern Ute Tribe (≈ 4.7 km), Navajo Tribe (≈ 35.6 km), Jicarilla Apache Tribe (≈ 41.4 km), Ute Mountain Ute Tribe (≈ 51.1 km)</b> |
|---|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

## Section 1-I – Submittal Requirements

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

### Hard Copy Submittal Requirements:

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

### Electronic files sent by (check one):

☐ CD/DVD attached to paper application

☒ Secure electronic transfer. Air Permit Contact Name: **Laura Worthen Lodes**

Email: [Laura.Worthen-Lodes@Altamira-US.com](mailto:Laura.Worthen-Lodes@Altamira-US.com)

Phone number: [405-702-1618](tel:405-702-1618)

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.

**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><br>(Specify Units) | Requested Permitted Capacity <sup>3</sup><br>(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/<br>Reconstruction <sup>2</sup> | Emissions vented to Stack # |                                  |                                                                                                                                                |                                                                                                                                |                    |     |
| 1                        | Compressor Engine     | Waukesha | 7042GSI      | 353971 (Pkg x00072)  | 1,480 hp                                                      | 1,357 hp                                                     | 3/1/1991                                             | Catalyst                    | 20200202                         | <input type="checkbox"/> Existing (unchanged)<br><input type="checkbox"/> New/Additional<br><input checked="" type="checkbox"/> To Be Modified | <input type="checkbox"/> To be Removed<br><input type="checkbox"/> Replacement Unit<br><input type="checkbox"/> To be Replaced | 4SRB               | N/A |
|                          |                       |          |              |                      |                                                               |                                                              | 3/1/1991                                             | 1                           |                                  |                                                                                                                                                |                                                                                                                                |                    |     |
| 2                        | Compressor Engine     | Waukesha | 7042GSI      | C-12608 (Pkg x00006) | 1,480 hp                                                      | 1,357 hp                                                     | 4/27/1998                                            | Catalyst                    | 20200202                         | <input type="checkbox"/> Existing (unchanged)<br><input type="checkbox"/> New/Additional<br><input checked="" type="checkbox"/> To Be Modified | <input type="checkbox"/> To be Removed<br><input type="checkbox"/> Replacement Unit<br><input type="checkbox"/> To be Replaced | 4SRB               | N/A |
|                          |                       |          |              |                      |                                                               |                                                              | 4/27/1998                                            | 2                           |                                  |                                                                                                                                                |                                                                                                                                |                    |     |
| 3                        | Compressor Engine     | Waukesha | 7044GSI S5   | WAU-1653608          | 1,900 hp                                                      | 1,500 hp                                                     | Jun-22                                               | Catalyst                    | 20200202                         | <input type="checkbox"/> Existing (unchanged)<br><input type="checkbox"/> New/Additional<br><input checked="" type="checkbox"/> To Be Modified | <input type="checkbox"/> To be Removed<br><input type="checkbox"/> Replacement Unit<br><input type="checkbox"/> To be Replaced | 4SRB               | N/A |
|                          |                       |          |              |                      |                                                               |                                                              | Jun-22                                               | 3                           |                                  |                                                                                                                                                |                                                                                                                                |                    |     |
| 4                        | Compressor Engine     | Waukesha | 7044GSI S4   | WAU-1653598          | 1,900 hp                                                      | 1,680 hp                                                     | Jun-22                                               | Catalyst                    | 20200202                         | <input type="checkbox"/> Existing (unchanged)<br><input type="checkbox"/> New/Additional<br><input checked="" type="checkbox"/> To Be Modified | <input type="checkbox"/> To be Removed<br><input type="checkbox"/> Replacement Unit<br><input type="checkbox"/> To be Replaced | 4SRB               | N/A |
|                          |                       |          |              |                      |                                                               |                                                              | Jun-22                                               | 4                           |                                  |                                                                                                                                                |                                                                                                                                |                    |     |
| 5                        | Compressor Engine     | Waukesha | 7044GSI S4   | WAU-1653603          | 1,900 hp                                                      | 1,680 hp                                                     | Jun-22                                               | Catalyst                    | 20200202                         | <input type="checkbox"/> Existing (unchanged)<br><input type="checkbox"/> New/Additional<br><input checked="" type="checkbox"/> To Be Modified | <input type="checkbox"/> To be Removed<br><input type="checkbox"/> Replacement Unit<br><input type="checkbox"/> To be Replaced | 4SRB               | N/A |
|                          |                       |          |              |                      |                                                               |                                                              | Jun-22                                               | 5                           |                                  |                                                                                                                                                |                                                                                                                                |                    |     |
| 6                        | Compressor Engine     | Waukesha | 7044GSI S5   | WAU-1653593          | 1,900 hp                                                      | 1,500 hp                                                     | May-22                                               | Catalyst                    | 20200202                         | <input type="checkbox"/> Existing (unchanged)<br><input type="checkbox"/> New/Additional<br><input checked="" type="checkbox"/> To Be Modified | <input type="checkbox"/> To be Removed<br><input type="checkbox"/> Replacement Unit<br><input type="checkbox"/> To be Replaced | 4SRB               | N/A |
|                          |                       |          |              |                      |                                                               |                                                              | May-22                                               | 6                           |                                  |                                                                                                                                                |                                                                                                                                |                    |     |
| 7                        | Compressor Engine     | Waukesha | 7044GSI S4   | TBD                  | 1,900 hp                                                      | 1,680 hp                                                     | 1/25/1995                                            | Catalyst                    | 20200202                         | <input type="checkbox"/> Existing (unchanged)<br><input type="checkbox"/> New/Additional<br><input checked="" type="checkbox"/> To Be Modified | <input type="checkbox"/> To be Removed<br><input type="checkbox"/> Replacement Unit<br><input type="checkbox"/> To be Replaced | 4SRB               | N/A |
|                          |                       |          |              |                      |                                                               |                                                              | 1/25/1995                                            | 7                           |                                  |                                                                                                                                                |                                                                                                                                |                    |     |
| 8                        | Compressor Engine     | Waukesha | 7044GSI S4   | TBD                  | 1,900 hp                                                      | 1,680 hp                                                     | TBD                                                  | Catalyst                    | 20200202                         | <input type="checkbox"/> Existing (unchanged)<br><input type="checkbox"/> New/Additional<br><input checked="" type="checkbox"/> To Be Modified | <input type="checkbox"/> To be Removed<br><input type="checkbox"/> Replacement Unit<br><input type="checkbox"/> To be Replaced | 4SRB               | N/A |
|                          |                       |          |              |                      |                                                               |                                                              | TBD                                                  | 8                           |                                  |                                                                                                                                                |                                                                                                                                |                    |     |
| 9                        | Compressor Engine     | Waukesha | 7044GSI S4   | WAU-1653588          | 1,900 hp                                                      | 1,680 hp                                                     | May-22                                               | Catalyst                    | 20200202                         | <input type="checkbox"/> Existing (unchanged)<br><input type="checkbox"/> New/Additional<br><input checked="" type="checkbox"/> To Be Modified | <input type="checkbox"/> To be Removed<br><input type="checkbox"/> Replacement Unit<br><input type="checkbox"/> To be Replaced | 4SRB               | N/A |
|                          |                       |          |              |                      |                                                               |                                                              | May-22                                               | 9                           |                                  |                                                                                                                                                |                                                                                                                                |                    |     |
| 17                       | Compressor Engine     | Waukesha | 7044GSI S4   | TBD                  | 1,900 hp                                                      | 1,680 hp                                                     | 9/9/1989                                             | Catalyst                    | 20200202                         | <input type="checkbox"/> Existing (unchanged)<br><input type="checkbox"/> New/Additional<br><input checked="" type="checkbox"/> To Be Modified | <input type="checkbox"/> To be Removed<br><input type="checkbox"/> Replacement Unit<br><input type="checkbox"/> To be Replaced | 4SRB               | N/A |
|                          |                       |          |              |                      |                                                               |                                                              | 9/9/1989                                             | 17                          |                                  |                                                                                                                                                |                                                                                                                                |                    |     |
| 18                       | Compressor Engine     | Waukesha | 7044GSI S4   | TBD                  | 1,900 hp                                                      | 1,680 hp                                                     | 2/19/1999                                            | Catalyst                    | 20200202                         | <input type="checkbox"/> Existing (unchanged)<br><input type="checkbox"/> New/Additional<br><input checked="" type="checkbox"/> To Be Modified | <input type="checkbox"/> To be Removed<br><input type="checkbox"/> Replacement Unit<br><input type="checkbox"/> To be Replaced | 4SRB               | N/A |
|                          |                       |          |              |                      |                                                               |                                                              | 2/19/1999                                            | 18                          |                                  |                                                                                                                                                |                                                                                                                                |                    |     |
| 19                       | Compressor Engine     | Waukesha | 7044GSI S4   | TBD                  | 1,900 hp                                                      | 1,680 hp                                                     | TBD                                                  | Catalyst                    | 20200202                         | <input type="checkbox"/> Existing (unchanged)<br><input type="checkbox"/> New/Additional<br><input checked="" type="checkbox"/> To Be Modified | <input type="checkbox"/> To be Removed<br><input type="checkbox"/> Replacement Unit<br><input type="checkbox"/> To be Replaced | 4SRB               | N/A |
|                          |                       |          |              |                      |                                                               |                                                              | TBD                                                  | 19                          |                                  |                                                                                                                                                |                                                                                                                                |                    |     |
| 10a                      | Dehydrator Still Vent | Enertek  | J2P20M11 109 | 42384                | 20 mmcf/d                                                     | 20 mmcf/d                                                    |                                                      | N/A                         | 31000227                         | <input type="checkbox"/> Existing (unchanged)<br><input type="checkbox"/> New/Additional<br><input checked="" type="checkbox"/> To Be Modified | <input type="checkbox"/> To be Removed<br><input type="checkbox"/> Replacement Unit<br><input type="checkbox"/> To be Replaced | N/A                | N/A |
|                          |                       |          |              |                      |                                                               |                                                              |                                                      | 10a                         |                                  |                                                                                                                                                |                                                                                                                                |                    |     |
| 10b                      | Dehydrator Reboiler   | Enertek  | J2P0M11 09   | 42384                | 1,648 scfh                                                    | 1,648 scfh                                                   |                                                      | N/A                         | 31000228                         | <input checked="" type="checkbox"/> Existing (unchanged)<br><input type="checkbox"/> New/Additional<br><input type="checkbox"/> To Be Modified | <input type="checkbox"/> To be Removed<br><input type="checkbox"/> Replacement Unit<br><input type="checkbox"/> To be Replaced | N/A                | N/A |
|                          |                       |          |              |                      |                                                               |                                                              |                                                      | 10b                         |                                  |                                                                                                                                                |                                                                                                                                |                    |     |
| 11a                      | Dehydrator Still Vent | Enertek  | J2P20M11 109 | 42267                | 20 mmcf/d                                                     | 20 mmcf/d                                                    |                                                      | N/A                         | 31000227                         | <input type="checkbox"/> Existing (unchanged)<br><input type="checkbox"/> New/Additional<br><input checked="" type="checkbox"/> To Be Modified | <input type="checkbox"/> To be Removed<br><input type="checkbox"/> Replacement Unit<br><input type="checkbox"/> To be Replaced | N/A                | N/A |
|                          |                       |          |              |                      |                                                               |                                                              |                                                      | 11a                         |                                  |                                                                                                                                                |                                                                                                                                |                    |     |
| 11b                      | Dehydrator Reboiler   | Enertek  | J2P20M11 109 | 42267                | 1,648 scfh                                                    | 1,648 scfh                                                   |                                                      | N/A                         | 31000228                         | <input checked="" type="checkbox"/> Existing (unchanged)<br><input type="checkbox"/> New/Additional<br><input type="checkbox"/> To Be Modified | <input type="checkbox"/> To be Removed<br><input type="checkbox"/> Replacement Unit<br><input type="checkbox"/> To be Replaced | N/A                | N/A |
|                          |                       |          |              |                      |                                                               |                                                              |                                                      | 11b                         |                                  |                                                                                                                                                |                                                                                                                                |                    |     |
| 12a                      | Dehydrator Still Vent | Enertek  | J2P20M11 109 | 39062                | 20 mmcf/d                                                     | 20 mmcf/d                                                    |                                                      | N/A                         | 31000227                         | <input type="checkbox"/> Existing (unchanged)<br><input type="checkbox"/> New/Additional<br><input checked="" type="checkbox"/> To Be Modified | <input type="checkbox"/> To be Removed<br><input type="checkbox"/> Replacement Unit<br><input type="checkbox"/> To be Replaced | N/A                | N/A |
|                          |                       |          |              |                      |                                                               |                                                              |                                                      | 12a                         |                                  |                                                                                                                                                |                                                                                                                                |                    |     |

| Unit Number <sup>1</sup> | Source Description    | Make            | Model #     | Serial # | Manufacturer's Rated Capacity <sup>3</sup><br>(Specify Units) | Requested Permitted Capacity <sup>3</sup><br>(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/<br>Reconstruction <sup>2</sup> | Emissions vented to Stack # |                                  |                                                                                                                                                |                                                                                                                                |                    |     |
| 12b                      | Dehydrator Reboiler   | Enertek         | J2P20M11109 | 39062    | 1,648 scfh                                                    | 1,648 scfh                                                   |                                                      | N/A                         | 31000228                         | <input checked="" type="checkbox"/> Existing (unchanged)<br><input type="checkbox"/> New/Additional<br><input type="checkbox"/> To Be Modified | <input type="checkbox"/> To be Removed<br><input type="checkbox"/> Replacement Unit<br><input type="checkbox"/> To be Replaced | N/A                | N/A |
| 13a                      | Dehydrator Still Vent | Enertek         | J2P20M11109 | 41644    | 12 mmcf/d                                                     | 12 mmcf/d                                                    |                                                      | N/A                         | 31000227                         | <input type="checkbox"/> Existing (unchanged)<br><input type="checkbox"/> New/Additional<br><input checked="" type="checkbox"/> To Be Modified | <input type="checkbox"/> To be Removed<br><input type="checkbox"/> Replacement Unit<br><input type="checkbox"/> To be Replaced | N/A                | N/A |
| 13b                      | Dehydrator Reboiler   | Enertek         | J2P20M11109 | 41644    | 1,208 scfh                                                    | 1,208 scfh                                                   |                                                      | N/A                         | 31000228                         | <input checked="" type="checkbox"/> Existing (unchanged)<br><input type="checkbox"/> New/Additional<br><input type="checkbox"/> To Be Modified | <input type="checkbox"/> To be Removed<br><input type="checkbox"/> Replacement Unit<br><input type="checkbox"/> To be Replaced | N/A                | N/A |
| 14a                      | Dehydrator Still Vent | Enertek         | J2P20M11109 | TBD      | 12 mmcf/d                                                     | 12 mmcf/d                                                    |                                                      | N/A                         | 31000227                         | <input type="checkbox"/> Existing (unchanged)<br><input type="checkbox"/> New/Additional<br><input checked="" type="checkbox"/> To Be Modified | <input type="checkbox"/> To be Removed<br><input type="checkbox"/> Replacement Unit<br><input type="checkbox"/> To be Replaced | N/A                | N/A |
| 14b                      | Dehydrator Reboiler   | Enertek         | J2P20M11109 | TBD      | 1,208 scfh                                                    | 1,208 scfh                                                   |                                                      | N/A                         | 31000228                         | <input checked="" type="checkbox"/> Existing (unchanged)<br><input type="checkbox"/> New/Additional<br><input type="checkbox"/> To Be Modified | <input type="checkbox"/> To be Removed<br><input type="checkbox"/> Replacement Unit<br><input type="checkbox"/> To be Replaced | N/A                | N/A |
| 15a                      | Dehydrator Still Vent | Enertek         | J2P20M11109 | 43797    | 20 mmcf/d                                                     | 20 mmcf/d                                                    |                                                      | N/A                         | 31000227                         | <input type="checkbox"/> Existing (unchanged)<br><input type="checkbox"/> New/Additional<br><input checked="" type="checkbox"/> To Be Modified | <input type="checkbox"/> To be Removed<br><input type="checkbox"/> Replacement Unit<br><input type="checkbox"/> To be Replaced | N/A                | N/A |
| 15b                      | Dehydrator Reboiler   | Enertek         | J2P20M11109 | 43797    | 1,648 scfh                                                    | 1,648 scfh                                                   |                                                      | N/A                         | 31000228                         | <input checked="" type="checkbox"/> Existing (unchanged)<br><input type="checkbox"/> New/Additional<br><input type="checkbox"/> To Be Modified | <input type="checkbox"/> To be Removed<br><input type="checkbox"/> Replacement Unit<br><input type="checkbox"/> To be Replaced | N/A                | N/A |
| 16a                      | Dehydrator Still Vent | Enertek         | J2P20M11109 | TBD      | 20 mmcf/d                                                     | 20 mmcf/d                                                    |                                                      | N/A                         | 31000227                         | <input type="checkbox"/> Existing (unchanged)<br><input type="checkbox"/> New/Additional<br><input checked="" type="checkbox"/> To Be Modified | <input type="checkbox"/> To be Removed<br><input type="checkbox"/> Replacement Unit<br><input type="checkbox"/> To be Replaced | N/A                | N/A |
| 16b                      | Dehydrator Reboiler   | Enertek         | J2P20M11109 | TBD      | 1,648 scfh                                                    | 1,648 scfh                                                   |                                                      | N/A                         | 31000228                         | <input checked="" type="checkbox"/> Existing (unchanged)<br><input type="checkbox"/> New/Additional<br><input type="checkbox"/> To Be Modified | <input type="checkbox"/> To be Removed<br><input type="checkbox"/> Replacement Unit<br><input type="checkbox"/> To be Replaced | N/A                | N/A |
| 20a                      | Dehydrator Still Vent | Dickson & Tryer | N/A         | N/A      | 200 MMSCFD                                                    | 200 MMSCFD                                                   |                                                      | Condenser                   | 31000227                         | <input type="checkbox"/> Existing (unchanged)<br><input type="checkbox"/> New/Additional<br><input checked="" type="checkbox"/> To Be Modified | <input type="checkbox"/> To be Removed<br><input type="checkbox"/> Replacement Unit<br><input type="checkbox"/> To be Replaced | N/A                | N/A |
| 20b                      | Dehydrator Reboiler   | Dickson & Tryer | N/A         | N/A      | 2.3 MMBtu/hr                                                  | 2.3 MMBtu/hr                                                 |                                                      | N/A                         | 31000228                         | <input type="checkbox"/> Existing (unchanged)<br><input type="checkbox"/> New/Additional<br><input checked="" type="checkbox"/> To Be Modified | <input type="checkbox"/> To be Removed<br><input type="checkbox"/> Replacement Unit<br><input type="checkbox"/> To be Replaced | N/A                | N/A |
| 20c                      | Dehydrator Reboiler   | Dickson & Tryer | N/A         | N/A      | 2.3 MMBtu/hr                                                  | 2.3 MMBtu/hr                                                 |                                                      | N/A                         | 31000227                         | <input checked="" type="checkbox"/> Existing (unchanged)<br><input type="checkbox"/> New/Additional<br><input type="checkbox"/> To Be Modified | <input type="checkbox"/> To be Removed<br><input type="checkbox"/> Replacement Unit<br><input type="checkbox"/> To be Replaced | N/A                | N/A |
| 21a                      | Dehydrator Still Vent | Dickson & Tryer | N/A         | N/A      | 200 MMSCFD                                                    | 200 MMSCFD                                                   |                                                      | Condenser                   | 31000228                         | <input type="checkbox"/> Existing (unchanged)<br><input type="checkbox"/> New/Additional<br><input checked="" type="checkbox"/> To Be Modified | <input type="checkbox"/> To be Removed<br><input type="checkbox"/> Replacement Unit<br><input type="checkbox"/> To be Replaced | N/A                | N/A |
| 21b                      | Dehydrator Reboiler   | Dickson & Tryer | N/A         | N/A      | 3.92 MMBtu/hr                                                 | 3.92 MMBtu/hr                                                |                                                      | N/A                         | 31000228                         | <input checked="" type="checkbox"/> Existing (unchanged)<br><input type="checkbox"/> New/Additional<br><input type="checkbox"/> To Be Modified | <input type="checkbox"/> To be Removed<br><input type="checkbox"/> Replacement Unit<br><input type="checkbox"/> To be Replaced | N/A                | N/A |
| 21c                      | Dehydrator Reboiler   | Dickson & Tryer | N/A         | N/A      | 3.92 MMBtu/hr                                                 | 3.92 MMBtu/hr                                                |                                                      | N/A                         | 31000228                         | <input checked="" type="checkbox"/> Existing (unchanged)<br><input type="checkbox"/> New/Additional<br><input type="checkbox"/> To Be Modified | <input type="checkbox"/> To be Removed<br><input type="checkbox"/> Replacement Unit<br><input type="checkbox"/> To be Replaced | N/A                | N/A |
| 22a                      | Dehydrator Still Vent | Dickson & Tryer | N/A         | N/A      | 200 MMSCFD                                                    | 200 MMSCFD                                                   |                                                      | Condenser                   | 31000228                         | <input type="checkbox"/> Existing (unchanged)<br><input checked="" type="checkbox"/> New/Additional<br><input type="checkbox"/> To Be Modified | <input type="checkbox"/> To be Removed<br><input type="checkbox"/> Replacement Unit<br><input type="checkbox"/> To be Replaced | N/A                | N/A |
| 22b                      | Dehydrator Reboiler   | Dickson & Tryer | N/A         | N/A      | 2.3 MMBtu/hr                                                  | 2.3 MMBtu/hr                                                 |                                                      | N/A                         | 31000228                         | <input type="checkbox"/> Existing (unchanged)<br><input checked="" type="checkbox"/> New/Additional<br><input type="checkbox"/> To Be Modified | <input type="checkbox"/> To be Removed<br><input type="checkbox"/> Replacement Unit<br><input type="checkbox"/> To be Replaced | N/A                | N/A |
| 22c                      | Dehydrator Reboiler   | Dickson & Tryer | N/A         | N/A      | 2.3 MMBtu/hr                                                  | 2.3 MMBtu/hr                                                 |                                                      | N/A                         | 31000228                         | <input type="checkbox"/> Existing (unchanged)<br><input checked="" type="checkbox"/> New/Additional<br><input type="checkbox"/> To Be Modified | <input type="checkbox"/> To be Removed<br><input type="checkbox"/> Replacement Unit<br><input type="checkbox"/> To be Replaced | N/A                | N/A |

| Unit Number <sup>1</sup> | Source Description                              | Make | Model # | Serial # | Manufact-<br>urer's Rated<br>Capacity <sup>3</sup><br>(Specify Units) | Requested<br>Permitted<br>Capacity <sup>3</sup><br>(Specify Units) | Date of<br>Manufacture <sup>2</sup>                     | Controlled by<br>Unit #           | Source Classi-<br>fication Code<br>(SCC) | For Each Piece of Equipment, Check One                                                                                                         | RICE Ignition Type<br>(CI, SI, 4SLB, 4SRB,<br>2SLB) <sup>4</sup>                                                                          | Replacing<br>Unit No. |     |
|--------------------------|-------------------------------------------------|------|---------|----------|-----------------------------------------------------------------------|--------------------------------------------------------------------|---------------------------------------------------------|-----------------------------------|------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------|-----------------------|-----|
|                          |                                                 |      |         |          |                                                                       |                                                                    | Date of<br>Construction/<br>Reconstruction <sup>2</sup> | Emissions<br>vented to<br>Stack # |                                          |                                                                                                                                                |                                                                                                                                           |                       |     |
| SSM                      | Startup, Shutdown &<br>Maintenance<br>Emissions | N/A  | N/A     | N/A      | N/A                                                                   | N/A                                                                | N/A                                                     | N/A                               | N/A                                      | <input type="checkbox"/> Existing (unchanged)<br><input type="checkbox"/> New/Additional<br><input checked="" type="checkbox"/> To Be Modified | <input type="checkbox"/> To be Removed<br><input type="checkbox"/> Replacement Unit<br><input type="checkbox"/> To be Replaced            | N/A                   | N/A |
|                          |                                                 |      |         |          |                                                                       |                                                                    | N/A                                                     | N/A                               |                                          |                                                                                                                                                |                                                                                                                                           |                       |     |
| MAL                      | Malfunction<br>Emissions                        | N/A  | N/A     | N/A      | N/A                                                                   | N/A                                                                | N/A                                                     | N/A                               | N/A                                      | <input type="checkbox"/> Existing (unchanged)<br><input type="checkbox"/> New/Additional<br><input type="checkbox"/> To Be Modified            | <input checked="" type="checkbox"/> To be Removed<br><input type="checkbox"/> Replacement Unit<br><input type="checkbox"/> To be Replaced | N/A                   | 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: Insignificant Activities<sup>1</sup> (20.2.70 NMAC) OR Exempted Equipment (20.2.72 NMAC)**

All 20.2.70 NMAC (Title V) applications must list all Insignificant Activities in this table. All 20.2.72 NMAC applications must list Exempted Equipment in this table. If equipment listed on this table is exempt under 20.2.72.202.B.5, include emissions calculations and emissions totals for 202.B.5 "similar functions" units, operations, and activities in Section 6, Calculations. Equipment and activities exempted under 20.2.72.202 NMAC may not necessarily be Insignificant under 20.2.70 NMAC (and vice versa). Unit & stack numbering must be consistent throughout the application package. Per Exemptions Policy 02-012.00 (see [http://www.env.nm.gov/aqb/permit/aqb\\_pol.html](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>  |                                                          |                                           |  |
| T1-T9       | Lubrication Oil Storage Tank |              |            | 500            | 20.2.72.202.B(2) NMAC                                           |                                                  | <input checked="" type="checkbox"/> Existing (unchanged) | <input type="checkbox"/> To be Removed    |  |
|             |                              |              |            | gal            | Insignificant Activity List Item #5                             |                                                  | <input type="checkbox"/> New/Additional                  | <input type="checkbox"/> Replacement Unit |  |
|             |                              |              |            |                |                                                                 |                                                  | <input type="checkbox"/> To Be Modified                  | <input type="checkbox"/> To be Replaced   |  |
| T10         | Lubrication Oil Storage Tank |              |            | 100            | 20.2.72.202.B(2) NMAC                                           |                                                  | <input checked="" type="checkbox"/> Existing (unchanged) | <input type="checkbox"/> To be Removed    |  |
|             |                              |              |            | bbl            | Insignificant Activity List Item #5                             |                                                  | <input type="checkbox"/> New/Additional                  | <input type="checkbox"/> Replacement Unit |  |
|             |                              |              |            |                |                                                                 |                                                  | <input type="checkbox"/> To Be Modified                  | <input type="checkbox"/> To be Replaced   |  |
| T11         | Wastewater Storage Tank      |              |            | 165            | 20.2.72.202.B(2) NMAC                                           |                                                  | <input checked="" type="checkbox"/> Existing (unchanged) | <input type="checkbox"/> To be Removed    |  |
|             |                              |              |            | bbl            | Insignificant Activity List Item #5                             |                                                  | <input type="checkbox"/> New/Additional                  | <input type="checkbox"/> Replacement Unit |  |
|             |                              |              |            |                |                                                                 |                                                  | <input type="checkbox"/> To Be Modified                  | <input type="checkbox"/> To be Replaced   |  |
| T12         | Used Oil Storage Tank        |              |            | 165            | 20.2.72.202.B(2) NMAC                                           |                                                  | <input checked="" type="checkbox"/> Existing (unchanged) | <input type="checkbox"/> To be Removed    |  |
|             |                              |              |            | bbl            | Insignificant Activity List Item #5                             |                                                  | <input type="checkbox"/> New/Additional                  | <input type="checkbox"/> Replacement Unit |  |
|             |                              |              |            |                |                                                                 |                                                  | <input type="checkbox"/> To Be Modified                  | <input type="checkbox"/> To be Replaced   |  |
| T13         | Used Oil Storage Tank        |              |            | 500            | 20.2.72.202.B(2) NMAC                                           |                                                  | <input checked="" type="checkbox"/> Existing (unchanged) | <input type="checkbox"/> To be Removed    |  |
|             |                              |              |            | gal            | Insignificant Activity List Item #5                             |                                                  | <input type="checkbox"/> New/Additional                  | <input type="checkbox"/> Replacement Unit |  |
|             |                              |              |            |                |                                                                 |                                                  | <input type="checkbox"/> To Be Modified                  | <input type="checkbox"/> To be Replaced   |  |
| T14         | Produced Water Storage Tank  |              |            | 400            | 20.2.72.202.B(2) NMAC                                           |                                                  | <input checked="" type="checkbox"/> Existing (unchanged) | <input type="checkbox"/> To be Removed    |  |
|             |                              |              |            | bbl            | Insignificant Activity List Item #5                             |                                                  | <input type="checkbox"/> New/Additional                  | <input type="checkbox"/> Replacement Unit |  |
|             |                              |              |            |                |                                                                 |                                                  | <input type="checkbox"/> To Be Modified                  | <input type="checkbox"/> To be Replaced   |  |
| T15         | Glycol Storage Tank          |              |            | 500            | 20.2.72.202.B(2) NMAC                                           |                                                  | <input checked="" type="checkbox"/> Existing (unchanged) | <input type="checkbox"/> To be Removed    |  |
|             |                              |              |            | gal            | Insignificant Activity List Item #5                             |                                                  | <input type="checkbox"/> New/Additional                  | <input type="checkbox"/> Replacement Unit |  |
|             |                              |              |            |                |                                                                 |                                                  | <input type="checkbox"/> To Be Modified                  | <input type="checkbox"/> To be Replaced   |  |
| T16         | Methanol Storage Tank        |              |            | 500            | 20.2.72.202.B(2) NMAC                                           |                                                  | <input checked="" type="checkbox"/> Existing (unchanged) | <input type="checkbox"/> To be Removed    |  |
|             |                              |              |            | gal            | Insignificant Activity List Item #5                             |                                                  | <input type="checkbox"/> New/Additional                  | <input type="checkbox"/> Replacement Unit |  |
|             |                              |              |            |                |                                                                 |                                                  | <input type="checkbox"/> To Be Modified                  | <input type="checkbox"/> To be Replaced   |  |
| T17         | Antifreeze Storage Tank      |              |            | 500            | 20.2.72.202.B(2) NMAC                                           |                                                  | <input checked="" type="checkbox"/> Existing (unchanged) | <input type="checkbox"/> To be Removed    |  |
|             |                              |              |            | gal            | Insignificant Activity List Item #5                             |                                                  | <input type="checkbox"/> New/Additional                  | <input type="checkbox"/> Replacement Unit |  |
|             |                              |              |            |                |                                                                 |                                                  | <input type="checkbox"/> To Be Modified                  | <input type="checkbox"/> To be Replaced   |  |
| T18-T24     | Glycol Storage Tank          |              |            | 100            | 20.2.72.202.B(2) NMAC                                           |                                                  | <input checked="" type="checkbox"/> Existing (unchanged) | <input type="checkbox"/> To be Removed    |  |
|             |                              |              |            | gal            | Insignificant Activity List Item #5                             |                                                  | <input type="checkbox"/> New/Additional                  | <input type="checkbox"/> Replacement Unit |  |
|             |                              |              |            |                |                                                                 |                                                  | <input type="checkbox"/> To Be Modified                  | <input type="checkbox"/> To be Replaced   |  |
| T25-T31     | Glycol Storage Tank          |              |            | 50             | 20.2.72.202.B(2) NMAC                                           |                                                  | <input checked="" type="checkbox"/> Existing (unchanged) | <input type="checkbox"/> To be Removed    |  |
|             |                              |              |            | gal            | Insignificant Activity List Item #5                             |                                                  | <input type="checkbox"/> New/Additional                  | <input type="checkbox"/> Replacement Unit |  |
|             |                              |              |            |                |                                                                 |                                                  | <input type="checkbox"/> To Be Modified                  | <input type="checkbox"/> To be Replaced   |  |
| T32-T39     | Lubrication Oil Storage Tank |              |            | 500            | 20.2.72.202.B(2) NMAC                                           |                                                  | <input checked="" type="checkbox"/> Existing (unchanged) | <input type="checkbox"/> To be Removed    |  |
|             |                              |              |            | gal            | Insignificant Activity List Item #5                             |                                                  | <input type="checkbox"/> New/Additional                  | <input type="checkbox"/> Replacement Unit |  |
|             |                              |              |            |                |                                                                 |                                                  | <input type="checkbox"/> To Be Modified                  | <input type="checkbox"/> To be Replaced   |  |
| T40-T41     | Produced Water Storage Tank  |              |            | 400            | 20.2.72.202.B(5) NMAC                                           |                                                  | <input checked="" type="checkbox"/> Existing (unchanged) | <input type="checkbox"/> To be Removed    |  |
|             |                              |              |            | bbl            | Insignificant Activity List Item #5                             |                                                  | <input type="checkbox"/> New/Additional                  | <input type="checkbox"/> Replacement Unit |  |
|             |                              |              |            |                |                                                                 |                                                  | <input type="checkbox"/> To Be Modified                  | <input type="checkbox"/> To be Replaced   |  |
| T42         | Glycol Storage Tank          |              |            | 100            | 20.2.72.202.B(2) NMAC                                           |                                                  | <input checked="" type="checkbox"/> Existing (unchanged) | <input type="checkbox"/> To be Removed    |  |
|             |                              |              |            | bbl            | Insignificant Activity List Item #5                             |                                                  | <input type="checkbox"/> New/Additional                  | <input type="checkbox"/> Replacement Unit |  |
|             |                              |              |            |                |                                                                 |                                                  | <input type="checkbox"/> To Be Modified                  | <input type="checkbox"/> To be Replaced   |  |

| Unit Number | Source Description       | Manufacturer | Model No.  | Max Capacity   | List Specific 20.2.72.202 NMAC Exemption (e.g. 20.2.72.202.B.5) | Date of Manufacture /Reconstruction <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>  |                                                          |                                           |  |  |
| T43         | Wastewater Storage Tank  |              |            | 165            | 20.2.72.202.B(2) NMAC                                           |                                                  | <input checked="" type="checkbox"/> Existing (unchanged) | <input type="checkbox"/> To be Removed    |  |  |
|             |                          |              |            | bbl            | Insignificant Activity List Item #5                             |                                                  | <input type="checkbox"/> New/Additional                  | <input type="checkbox"/> Replacement Unit |  |  |
| F1          | Equipment Leak Emissions |              |            | N/A            | 20.2.72.202.B(5) NMAC                                           |                                                  | <input checked="" type="checkbox"/> Existing (unchanged) | <input type="checkbox"/> To be Removed    |  |  |
|             |                          |              |            | N/A            | Insignificant Activity List Item #1                             |                                                  | <input type="checkbox"/> New/Additional                  | <input type="checkbox"/> Replacement Unit |  |  |
| L1          | Truck Loading Emissions  |              |            | N/A            | 20.2.72.202.B(5) NMAC                                           |                                                  | <input checked="" type="checkbox"/> Existing (unchanged) | <input type="checkbox"/> To be Removed    |  |  |
|             |                          |              |            | N/A            | Insignificant Activity List Item #1                             |                                                  | <input type="checkbox"/> New/Additional                  | <input type="checkbox"/> Replacement Unit |  |  |

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

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

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

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

| Control Equipment Unit No. | Control Equipment Description     | Date Installed | Controlled Pollutant(s)         | Controlling Emissions for Unit Number(s) <sup>1</sup> | Efficiency (% Control by Weight)                        | Method used to Estimate Efficiency |
|----------------------------|-----------------------------------|----------------|---------------------------------|-------------------------------------------------------|---------------------------------------------------------|------------------------------------|
| 1                          | Non-Selective Catalytic Converter | TBD            | NO <sub>x</sub> , CO, VOC, HCHO | 1                                                     | NO <sub>x</sub> >45%, CO >93%, VOC 79%, HCHO >93%       | Mfg. specs                         |
| 2                          | Non-Selective Catalytic Converter | TBD            | NO <sub>x</sub> , CO, VOC, HCHO | 2                                                     | NO <sub>x</sub> >45%, CO >93%, VOC 79%, HCHO >93%       | Mfg. specs                         |
| 3                          | Non-Selective Catalytic Converter | TBD            | NO <sub>x</sub> , CO, HCHO      | 3                                                     | NO <sub>x</sub> >96.5%, CO >95%, HCHO >80%              | Mfg. specs                         |
| 4                          | Non-Selective Catalytic Converter | TBD            | NO <sub>x</sub> , CO, HCHO      | 4                                                     | NO <sub>x</sub> >96.5%, CO >95%, HCHO >80%              | Mfg. specs                         |
| 5                          | Non-Selective Catalytic Converter | TBD            | NO <sub>x</sub> , CO, HCHO      | 5                                                     | NO <sub>x</sub> >96.5%, CO >95%, HCHO >80%              | Mfg. specs                         |
| 6                          | Non-Selective Catalytic Converter | TBD            | NO <sub>x</sub> , CO, HCHO      | 6                                                     | NO <sub>x</sub> >96%, CO >93.3%, HCHO >80%              | Mfg. specs                         |
| 7                          | Non-Selective Catalytic Converter | 7/1/1999       | NO <sub>x</sub> , CO, HCHO      | 7                                                     | NO <sub>x</sub> >96.5%, CO >95%, HCHO >80%              | Mfg. specs                         |
| 8                          | Non-Selective Catalytic Converter | 6/10/1999      | NO <sub>x</sub> , CO, HCHO      | 8                                                     | NO <sub>x</sub> >96.5%, CO >95%, HCHO >80%              | Mfg. specs                         |
| 9                          | Non-Selective Catalytic Converter | TBD            | NO <sub>x</sub> , CO, HCHO      | 9                                                     | NO <sub>x</sub> >96.5%, CO >95%, HCHO >80%              | Mfg. specs                         |
| 10a                        | Dehydrator Still Vent Condenser   | TBD            | VOC                             | 10a                                                   | VOC >95%                                                | Engineering Judgement              |
| 11a                        | Dehydrator Still Vent Condenser   | TBD            | VOC                             | 11a                                                   | VOC >95%                                                | Engineering Judgement              |
| 12a                        | Dehydrator Still Vent Condenser   | TBD            | VOC                             | 12a                                                   | VOC >95%                                                | Engineering Judgement              |
| 15a                        | Dehydrator Still Vent Condenser   | TBD            | VOC                             | 15a                                                   | VOC >95%                                                | Engineering Judgement              |
| 16a                        | Dehydrator Still Vent Condenser   | TBD            | VOC                             | 16a                                                   | VOC >95%                                                | Engineering Judgement              |
| 17                         | Non-Selective Catalytic Converter | 8/24/2004      | NO <sub>x</sub> , CO, HCHO      | 17                                                    | NO <sub>x</sub> >96.5%, CO >95%, HCHO >80%              | Mfg. specs                         |
| 18                         | Non-Selective Catalytic Converter | 8/24/2004      | NO <sub>x</sub> , CO, HCHO      | 18                                                    | NO <sub>x</sub> >96.5%, CO >95%, HCHO >80% <sub>v</sub> | Mfg. specs                         |
| 19                         | Non-Selective Catalytic Converter | 8/24/2004      | NO <sub>x</sub> , CO, HCHO      | 19                                                    | NO <sub>x</sub> >96.5%, CO >95%, HCHO >80%              | Mfg. specs                         |
| 20a                        | Dehydrator Still Vent Condenser   | TBD            | VOC                             | 20a                                                   | VOC >95%                                                | Engineering Judgement              |
| 21a                        | Dehydrator Still Vent Condenser   | TBD            | VOC                             | 21a                                                   | VOC >95%                                                | Engineering Judgement              |
| 22a                        | Dehydrator Still Vent Condenser   | TBD            | VOC                             | 22a                                                   | VOC >95%                                                | Engineering Judgement              |
|                            |                                   |                |                                 |                                                       |                                                         |                                    |

<sup>1</sup> List each control device on a separate line. For each control device, list all emission units controlled by the control device.

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

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

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

| Unit No. | NOx   |        | CO    |        | VOC      |        | SOx      |          | PM <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 |
| 1        | 2.70  | 11.81  | 8.24  | 36.09  | 3.00     | 13.13  | 5.92E-03 | 0.03     | 0.10            | 0.44   | 0.10              | 0.44   | 0.10               | 0.44   | -                | -      | -     | -      |
| 2        | 2.70  | 11.81  | 8.24  | 36.09  | 3.00     | 13.13  | 5.92E-03 | 0.03     | 0.10            | 0.44   | 0.10              | 0.44   | 0.10               | 0.44   | -                | -      | -     | -      |
| 3        | 38.10 | 166.86 | 29.43 | 128.91 | 1.98     | 8.69   | 7.13E-03 | 0.03     | 0.12            | 0.53   | 0.12              | 0.53   | 0.12               | 0.53   | -                | -      | -     | -      |
| 4        | 50.37 | 220.63 | 41.11 | 180.07 | 0.07     | 0.31   | 7.71E-03 | 0.03     | 0.13            | 0.57   | 0.13              | 0.57   | 0.13               | 0.57   | -                | -      | -     | -      |
| 5        | 50.37 | 220.63 | 41.11 | 180.07 | 0.07     | 0.31   | 7.71E-03 | 0.03     | 0.13            | 0.57   | 0.13              | 0.57   | 0.13               | 0.57   | -                | -      | -     | -      |
| 6        | 38.10 | 166.86 | 29.43 | 128.91 | 1.98     | 8.69   | 7.13E-03 | 0.03     | 0.12            | 0.53   | 0.12              | 0.53   | 0.12               | 0.53   | -                | -      | -     | -      |
| 7        | 50.37 | 220.63 | 41.11 | 180.07 | 0.07     | 0.31   | 7.71E-03 | 0.03     | 0.13            | 0.57   | 0.13              | 0.57   | 0.13               | 0.57   | -                | -      | -     | -      |
| 8        | 50.37 | 220.63 | 41.11 | 180.07 | 0.07     | 0.31   | 7.71E-03 | 0.03     | 0.13            | 0.57   | 0.13              | 0.57   | 0.13               | 0.57   | -                | -      | -     | -      |
| 9        | 50.37 | 220.63 | 41.11 | 180.07 | 0.07     | 0.31   | 7.71E-03 | 0.03     | 0.13            | 0.57   | 0.13              | 0.57   | 0.13               | 0.57   | -                | -      | -     | -      |
| 17       | 50.37 | 220.63 | 41.11 | 180.07 | 0.07     | 0.31   | 7.71E-03 | 0.03     | 0.13            | 0.57   | 0.13              | 0.57   | 0.13               | 0.57   | -                | -      | -     | -      |
| 18       | 50.37 | 220.63 | 41.11 | 180.07 | 0.07     | 0.31   | 7.71E-03 | 0.03     | 0.13            | 0.57   | 0.13              | 0.57   | 0.13               | 0.57   | -                | -      | -     | -      |
| 19       | 50.37 | 220.63 | 41.11 | 180.07 | 0.07     | 0.31   | 7.71E-03 | 0.03     | 0.13            | 0.57   | 0.13              | 0.57   | 0.13               | 0.57   | -                | -      | -     | -      |
| 10a      | -     | -      | -     | -      | 0.01     | 0.06   | -        | -        | -               | -      | -                 | -      | -                  | -      | -                | -      | -     | -      |
| 10b      | 0.04  | 0.19   | 0.04  | 0.20   | 6.67E-03 | 0.03   | 8.33E-04 | 3.65E-03 | 0.01            | 0.05   | 0.01              | 0.05   | 0.01               | 0.05   | -                | -      | -     | -      |
| 11a      | -     | -      | -     | -      | 0.01     | 0.06   | -        | -        | -               | -      | -                 | -      | -                  | -      | -                | -      | -     | -      |
| 11b      | 0.04  | 0.19   | 0.04  | 0.20   | 6.67E-03 | 0.03   | 8.33E-04 | 3.65E-03 | 0.01            | 0.05   | 0.01              | 0.05   | 0.01               | 0.05   | -                | -      | -     | -      |
| 12a      | -     | -      | -     | -      | 0.01     | 0.06   | -        | -        | -               | -      | -                 | -      | -                  | -      | -                | -      | -     | -      |
| 12b      | 0.04  | 0.19   | 0.04  | 0.20   | 6.67E-03 | 0.03   | 8.33E-04 | 3.65E-03 | 0.01            | 0.05   | 0.01              | 0.05   | 0.01               | 0.05   | -                | -      | -     | -      |
| 13a      | -     | -      | -     | -      | 0.02     | 0.11   | -        | -        | -               | -      | -                 | -      | -                  | -      | -                | -      | -     | -      |
| 13b      | 0.04  | 0.19   | 0.03  | 0.14   | 4.79E-03 | 0.02   | 8.33E-04 | 3.65E-03 | 9.18E-03        | 0.04   | 9.18E-03          | 0.04   | 9.18E-03           | 0.04   | -                | -      | -     | -      |
| 14a      | -     | -      | -     | -      | 0.02     | 0.11   | -        | -        | -               | -      | -                 | -      | -                  | -      | -                | -      | -     | -      |
| 14b      | 0.04  | 0.19   | 0.03  | 0.14   | 4.79E-03 | 0.02   | 8.33E-04 | 3.65E-03 | 9.18E-03        | 0.04   | 9.18E-03          | 0.04   | 9.18E-03           | 0.04   | -                | -      | -     | -      |
| 15a      | -     | -      | -     | -      | 0.01     | 0.06   | -        | -        | -               | -      | -                 | -      | -                  | -      | -                | -      | -     | -      |
| 15b      | 0.04  | 0.19   | 0.04  | 0.20   | 6.67E-03 | 0.03   | 8.33E-04 | 3.65E-03 | 0.01            | 0.05   | 0.01              | 0.05   | 0.01               | 0.05   | -                | -      | -     | -      |
| 16a      | -     | -      | -     | -      | 0.01     | 0.06   | -        | -        | -               | -      | -                 | -      | -                  | -      | -                | -      | -     | -      |
| 16b      | 0.04  | 0.19   | 0.04  | 0.20   | 6.67E-03 | 0.03   | 8.33E-04 | 3.65E-03 | 0.01            | 0.05   | 0.01              | 0.05   | 0.01               | 0.05   | -                | -      | -     | -      |
| 20a      | -     | -      | -     | -      | 0.37     | 1.63   | -        | -        | -               | -      | -                 | -      | -                  | -      | -                | -      | -     | -      |
| 20b      | 0.26  | 1.12   | 0.21  | 0.94   | 0.01     | 0.06   | 1.53E-03 | 6.71E-03 | 0.02            | 0.09   | 0.02              | 0.09   | 0.02               | 0.09   | -                | -      | -     | -      |
| 20c      | 0.26  | 1.12   | 0.21  | 0.94   | 0.01     | 0.06   | 1.53E-03 | 6.71E-03 | 0.02            | 0.09   | 0.02              | 0.09   | 0.02               | 0.09   | -                | -      | -     | -      |
| 21a      | -     | -      | -     | -      | 0.37     | 1.63   | -        | -        | -               | -      | -                 | -      | -                  | -      | -                | -      | -     | -      |
| 21b      | 0.44  | 1.91   | 0.37  | 1.60   | 0.02     | 0.10   | 2.61E-03 | 0.01     | 0.03            | 0.14   | 0.03              | 0.14   | 0.03               | 0.14   | -                | -      | -     | -      |
| 21c      | 0.44  | 1.91   | 0.37  | 1.60   | 0.02     | 0.10   | 2.61E-03 | 0.01     | 0.03            | 0.14   | 0.03              | 0.14   | 0.03               | 0.14   | -                | -      | -     | -      |

| 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 |
| 22a           | -      | -        | -      | -        | 0.37  | 1.63   | -        | -        | -               | -      | -                 | -      | -                  | -      | -                | -      | -     | -      |
| 22b           | 0.26   | 1.12     | 0.21   | 0.94     | 0.01  | 0.06   | 1.53E-03 | 6.71E-03 | 0.02            | 0.09   | 0.02              | 0.09   | 0.02               | 0.09   | -                | -      | -     | -      |
| 22c           | 0.26   | 1.12     | 0.21   | 0.94     | 0.01  | 0.06   | 1.53E-03 | 6.71E-03 | 0.02            | 0.09   | 0.02              | 0.09   | 0.02               | 0.09   | -                | -      | -     | -      |
| SSM           | -      | -        | -      | -        | *     | 1.31   | -        | -        | -               | -      | -                 | -      | -                  | -      | -                | -      | -     | -      |
|               |        |          |        |          |       |        |          |          |                 |        |                   |        |                    |        |                  |        |       |        |
| <b>Totals</b> | 486.75 | 2,131.97 | 406.12 | 1,778.80 | 11.91 | 53.48  | 0.10     | 0.46     | 1.72            | 7.52   | 1.72              | 7.52   | 1.72               | 7.52   | -                | -      | -     | -      |

" \* " indicates lb/hr emission rates are not appropriate for this unit.

<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 PM is a regulated air pollutant under PSD (20.2.74 NMAC) and Title V (20.2.70 NMAC).

<sup>2</sup> These amine regenerator vents have a single combined emission limit cap for all five units.

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

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

| Unit No. | 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 |
| 1        | 1.48  | 6.50   | 0.58  | 2.53   | 0.63     | 2.76   | 5.92E-03 | 0.03     | 0.10            | 0.44   | 0.10              | 0.44   | 0.10               | 0.44   | -                | -      | -     | -      |
| 2        | 1.48  | 6.50   | 0.58  | 2.53   | 0.63     | 2.76   | 5.92E-03 | 0.03     | 0.10            | 0.44   | 0.10              | 0.44   | 0.10               | 0.44   | -                | -      | -     | -      |
| 3        | 1.52  | 6.67   | 1.97  | 8.64   | 1.98     | 8.69   | 7.13E-03 | 0.03     | 0.12            | 0.53   | 0.12              | 0.53   | 0.12               | 0.53   | -                | -      | -     | -      |
| 4        | 1.76  | 7.72   | 2.06  | 9.00   | 0.07     | 0.31   | 7.71E-03 | 0.03     | 0.13            | 0.57   | 0.13              | 0.57   | 0.13               | 0.57   | -                | -      | -     | -      |
| 5        | 1.76  | 7.72   | 2.06  | 9.00   | 0.07     | 0.31   | 7.71E-03 | 0.03     | 0.13            | 0.57   | 0.13              | 0.57   | 0.13               | 0.57   | -                | -      | -     | -      |
| 6        | 1.52  | 6.67   | 1.97  | 8.64   | 1.98     | 8.69   | 7.13E-03 | 0.03     | 0.12            | 0.53   | 0.12              | 0.53   | 0.12               | 0.53   | -                | -      | -     | -      |
| 7        | 1.76  | 7.72   | 2.06  | 9.00   | 0.07     | 0.31   | 7.71E-03 | 0.03     | 0.13            | 0.57   | 0.13              | 0.57   | 0.13               | 0.57   | -                | -      | -     | -      |
| 8        | 1.76  | 7.72   | 2.06  | 9.00   | 0.07     | 0.31   | 7.71E-03 | 0.03     | 0.13            | 0.57   | 0.13              | 0.57   | 0.13               | 0.57   | -                | -      | -     | -      |
| 9        | 1.76  | 7.72   | 2.06  | 9.00   | 0.07     | 0.31   | 7.71E-03 | 0.03     | 0.13            | 0.57   | 0.13              | 0.57   | 0.13               | 0.57   | -                | -      | -     | -      |
| 17       | 1.76  | 7.72   | 2.06  | 9.00   | 0.07     | 0.31   | 7.71E-03 | 0.03     | 0.13            | 0.57   | 0.13              | 0.57   | 0.13               | 0.57   | -                | -      | -     | -      |
| 18       | 1.76  | 7.72   | 2.06  | 9.00   | 0.07     | 0.31   | 7.71E-03 | 0.03     | 0.13            | 0.57   | 0.13              | 0.57   | 0.13               | 0.57   | -                | -      | -     | -      |
| 19       | 1.76  | 7.72   | 2.06  | 9.00   | 0.07     | 0.31   | 7.71E-03 | 0.03     | 0.13            | 0.57   | 0.13              | 0.57   | 0.13               | 0.57   | -                | -      | -     | -      |
| 10a      | -     | -      | -     | -      | 0.01     | 0.06   | -        | -        | -               | -      | -                 | -      | -                  | -      | -                | -      | -     | -      |
| 10b      | 0.04  | 0.19   | 0.04  | 0.20   | 6.67E-03 | 0.03   | 8.33E-04 | 3.65E-03 | 0.01            | 0.05   | 0.01              | 0.05   | 0.01               | 0.05   | -                | -      | -     | -      |
| 11a      | -     | -      | -     | -      | 0.01     | 0.06   | -        | -        | -               | -      | -                 | -      | -                  | -      | -                | -      | -     | -      |
| 11b      | 0.04  | 0.19   | 0.04  | 0.20   | 6.67E-03 | 0.03   | 8.33E-04 | 3.65E-03 | 0.01            | 0.05   | 0.01              | 0.05   | 0.01               | 0.05   | -                | -      | -     | -      |
| 12a      | -     | -      | -     | -      | 0.01     | 0.06   | -        | -        | -               | -      | -                 | -      | -                  | -      | -                | -      | -     | -      |
| 12b      | 0.04  | 0.19   | 0.04  | 0.20   | 6.67E-03 | 0.03   | 8.33E-04 | 3.65E-03 | 0.01            | 0.05   | 0.01              | 0.05   | 0.01               | 0.05   | -                | -      | -     | -      |
| 13a      | -     | -      | -     | -      | 0.02     | 0.11   | -        | -        | -               | -      | -                 | -      | -                  | -      | -                | -      | -     | -      |
| 13b      | 0.04  | 0.19   | 0.03  | 0.14   | 4.79E-03 | 0.02   | 8.33E-04 | 3.65E-03 | 9.18E-03        | 0.04   | 9.18E-03          | 0.04   | 9.18E-03           | 0.04   | -                | -      | -     | -      |
| 14a      | -     | -      | -     | -      | 0.02     | 0.11   | -        | -        | -               | -      | -                 | -      | -                  | -      | -                | -      | -     | -      |
| 14b      | 0.04  | 0.19   | 0.03  | 0.14   | 4.79E-03 | 0.02   | 8.33E-04 | 3.65E-03 | 9.18E-03        | 0.04   | 9.18E-03          | 0.04   | 9.18E-03           | 0.04   | -                | -      | -     | -      |
| 15a      | -     | -      | -     | -      | 0.01     | 0.06   | -        | -        | -               | -      | -                 | -      | -                  | -      | -                | -      | -     | -      |
| 15b      | 0.04  | 0.19   | 0.04  | 0.20   | 6.67E-03 | 0.03   | 8.33E-04 | 3.65E-03 | 0.01            | 0.05   | 0.01              | 0.05   | 0.01               | 0.05   | -                | -      | -     | -      |
| 16a      | -     | -      | -     | -      | 0.01     | 0.06   | -        | -        | -               | -      | -                 | -      | -                  | -      | -                | -      | -     | -      |
| 16b      | 0.04  | 0.19   | 0.04  | 0.20   | 6.67E-03 | 0.03   | 8.33E-04 | 3.65E-03 | 0.01            | 0.05   | 0.01              | 0.05   | 0.01               | 0.05   | -                | -      | -     | -      |
| 20a      | -     | -      | -     | -      | 0.37     | 1.63   | -        | -        | -               | -      | -                 | -      | -                  | -      | -                | -      | -     | -      |
| 20b      | 0.26  | 1.12   | 0.21  | 0.94   | 0.01     | 0.06   | 1.53E-03 | 6.71E-03 | 0.02            | 0.09   | 0.02              | 0.09   | 0.02               | 0.09   | -                | -      | -     | -      |
| 20c      | 0.26  | 1.12   | 0.21  | 0.94   | 0.01     | 0.06   | 1.53E-03 | 6.71E-03 | 0.02            | 0.09   | 0.02              | 0.09   | 0.02               | 0.09   | -                | -      | -     | -      |
| 21a      | -     | -      | -     | -      | 0.37     | 1.63   | -        | -        | -               | -      | -                 | -      | -                  | -      | -                | -      | -     | -      |
| 21b      | 0.44  | 1.91   | 0.37  | 1.60   | 0.02     | 0.10   | 2.61E-03 | 0.01     | 0.03            | 0.14   | 0.03              | 0.14   | 0.03               | 0.14   | -                | -      | -     | -      |
| 21c      | 0.44  | 1.91   | 0.37  | 1.60   | 0.02     | 0.10   | 2.61E-03 | 0.01     | 0.03            | 0.14   | 0.03              | 0.14   | 0.03               | 0.14   | -                | -      | -     | -      |
| 22a      | -     | -      | -     | -      | 0.37     | 1.63   | -        | -        | -               | -      | -                 | -      | -                  | -      | -                | -      | -     | -      |
| 22b      | 0.26  | 1.12   | 0.21  | 0.94   | 0.01     | 0.06   | 1.53E-03 | 6.71E-03 | 0.02            | 0.09   | 0.02              | 0.09   | 0.02               | 0.09   | -                | -      | -     | -      |

| 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   |
| 22c           | 0.26         | 1.12         | 0.21         | 0.94          | 0.01        | 0.06         | 1.53E-03    | 6.71E-03    | 0.02            | 0.09        | 0.02              | 0.09        | 0.02               | 0.09        | -                | -        | -        | -        |
| SSM           | -            | -            | -            | -             | *           | 1.31         | -           | -           | -               | -           | -                 | -           | -                  | -           | -                | -        | -        | -        |
|               |              |              |              |               |             |              |             |             |                 |             |                   |             |                    |             |                  |          |          |          |
| <b>Totals</b> | <b>22.31</b> | <b>97.73</b> | <b>23.42</b> | <b>102.58</b> | <b>7.18</b> | <b>32.75</b> | <b>0.10</b> | <b>0.46</b> | <b>1.72</b>     | <b>7.52</b> | <b>1.72</b>       | <b>7.52</b> | <b>1.72</b>        | <b>7.52</b> | <b>-</b>         | <b>-</b> | <b>-</b> | <b>-</b> |

" \* " indicates lb/hr emission rates are not appropriate for this unit.

<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).

<sup>2</sup> Emissions are associated with SSM2.

<sup>3</sup> These amine regenerator vents have a single combined emission limit cap for all five units.

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).

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☒ 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.

[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:

| Stack Number | Serving Unit Number(s) from Table 2-A | Orientation (H=Horizontal V=Vertical) | Rain Caps (Yes or No) | Height Above Ground (ft) | Temp. (F) | Flow Rate |         | Moisture by Volume (%) | Velocity (ft/sec) | Inside Diameter (ft) |
|--------------|---------------------------------------|---------------------------------------|-----------------------|--------------------------|-----------|-----------|---------|------------------------|-------------------|----------------------|
|              |                                       |                                       |                       |                          |           | (acfs)    | (dscfs) |                        |                   |                      |
| 1            | 1                                     | V                                     | No                    | 23                       | 909       | 166.54    | N/A     | N/A                    | 166.54            | 1.02                 |
| 2            | 2                                     | V                                     | No                    | 23                       | 909       | 166.54    | N/A     | N/A                    | 166.54            | 1.02                 |
| 3            | 3                                     | V                                     | No                    | 26.0                     | 1165      | 101.80    | N/A     | N/A                    | 101.80            | 1.33                 |
| 4            | 4                                     | V                                     | No                    | 26.0                     | 1165      | 101.80    | N/A     | N/A                    | 101.80            | 1.33                 |
| 5            | 5                                     | V                                     | No                    | 26.0                     | 1165      | 101.80    | N/A     | N/A                    | 101.80            | 1.33                 |
| 6            | 6                                     | V                                     | No                    | 26.0                     | 1165      | 101.80    | N/A     | N/A                    | 101.80            | 1.33                 |
| 7            | 7                                     | V                                     | No                    | 26.0                     | 1165      | 101.80    | N/A     | N/A                    | 101.80            | 1.33                 |
| 8            | 8                                     | V                                     | No                    | 26.0                     | 1165      | 101.80    | N/A     | N/A                    | 101.80            | 1.33                 |
| 9            | 9                                     | V                                     | No                    | 26.0                     | 1165      | 101.80    | N/A     | N/A                    | 101.80            | 1.33                 |
| 17           | 17                                    | V                                     | No                    | 26.0                     | 1165      | 101.80    | N/A     | N/A                    | 101.80            | 1.33                 |
| 18           | 18                                    | V                                     | No                    | 26.0                     | 1165      | 101.80    | N/A     | N/A                    | 101.80            | 1.33                 |
| 19           | 19                                    | V                                     | No                    | 26.0                     | 1165      | 101.80    | N/A     | N/A                    | 101.80            | 1.33                 |
| 10b          | 10b                                   | V                                     | No                    | 19                       | 600       | 6.10      | N/A     | N/A                    | 6.10              | 1.00                 |
| 11b          | 11b                                   | V                                     | No                    | 19                       | 600       | 6.10      | N/A     | N/A                    | 6.10              | 1.00                 |
| 12b          | 12b                                   | V                                     | No                    | 19                       | 600       | 6.10      | N/A     | N/A                    | 6.10              | 1.00                 |
| 13b          | 13b                                   | V                                     | No                    | 19                       | 600       | 6.10      | N/A     | N/A                    | 6.10              | 0.83                 |
| 14b          | 14b                                   | V                                     | No                    | 19                       | 600       | 6.10      | N/A     | N/A                    | 6.10              | 0.83                 |
| 15b          | 15b                                   | V                                     | No                    | 19                       | 600       | 6.10      | N/A     | N/A                    | 6.10              | 1.00                 |
| 16b          | 16b                                   | V                                     | No                    | 19                       | 600       | 6.10      | N/A     | N/A                    | 6.10              | 1.00                 |
| 20b          | 20b                                   | V                                     | No                    | 25                       | 600       | 10.60     | N/A     | N/A                    | 10.60             | 1.50                 |
| 20c          | 20c                                   | V                                     | No                    | 25                       | 600       | 10.60     | N/A     | N/A                    | 10.60             | 1.50                 |
| 21b          | 21b                                   | V                                     | No                    | 25                       | 600       | 12.70     | N/A     | N/A                    | 12.70             | 1.50                 |
| 21c          | 21c                                   | V                                     | No                    | 25                       | 600       | 12.70     | N/A     | N/A                    | 12.70             | 1.50                 |
| 22b          | 22b                                   | V                                     | Yes                   | 25                       | Ambient   | 0.003     | N/A     | N/A                    | 0.003             | 1.50                 |

| Stack Number | Serving Unit Number(s) from Table 2-A | Orientation (H=Horizontal V=Vertical) | Rain Caps (Yes or No) | Height Above Ground (ft) | Temp. (F) | Flow Rate |         | Moisture by Volume (%) | Velocity (ft/sec) | Inside Diameter (ft) |
|--------------|---------------------------------------|---------------------------------------|-----------------------|--------------------------|-----------|-----------|---------|------------------------|-------------------|----------------------|
|              |                                       |                                       |                       |                          |           | (acfs)    | (dscfs) |                        |                   |                      |
| 22c          | 22c                                   | V                                     | Yes                   | 25                       | Ambient   | 0.003     | N/A     | N/A                    | 0.003             | 1.50                 |

**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                                                            |                                                              | Benzene                                                                 |                                                              | Toluene                                                                 |                                                              | Xylene                                                       |                                                              | Provide Pollutant<br>Name Here                               |                                                              | Provide Pollutant<br>Name Here                               |                                                              | Provide Pollutant<br>Name Here |        | Provide Pollutant<br>Name Here |        |
|-----------|-------------|------------|--------|-------------------------------------------------------------------------|--------------------------------------------------------------|-------------------------------------------------------------------------|--------------------------------------------------------------|-------------------------------------------------------------------------|--------------------------------------------------------------|--------------------------------------------------------------|--------------------------------------------------------------|--------------------------------------------------------------|--------------------------------------------------------------|--------------------------------------------------------------|--------------------------------------------------------------|--------------------------------|--------|--------------------------------|--------|
|           |             |            |        | <input checked="" type="checkbox"/> HAP or <input type="checkbox"/> TAP | <input type="checkbox"/> HAP or <input type="checkbox"/> TAP | <input checked="" type="checkbox"/> HAP or <input type="checkbox"/> TAP | <input type="checkbox"/> HAP or <input type="checkbox"/> TAP | <input checked="" type="checkbox"/> HAP or <input type="checkbox"/> TAP | <input type="checkbox"/> HAP or <input type="checkbox"/> TAP | <input type="checkbox"/> HAP or <input type="checkbox"/> TAP | <input type="checkbox"/> HAP or <input type="checkbox"/> TAP | <input type="checkbox"/> HAP or <input type="checkbox"/> TAP | <input type="checkbox"/> HAP or <input type="checkbox"/> TAP | <input type="checkbox"/> HAP or <input type="checkbox"/> TAP | <input type="checkbox"/> HAP or <input type="checkbox"/> TAP |                                |        |                                |        |
|           |             | lb/hr      | ton/yr | lb/hr                                                                   | ton/yr                                                       | lb/hr                                                                   | ton/yr                                                       | lb/hr                                                                   | ton/yr                                                       | lb/hr                                                        | ton/yr                                                       | lb/hr                                                        | ton/yr                                                       | lb/hr                                                        | ton/yr                                                       | lb/hr                          | ton/yr | lb/hr                          | ton/yr |
| 1         | 1           | 0.08       | 0.37   | 0.06                                                                    | 0.27                                                         | 0.02                                                                    | 0.07                                                         | 5.62E-03                                                                | 0.02                                                         | 1.96E-03                                                     | 8.60E-03                                                     |                                                              |                                                              |                                                              |                                                              |                                |        |                                |        |
| 2         | 2           | 0.08       | 0.37   | 0.06                                                                    | 0.27                                                         | 0.02                                                                    | 0.07                                                         | 5.62E-03                                                                | 0.02                                                         | 1.96E-03                                                     | 8.60E-03                                                     |                                                              |                                                              |                                                              |                                                              |                                |        |                                |        |
| 3         | 3           | 0.06       | 0.27   | 0.03                                                                    | 0.14                                                         | 0.02                                                                    | 0.08                                                         | 6.76E-03                                                                | 0.03                                                         | 2.36E-03                                                     | 0.01                                                         |                                                              |                                                              |                                                              |                                                              |                                |        |                                |        |
| 4         | 4           | 0.07       | 0.30   | 0.04                                                                    | 0.16                                                         | 0.02                                                                    | 0.09                                                         | 7.32E-03                                                                | 0.03                                                         | 2.56E-03                                                     | 0.01                                                         |                                                              |                                                              |                                                              |                                                              |                                |        |                                |        |
| 5         | 5           | 0.07       | 0.30   | 0.04                                                                    | 0.16                                                         | 0.02                                                                    | 0.09                                                         | 7.32E-03                                                                | 0.03                                                         | 2.56E-03                                                     | 0.01                                                         |                                                              |                                                              |                                                              |                                                              |                                |        |                                |        |
| 6         | 6           | 0.06       | 0.27   | 0.03                                                                    | 0.14                                                         | 0.02                                                                    | 0.08                                                         | 6.76E-03                                                                | 0.03                                                         | 2.36E-03                                                     | 0.01                                                         |                                                              |                                                              |                                                              |                                                              |                                |        |                                |        |
| 7         | 7           | 0.07       | 0.30   | 0.04                                                                    | 0.16                                                         | 0.02                                                                    | 0.09                                                         | 7.32E-03                                                                | 0.03                                                         | 2.56E-03                                                     | 0.01                                                         |                                                              |                                                              |                                                              |                                                              |                                |        |                                |        |
| 8         | 8           | 0.07       | 0.30   | 0.04                                                                    | 0.16                                                         | 0.02                                                                    | 0.09                                                         | 7.32E-03                                                                | 0.03                                                         | 2.56E-03                                                     | 0.01                                                         |                                                              |                                                              |                                                              |                                                              |                                |        |                                |        |
| 9         | 9           | 0.07       | 0.30   | 0.04                                                                    | 0.16                                                         | 0.02                                                                    | 0.09                                                         | 7.32E-03                                                                | 0.03                                                         | 2.56E-03                                                     | 0.01                                                         |                                                              |                                                              |                                                              |                                                              |                                |        |                                |        |
| 17        | 17          | 0.07       | 0.30   | 0.04                                                                    | 0.16                                                         | 0.02                                                                    | 0.09                                                         | 7.32E-03                                                                | 0.03                                                         | 2.56E-03                                                     | 0.01                                                         |                                                              |                                                              |                                                              |                                                              |                                |        |                                |        |
| 18        | 18          | 0.07       | 0.30   | 0.04                                                                    | 0.16                                                         | 0.02                                                                    | 0.09                                                         | 7.32E-03                                                                | 0.03                                                         | 2.56E-03                                                     | 0.01                                                         |                                                              |                                                              |                                                              |                                                              |                                |        |                                |        |
| 19        | 19          | 0.07       | 0.30   | 0.04                                                                    | 0.16                                                         | 0.02                                                                    | 0.09                                                         | 7.32E-03                                                                | 0.03                                                         | 2.56E-03                                                     | 0.01                                                         |                                                              |                                                              |                                                              |                                                              |                                |        |                                |        |
| 10a       | 10b         | -          | -      | -                                                                       | -                                                            | -                                                                       | -                                                            | -                                                                       | -                                                            | -                                                            | -                                                            |                                                              |                                                              |                                                              |                                                              |                                |        |                                |        |
| 10b       | 10b         | -          | -      | -                                                                       | -                                                            | -                                                                       | -                                                            | -                                                                       | -                                                            | -                                                            | -                                                            |                                                              |                                                              |                                                              |                                                              |                                |        |                                |        |
| 11a       | 11b         | -          | -      | -                                                                       | -                                                            | -                                                                       | -                                                            | -                                                                       | -                                                            | -                                                            | -                                                            |                                                              |                                                              |                                                              |                                                              |                                |        |                                |        |
| 11b       | 11b         | -          | -      | -                                                                       | -                                                            | -                                                                       | -                                                            | -                                                                       | -                                                            | -                                                            | -                                                            |                                                              |                                                              |                                                              |                                                              |                                |        |                                |        |
| 12a       | 12b         | -          | -      | -                                                                       | -                                                            | -                                                                       | -                                                            | -                                                                       | -                                                            | -                                                            | -                                                            |                                                              |                                                              |                                                              |                                                              |                                |        |                                |        |
| 12b       | 12b         | -          | -      | -                                                                       | -                                                            | -                                                                       | -                                                            | -                                                                       | -                                                            | -                                                            | -                                                            |                                                              |                                                              |                                                              |                                                              |                                |        |                                |        |
| 13a       | 13b         | -          | -      | -                                                                       | -                                                            | -                                                                       | -                                                            | -                                                                       | -                                                            | -                                                            | -                                                            |                                                              |                                                              |                                                              |                                                              |                                |        |                                |        |
| 13b       | 13b         | -          | -      | -                                                                       | -                                                            | -                                                                       | -                                                            | -                                                                       | -                                                            | -                                                            | -                                                            |                                                              |                                                              |                                                              |                                                              |                                |        |                                |        |
| 14a       | 14b         | -          | -      | -                                                                       | -                                                            | -                                                                       | -                                                            | -                                                                       | -                                                            | -                                                            | -                                                            |                                                              |                                                              |                                                              |                                                              |                                |        |                                |        |
| 14b       | 14b         | -          | -      | -                                                                       | -                                                            | -                                                                       | -                                                            | -                                                                       | -                                                            | -                                                            | -                                                            |                                                              |                                                              |                                                              |                                                              |                                |        |                                |        |
| 15a       | 15b         | -          | -      | -                                                                       | -                                                            | -                                                                       | -                                                            | -                                                                       | -                                                            | -                                                            | -                                                            |                                                              |                                                              |                                                              |                                                              |                                |        |                                |        |
| 15b       | 15b         | -          | -      | -                                                                       | -                                                            | -                                                                       | -                                                            | -                                                                       | -                                                            | -                                                            | -                                                            |                                                              |                                                              |                                                              |                                                              |                                |        |                                |        |
| 16a       | 16b         | -          | -      | -                                                                       | -                                                            | -                                                                       | -                                                            | -                                                                       | -                                                            | -                                                            | -                                                            |                                                              |                                                              |                                                              |                                                              |                                |        |                                |        |
| 16b       | 16b         | -          | -      | -                                                                       | -                                                            | -                                                                       | -                                                            | -                                                                       | -                                                            | -                                                            | -                                                            |                                                              |                                                              |                                                              |                                                              |                                |        |                                |        |
| 20a       | 20b         | -          | -      | -                                                                       | -                                                            | -                                                                       | -                                                            | -                                                                       | -                                                            | -                                                            | -                                                            |                                                              |                                                              |                                                              |                                                              |                                |        |                                |        |

| Stack No.      | Unit No.(s) | Total HAPs |        | Formaldehyde<br><input checked="" type="checkbox"/> HAP or <input type="checkbox"/> TAP |        | Benzene<br><input checked="" type="checkbox"/> HAP or <input type="checkbox"/> TAP |        | Toluene<br><input checked="" type="checkbox"/> HAP or <input type="checkbox"/> TAP |        | Xylene<br><input checked="" type="checkbox"/> HAP or <input type="checkbox"/> TAP |        | Provide Pollutant<br>Name Here<br><input type="checkbox"/> HAP or <input type="checkbox"/> TAP |        | Provide Pollutant<br>Name Here<br><input type="checkbox"/> HAP or <input type="checkbox"/> TAP |        | Provide Pollutant<br>Name Here<br><input type="checkbox"/> HAP or <input type="checkbox"/> TAP |        | Provide Pollutant<br>Name Here<br><input type="checkbox"/> HAP or <input type="checkbox"/> TAP |        |
|----------------|-------------|------------|--------|-----------------------------------------------------------------------------------------|--------|------------------------------------------------------------------------------------|--------|------------------------------------------------------------------------------------|--------|-----------------------------------------------------------------------------------|--------|------------------------------------------------------------------------------------------------|--------|------------------------------------------------------------------------------------------------|--------|------------------------------------------------------------------------------------------------|--------|------------------------------------------------------------------------------------------------|--------|
|                |             | lb/hr      | ton/yr | lb/hr                                                                                   | ton/yr | lb/hr                                                                              | ton/yr | lb/hr                                                                              | ton/yr | lb/hr                                                                             | ton/yr | lb/hr                                                                                          | ton/yr | lb/hr                                                                                          | ton/yr | lb/hr                                                                                          | ton/yr | lb/hr                                                                                          | ton/yr |
| 20b            | 20b         | -          | -      | -                                                                                       | -      | -                                                                                  | -      | -                                                                                  | -      | -                                                                                 | -      |                                                                                                |        |                                                                                                |        |                                                                                                |        |                                                                                                |        |
| 21a            | 21b         | -          | -      | -                                                                                       | -      | -                                                                                  | -      | -                                                                                  | -      | -                                                                                 | -      |                                                                                                |        |                                                                                                |        |                                                                                                |        |                                                                                                |        |
| 21b            | 21b         | -          | -      | -                                                                                       | -      | -                                                                                  | -      | -                                                                                  | -      | -                                                                                 | -      |                                                                                                |        |                                                                                                |        |                                                                                                |        |                                                                                                |        |
| 21c            | 21b         | -          | -      | -                                                                                       | -      | -                                                                                  | -      | -                                                                                  | -      | -                                                                                 | -      |                                                                                                |        |                                                                                                |        |                                                                                                |        |                                                                                                |        |
| 22a            | 22b         | -          | -      | -                                                                                       | -      | -                                                                                  | -      | -                                                                                  | -      | -                                                                                 | -      |                                                                                                |        |                                                                                                |        |                                                                                                |        |                                                                                                |        |
| 22b            | 22b         | -          | -      | -                                                                                       | -      | -                                                                                  | -      | -                                                                                  | -      | -                                                                                 | -      |                                                                                                |        |                                                                                                |        |                                                                                                |        |                                                                                                |        |
| 22c            | 22b         | -          | -      | -                                                                                       | -      | -                                                                                  | -      | -                                                                                  | -      | -                                                                                 | -      |                                                                                                |        |                                                                                                |        |                                                                                                |        |                                                                                                |        |
| 23a            | 23b         | -          | -      | -                                                                                       | -      | -                                                                                  | -      | -                                                                                  | -      | -                                                                                 | -      |                                                                                                |        |                                                                                                |        |                                                                                                |        |                                                                                                |        |
| <b>Totals:</b> |             | 0.83       | 3.65   | 0.48                                                                                    | 2.12   | 0.24                                                                               | 1.03   | 0.08                                                                               | 0.36   | 0.03                                                                              | 0.13   |                                                                                                |        |                                                                                                |        |                                                                                                |        |                                                                                                |        |

**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 |
| 1        | Natural Gas                                                                    | Raw/Field Natural Gas                                                                                                                         | 900 Btu/scf         | 11.19 Mscf/hr | 98.03 MMscf/yr  | -        | -     |
| 2        | Natural Gas                                                                    | Raw/Field Natural Gas                                                                                                                         | 900 Btu/scf         | 11.19 Mscf/hr | 98.03 MMscf/yr  | -        | -     |
| 3        | Natural Gas                                                                    | Raw/Field Natural Gas                                                                                                                         | 900 Btu/scf         | 13.47 Mscf/hr | 117.98 MMscf/yr | -        | -     |
| 4        | Natural Gas                                                                    | Raw/Field Natural Gas                                                                                                                         | 900 Btu/scf         | 14.57 Mscf/hr | 127.68 MMscf/yr | -        | -     |
| 5        | Natural Gas                                                                    | Raw/Field Natural Gas                                                                                                                         | 900 Btu/scf         | 14.57 Mscf/hr | 127.68 MMscf/yr | -        | -     |
| 6        | Natural Gas                                                                    | Raw/Field Natural Gas                                                                                                                         | 900 Btu/scf         | 13.47 Mscf/hr | 117.98 MMscf/yr | -        | -     |
| 7        | Natural Gas                                                                    | Raw/Field Natural Gas                                                                                                                         | 900 Btu/scf         | 14.57 Mscf/hr | 127.68 MMscf/yr | -        | -     |
| 8        | Natural Gas                                                                    | Raw/Field Natural Gas                                                                                                                         | 900 Btu/scf         | 14.57 Mscf/hr | 127.68 MMscf/yr | -        | -     |
| 9        | Natural Gas                                                                    | Raw/Field Natural Gas                                                                                                                         | 900 Btu/scf         | 14.57 Mscf/hr | 127.68 MMscf/yr | -        | -     |
| 17       | Natural Gas                                                                    | Raw/Field Natural Gas                                                                                                                         | 900 Btu/scf         | 14.57 Mscf/hr | 127.68 MMscf/yr | -        | -     |
| 18       | Natural Gas                                                                    | Raw/Field Natural Gas                                                                                                                         | 900 Btu/scf         | 14.57 Mscf/hr | 127.68 MMscf/yr | -        | -     |
| 19       | Natural Gas                                                                    | Raw/Field Natural Gas                                                                                                                         | 900 Btu/scf         | 14.57 Mscf/hr | 127.68 MMscf/yr | -        | -     |
| 10b      | Natural Gas                                                                    | Raw/Field Natural Gas                                                                                                                         | 900 Btu/scf         | 1.65 Mscf/hr  | 14.44 MMscf/yr  | -        | -     |
| 11b      | Natural Gas                                                                    | Raw/Field Natural Gas                                                                                                                         | 900 Btu/scf         | 1.65 Mscf/hr  | 14.44 MMscf/yr  | -        | -     |
| 12b      | Natural Gas                                                                    | Raw/Field Natural Gas                                                                                                                         | 900 Btu/scf         | 1.65 Mscf/hr  | 14.44 MMscf/yr  | -        | -     |
| 13b      | Natural Gas                                                                    | Raw/Field Natural Gas                                                                                                                         | 900 Btu/scf         | 1.21 Mscf/hr  | 10.58 MMscf/yr  | -        | -     |
| 14b      | Natural Gas                                                                    | Raw/Field Natural Gas                                                                                                                         | 900 Btu/scf         | 1.21 Mscf/hr  | 10.58 MMscf/yr  | -        | -     |
| 15b      | Natural Gas                                                                    | Raw/Field Natural Gas                                                                                                                         | 900 Btu/scf         | 1.65 Mscf/hr  | 14.44 MMscf/yr  | -        | -     |
| 16b      | Natural Gas                                                                    | Raw/Field Natural Gas                                                                                                                         | 900 Btu/scf         | 1.65 Mscf/hr  | 14.44 MMscf/yr  | -        | -     |

| 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 |
| 20b      | Natural Gas                                                                    | Raw/Field Natural Gas                                                                                                                         | 900 Btu/scf         | 2.56 Mscf/hr | 22.38 MMscf/yr | -        | -     |
| 20c      | Natural Gas                                                                    | Raw/Field Natural Gas                                                                                                                         | 900 Btu/scf         | 2.56 Mscf/hr | 22.38 MMscf/yr | -        | -     |
| 21b      | Natural Gas                                                                    | Raw/Field Natural Gas                                                                                                                         | 900 Btu/scf         | 4.36 Mscf/hr | 38.15 MMscf/yr | -        | -     |
| 21c      | Natural Gas                                                                    | Raw/Field Natural Gas                                                                                                                         | 900 Btu/scf         | 4.36 Mscf/hr | 38.15 MMscf/yr | -        | -     |
| 22b      | Natural Gas                                                                    | Raw/Field Natural Gas                                                                                                                         | 900 Btu/scf         | 2.56 Mscf/hr | 22.38 MMscf/yr | -        | -     |
| 22c      | Natural Gas                                                                    | Raw/Field Natural Gas                                                                                                                         | 900 Btu/scf         | 2.56 Mscf/hr | 22.38 MMscf/yr | -        | -     |

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

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

| Tank No. | SCC Code | Material Name   | Composition               | Liquid Density (lb/gal) | Vapor Molecular Weight (lb/lb*mol) | Average Storage Conditions    |                            | Max Storage Conditions |                            |
|----------|----------|-----------------|---------------------------|-------------------------|------------------------------------|-------------------------------|----------------------------|------------------------|----------------------------|
|          |          |                 |                           |                         |                                    | Temperature (°F)              | True Vapor Pressure (psia) | Temperature (°F)       | True Vapor Pressure (psia) |
| T1-T9    | 40400313 | Lubrication Oil | Lubrication Oil           |                         |                                    | Exempt & Insignificant Source |                            |                        |                            |
| T10      | 40400313 | Lubrication Oil | Lubrication Oil           |                         |                                    | Exempt & Insignificant Source |                            |                        |                            |
| T11      | 40400313 | Waste Water     | 99% H2O & 1% Hydrocarbons |                         |                                    | Exempt & Insignificant Source |                            |                        |                            |
| T12      | 40400313 | Used Oil        | Used Lubrication Oil      |                         |                                    | Exempt & Insignificant Source |                            |                        |                            |
| T13      | 40400313 | Used Oil        | Used Lubrication Oil      |                         |                                    | Exempt & Insignificant Source |                            |                        |                            |
| T14      | 40400315 | Produced Water  | 99% H2O & 1% Hydrocarbons |                         |                                    | Exempt & Insignificant Source |                            |                        |                            |
| T15      | 40705218 | Glycol          | Triethylene Glycol (TEG)  |                         |                                    | Exempt & Insignificant Source |                            |                        |                            |
| T16      | 40700816 | Methanol        | Methanol                  |                         |                                    | Exempt & Insignificant Source |                            |                        |                            |
| T17      | 31000299 | Antifreeze      | Ethylene Glycol           |                         |                                    | Exempt & Insignificant Source |                            |                        |                            |
| T18-T24  | 40705218 | Glycol          | Triethylene Glycol (TEG)  |                         |                                    | Exempt & Insignificant Source |                            |                        |                            |
| T25-T31  | 40705218 | Glycol          | Triethylene Glycol (TEG)  |                         |                                    | Exempt & Insignificant Source |                            |                        |                            |
| T32-T39  | 40400313 | Lubrication Oil | Lubrication Oil           |                         |                                    | Exempt & Insignificant Source |                            |                        |                            |
| T40-T41  | 40400315 | Produced Water  | 99% H2O & 1% Hydrocarbons |                         |                                    | Exempt & Insignificant Source |                            |                        |                            |
| T42      | 40705218 | Glycol          | Triethylene Glycol (TEG)  |                         |                                    | Exempt & Insignificant Source |                            |                        |                            |
| T43      | 40400313 | Waste Water     | 99% H2O & 1% Hydrocarbons |                         |                                    | Exempt & Insignificant Source |                            |                        |                            |
|          |          |                 |                           |                         |                                    |                               |                            |                        |                            |
|          |          |                 |                           |                         |                                    |                               |                            |                        |                            |
|          |          |                 |                           |                         |                                    |                               |                            |                        |                            |
|          |          |                 |                           |                         |                                    |                               |                            |                        |                            |
|          |          |                 |                           |                         |                                    |                               |                            |                        |                            |
|          |          |                 |                           |                         |                                    |                               |                            |                        |                            |
|          |          |                 |                           |                         |                                    |                               |                            |                        |                            |
|          |          |                 |                           |                         |                                    |                               |                            |                        |                            |
|          |          |                 |                           |                         |                                    |                               |                            |                        |                            |
|          |          |                 |                           |                         |                                    |                               |                            |                        |                            |
|          |          |                 |                           |                         |                                    |                               |                            |                        |                            |

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

Exempt & Insignificant Source

**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]

### Table 2-N: CEM Equipment

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

[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><br>ton/yr | N <sub>2</sub> O<br>ton/yr | CH <sub>4</sub><br>ton/yr | SF <sub>6</sub><br>ton/yr | PFC/HFC<br>ton/yr <sup>2</sup> |  |  |  |  |  |  |  |  | Total GHG<br>Mass Basis<br>ton/yr <sup>4</sup> | Total CO <sub>2</sub> e<br>ton/yr <sup>5</sup> |
|----------|-------------------|---------------------------|----------------------------|---------------------------|---------------------------|--------------------------------|--|--|--|--|--|--|--|--|------------------------------------------------|------------------------------------------------|
| Unit No. | GWPs <sup>1</sup> | 1                         | 298                        | 25                        | 22,800                    | footnote 3                     |  |  |  |  |  |  |  |  |                                                |                                                |
| 1        | mass GHG          | 6,010.45                  | 0.01                       | 0.11                      |                           |                                |  |  |  |  |  |  |  |  | 6,010.58                                       | -                                              |
|          | CO <sub>2</sub> e | 6,010.45                  | 3.38                       | 2.83                      |                           |                                |  |  |  |  |  |  |  |  | -                                              | 6,016.66                                       |
| 2        | mass GHG          | 6,010.45                  | 0.01                       | 0.11                      |                           |                                |  |  |  |  |  |  |  |  | 6,010.58                                       | -                                              |
|          | CO <sub>2</sub> e | 6,010.45                  | 3.38                       | 2.83                      |                           |                                |  |  |  |  |  |  |  |  | -                                              | 6,016.66                                       |
| 3        | mass GHG          | 6,885.32                  | 0.01                       | 0.13                      |                           |                                |  |  |  |  |  |  |  |  | 6,885.46                                       | -                                              |
|          | CO <sub>2</sub> e | 6,885.32                  | 3.87                       | 3.24                      |                           |                                |  |  |  |  |  |  |  |  | -                                              | 6,892.43                                       |
| 4        | mass GHG          | 7,453.42                  | 0.01                       | 0.14                      |                           |                                |  |  |  |  |  |  |  |  | 7,453.57                                       | -                                              |
|          | CO <sub>2</sub> e | 7,453.42                  | 4.19                       | 3.51                      |                           |                                |  |  |  |  |  |  |  |  | -                                              | 7,461.11                                       |
| 5        | mass GHG          | 7,453.42                  | 0.01                       | 0.14                      |                           |                                |  |  |  |  |  |  |  |  | 7,453.57                                       | -                                              |
|          | CO <sub>2</sub> e | 7,453.42                  | 4.19                       | 3.51                      |                           |                                |  |  |  |  |  |  |  |  | -                                              | 7,461.11                                       |
| 6        | mass GHG          | 6,885.32                  | 0.01                       | 0.13                      |                           |                                |  |  |  |  |  |  |  |  | 6,885.46                                       | -                                              |
|          | CO <sub>2</sub> e | 6,885.32                  | 3.87                       | 3.24                      |                           |                                |  |  |  |  |  |  |  |  | -                                              | 6,892.43                                       |
| 7        | mass GHG          | 7,453.42                  | 0.01                       | 0.14                      |                           |                                |  |  |  |  |  |  |  |  | 7,453.57                                       | -                                              |
|          | CO <sub>2</sub> e | 7,453.42                  | 4.19                       | 3.51                      |                           |                                |  |  |  |  |  |  |  |  | -                                              | 7,461.11                                       |
| 8        | mass GHG          | 7,453.42                  | 0.01                       | 0.14                      |                           |                                |  |  |  |  |  |  |  |  | 7,453.57                                       | -                                              |
|          | CO <sub>2</sub> e | 7,453.42                  | 4.19                       | 3.51                      |                           |                                |  |  |  |  |  |  |  |  | -                                              | 7,461.11                                       |
| 9        | mass GHG          | 7,453.42                  | 0.01                       | 0.14                      |                           |                                |  |  |  |  |  |  |  |  | 7,453.57                                       | -                                              |
|          | CO <sub>2</sub> e | 7,453.42                  | 4.19                       | 3.51                      |                           |                                |  |  |  |  |  |  |  |  | -                                              | 7,461.11                                       |
| 17       | mass GHG          | 7,453.42                  | 0.01                       | 0.14                      |                           |                                |  |  |  |  |  |  |  |  | 7,453.57                                       | -                                              |
|          | CO <sub>2</sub> e | 7,453.42                  | 4.19                       | 3.51                      |                           |                                |  |  |  |  |  |  |  |  | -                                              | 7,461.11                                       |
| 18       | mass GHG          | 7,453.42                  | 0.01                       | 0.14                      |                           |                                |  |  |  |  |  |  |  |  | 7,453.57                                       | -                                              |
|          | CO <sub>2</sub> e | 7,453.42                  | 4.19                       | 3.51                      |                           |                                |  |  |  |  |  |  |  |  | -                                              | 7,461.11                                       |
| 19       | mass GHG          | 7,453.42                  | 0.01                       | 0.14                      |                           |                                |  |  |  |  |  |  |  |  | 7,453.57                                       | -                                              |
|          | CO <sub>2</sub> e | 7,453.42                  | 4.19                       | 3.51                      |                           |                                |  |  |  |  |  |  |  |  | -                                              | 7,461.11                                       |
| 10a      | mass GHG          | 9.99                      |                            | 1.88                      |                           |                                |  |  |  |  |  |  |  |  | 11.87                                          | -                                              |
|          | CO <sub>2</sub> e | 9.99                      |                            | 46.98                     |                           |                                |  |  |  |  |  |  |  |  | -                                              | 56.96                                          |
| 10b      | mass GHG          | 842.60                    | 1.59E-03                   | 0.016                     |                           |                                |  |  |  |  |  |  |  |  | 842.62                                         | -                                              |
|          | CO <sub>2</sub> e | 842.60                    | 0.47                       | 0.40                      |                           |                                |  |  |  |  |  |  |  |  | -                                              | 843.47                                         |
| 11a      | mass GHG          | 9.99                      |                            | 1.88                      |                           |                                |  |  |  |  |  |  |  |  | 11.87                                          | -                                              |
|          | CO <sub>2</sub> e | 9.99                      |                            | 46.98                     |                           |                                |  |  |  |  |  |  |  |  | -                                              | 56.96                                          |
| 11b      | mass GHG          | 842.60                    | 1.59E-03                   | 0.016                     |                           |                                |  |  |  |  |  |  |  |  | 842.62                                         | -                                              |
|          | CO <sub>2</sub> e | 842.60                    | 0.47                       | 0.40                      |                           |                                |  |  |  |  |  |  |  |  | -                                              | 843.47                                         |
| 12a      | mass GHG          | 9.99                      |                            | 1.88                      |                           |                                |  |  |  |  |  |  |  |  | 11.87                                          | -                                              |
|          | CO <sub>2</sub> e | 9.99                      |                            | 46.98                     |                           |                                |  |  |  |  |  |  |  |  | -                                              | 56.96                                          |
| 12b      | mass GHG          | 842.60                    | 1.59E-03                   | 0.016                     |                           |                                |  |  |  |  |  |  |  |  | 842.62                                         | -                                              |
|          | CO <sub>2</sub> e | 842.60                    | 0.47                       | 0.40                      |                           |                                |  |  |  |  |  |  |  |  | -                                              | 843.47                                         |
| 13a      | mass GHG          | 4.17                      |                            | 0.77                      |                           |                                |  |  |  |  |  |  |  |  | 4.94                                           | -                                              |
|          | CO <sub>2</sub> e | 4.17                      |                            | 19.16                     |                           |                                |  |  |  |  |  |  |  |  | -                                              | 23.33                                          |

|          |                   | CO <sub>2</sub><br>ton/yr | N <sub>2</sub> O<br>ton/yr | CH <sub>4</sub><br>ton/yr | SF <sub>6</sub><br>ton/yr | PFC/HFC<br>ton/yr <sup>2</sup> |  |  |  |  |  |  |  |  | Total GHG<br>Mass Basis<br>ton/yr <sup>4</sup> | Total CO <sub>2</sub> e<br>ton/yr <sup>5</sup> |
|----------|-------------------|---------------------------|----------------------------|---------------------------|---------------------------|--------------------------------|--|--|--|--|--|--|--|--|------------------------------------------------|------------------------------------------------|
| Unit No. | GWPs <sup>1</sup> | 1                         | 298                        | 25                        | 22,800                    | footnote 3                     |  |  |  |  |  |  |  |  |                                                |                                                |
| 13b      | mass GHG          | 617.63                    | 1.16E-03                   | 0.01                      |                           |                                |  |  |  |  |  |  |  |  | 617.65                                         | -                                              |
|          | CO <sub>2</sub> e | 617.63                    | 0.35                       | 0.29                      |                           |                                |  |  |  |  |  |  |  |  | -                                              | 618.27                                         |
| 14a      | mass GHG          | 4.17                      |                            | 0.77                      |                           |                                |  |  |  |  |  |  |  |  | 4.94                                           | -                                              |
|          | CO <sub>2</sub> e | 4.17                      |                            | 19.16                     |                           |                                |  |  |  |  |  |  |  |  | -                                              | 23.33                                          |
| 14b      | mass GHG          | 617.63                    | 1.16E-03                   | 0.01                      |                           |                                |  |  |  |  |  |  |  |  | 617.65                                         | -                                              |
|          | CO <sub>2</sub> e | 617.63                    | 0.35                       | 0.29                      |                           |                                |  |  |  |  |  |  |  |  | -                                              | 618.27                                         |
| 15a      | mass GHG          | 9.99                      |                            | 1.88                      |                           |                                |  |  |  |  |  |  |  |  | 11.87                                          | -                                              |
|          | CO <sub>2</sub> e | 9.99                      |                            | 46.98                     |                           |                                |  |  |  |  |  |  |  |  | -                                              | 56.96                                          |
| 15b      | mass GHG          | 842.60                    | 1.59E-03                   | 0.02                      |                           |                                |  |  |  |  |  |  |  |  | 842.62                                         | -                                              |
|          | CO <sub>2</sub> e | 842.60                    | 0.47                       | 0.40                      |                           |                                |  |  |  |  |  |  |  |  | -                                              | 843.47                                         |
| 16a      | mass GHG          | 9.99                      |                            | 1.88                      |                           |                                |  |  |  |  |  |  |  |  | 11.87                                          | -                                              |
|          | CO <sub>2</sub> e | 9.99                      |                            | 46.98                     |                           |                                |  |  |  |  |  |  |  |  | -                                              | 56.96                                          |
| 16b      | mass GHG          | 842.60                    | 1.59E-03                   | 0.02                      |                           |                                |  |  |  |  |  |  |  |  | 842.62                                         | -                                              |
|          | CO <sub>2</sub> e | 842.60                    | 0.47                       | 0.40                      |                           |                                |  |  |  |  |  |  |  |  | -                                              | 843.47                                         |
| 20a      | mass GHG          | 170.38                    |                            | 20.19                     |                           |                                |  |  |  |  |  |  |  |  | 190.57                                         | -                                              |
|          | CO <sub>2</sub> e | 170.38                    |                            | 504.80                    |                           |                                |  |  |  |  |  |  |  |  | -                                              | 675.18                                         |
| 20b      | mass GHG          | 1,306.34                  | 2.46E-03                   | 0.02                      |                           |                                |  |  |  |  |  |  |  |  | 1,306.36                                       | -                                              |
|          | CO <sub>2</sub> e | 1,306.34                  | 0.73                       | 0.62                      |                           |                                |  |  |  |  |  |  |  |  | -                                              | 1,307.69                                       |
| 20c      | mass GHG          | 1,306.34                  | 2.46E-03                   | 0.02                      |                           |                                |  |  |  |  |  |  |  |  | 1,306.36                                       | -                                              |
|          | CO <sub>2</sub> e | 1,306.34                  | 0.73                       | 0.62                      |                           |                                |  |  |  |  |  |  |  |  | -                                              | 1,307.69                                       |
| 21a      | mass GHG          | 170.38                    |                            | 20.19                     |                           |                                |  |  |  |  |  |  |  |  | 190.57                                         | -                                              |
|          | CO <sub>2</sub> e | 170.38                    |                            | 504.80                    |                           |                                |  |  |  |  |  |  |  |  | -                                              | 675.18                                         |
| 21b      | mass GHG          | 2,226.65                  | 4.20E-03                   | 0.04                      |                           |                                |  |  |  |  |  |  |  |  | 2,226.70                                       | -                                              |
|          | CO <sub>2</sub> e | 2,226.65                  | 1.25                       | 1.05                      |                           |                                |  |  |  |  |  |  |  |  | -                                              | 2,228.95                                       |
| 21c      | mass GHG          | 2,226.65                  | 4.20E-03                   | 0.04                      |                           |                                |  |  |  |  |  |  |  |  | 2,226.70                                       | -                                              |
|          | CO <sub>2</sub> e | 2,226.65                  | 1.25                       | 1.05                      |                           |                                |  |  |  |  |  |  |  |  | -                                              | 2,228.95                                       |
| 22a      | mass GHG          | 170.38                    |                            | 20.19                     |                           |                                |  |  |  |  |  |  |  |  | 190.57                                         | -                                              |
|          | CO <sub>2</sub> e | 170.38                    |                            | 504.80                    |                           |                                |  |  |  |  |  |  |  |  | -                                              | 675.18                                         |
| 22b      | mass GHG          | 1,306.34                  | 2.46E-03                   | 0.02                      |                           |                                |  |  |  |  |  |  |  |  | 1,306.36                                       | -                                              |
|          | CO <sub>2</sub> e | 1,306.34                  | 0.73                       | 0.62                      |                           |                                |  |  |  |  |  |  |  |  | -                                              | 1,307.69                                       |
| 22c      | mass GHG          | 1,306.34                  | 2.46E-03                   | 0.02                      |                           |                                |  |  |  |  |  |  |  |  | 1,306.36                                       | -                                              |
|          | CO <sub>2</sub> e | 1,306.34                  | 0.73                       | 0.62                      |                           |                                |  |  |  |  |  |  |  |  | -                                              | 1,307.69                                       |
| SSM      | mass GHG          | 135.07                    |                            | 1,050.93                  |                           |                                |  |  |  |  |  |  |  |  | 1,186.00                                       | -                                              |
|          | CO <sub>2</sub> e | 135.07                    |                            | 26,273.27                 |                           |                                |  |  |  |  |  |  |  |  | -                                              | 26,408.34                                      |
| Total    | mass GHG          | 101,250.28                | 0.19                       | 1,124.33                  |                           |                                |  |  |  |  |  |  |  |  | 102,374.79                                     | -                                              |
|          | CO <sub>2</sub> e | 101,250.28                | 56.47                      | 28,108.23                 |                           |                                |  |  |  |  |  |  |  |  | -                                              | 129,414.97                                     |

<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.

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.

# 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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### *Application Summary*

Harvest Four Corners, LLC (Harvest) is submitting this permit application to the New Mexico Air Quality Bureau (NMAQB) to revise the 32-8 #2 Central Point Delivery (32-8 #2 CDP) Compressor Station, New Source Review Construction (NSR) Permit 1033-M7, issued August 15, 2023. This application for a significant permit revision is submitted under Section 20.2.72.219.D(1) of the New Mexico Administrative Code (NMAC).

32-8 #2 CDP compresses pipeline quality natural gas for transport through natural gas pipelines. The permitted equipment at the facility currently includes seven Waukesha 7042GL natural gas-fired compressor engines (Units 1-2, 7-8 and 17-19), five Waukesha 7044GSI natural gas-fired compressor engines (Units 3-6 and 9) and nine triethylene glycol dehydrators (Units 10-16, 20-21). In addition to the regulated equipment, the facility includes numerous exempt/insignificant organic liquid storage tanks and fugitive emissions. The applicable regulation is 20.2.72 New Mexico Administrative Code (NMAC). The lowest level regulatory citation is 20.2.72.219.D(1) NMAC.

The following permit changes are requested:

- Updating five (5) compressor engines (Units 7-8 and 17-19) to Waukesha 7044GSI natural gas-fired compressors.
- Addition of one (1) triethylene glycol dehydrator (Unit 22) and associated reboilers

### *Process Description*

The facility is a natural gas compressor station. The gas is compressed for pipeline transmission using up to twelve compressors driven by natural gas-fired engines. Gas is currently dried using ten TEG dehydrators.

# Section 4

## Process Flow Sheet

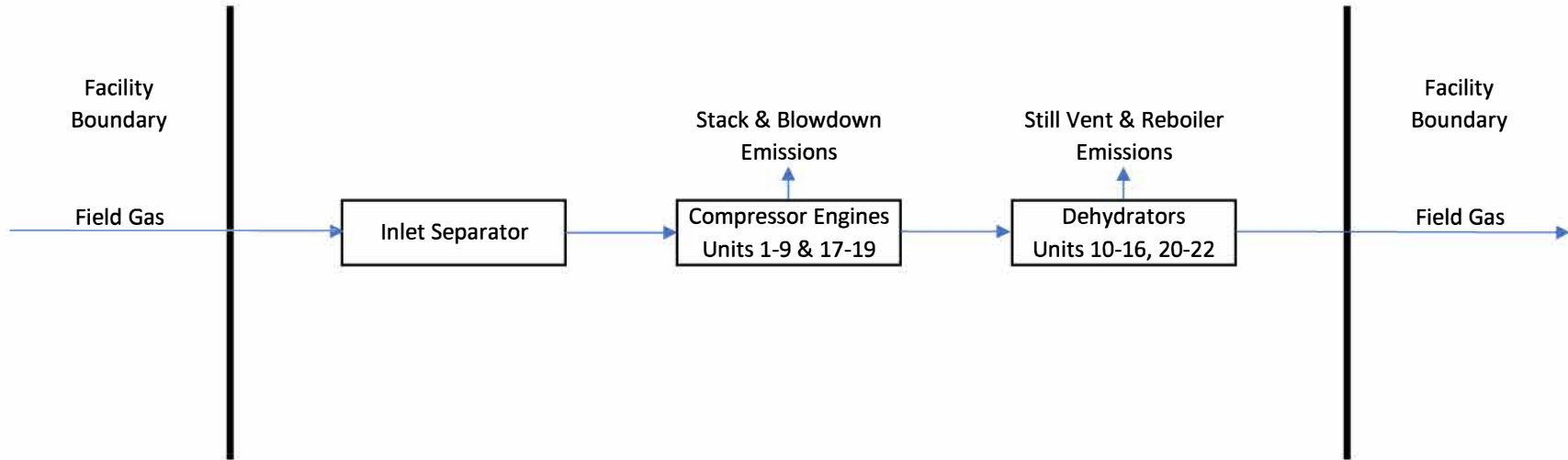
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A **process flow sheet** and/or block diagram indicating the individual equipment, all emission points and types of control applied to those points. The unit numbering system should be consistent throughout this application.

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A process flow diagram is provided in this section. Please see the following page.

### Flow Diagram



# Section 5

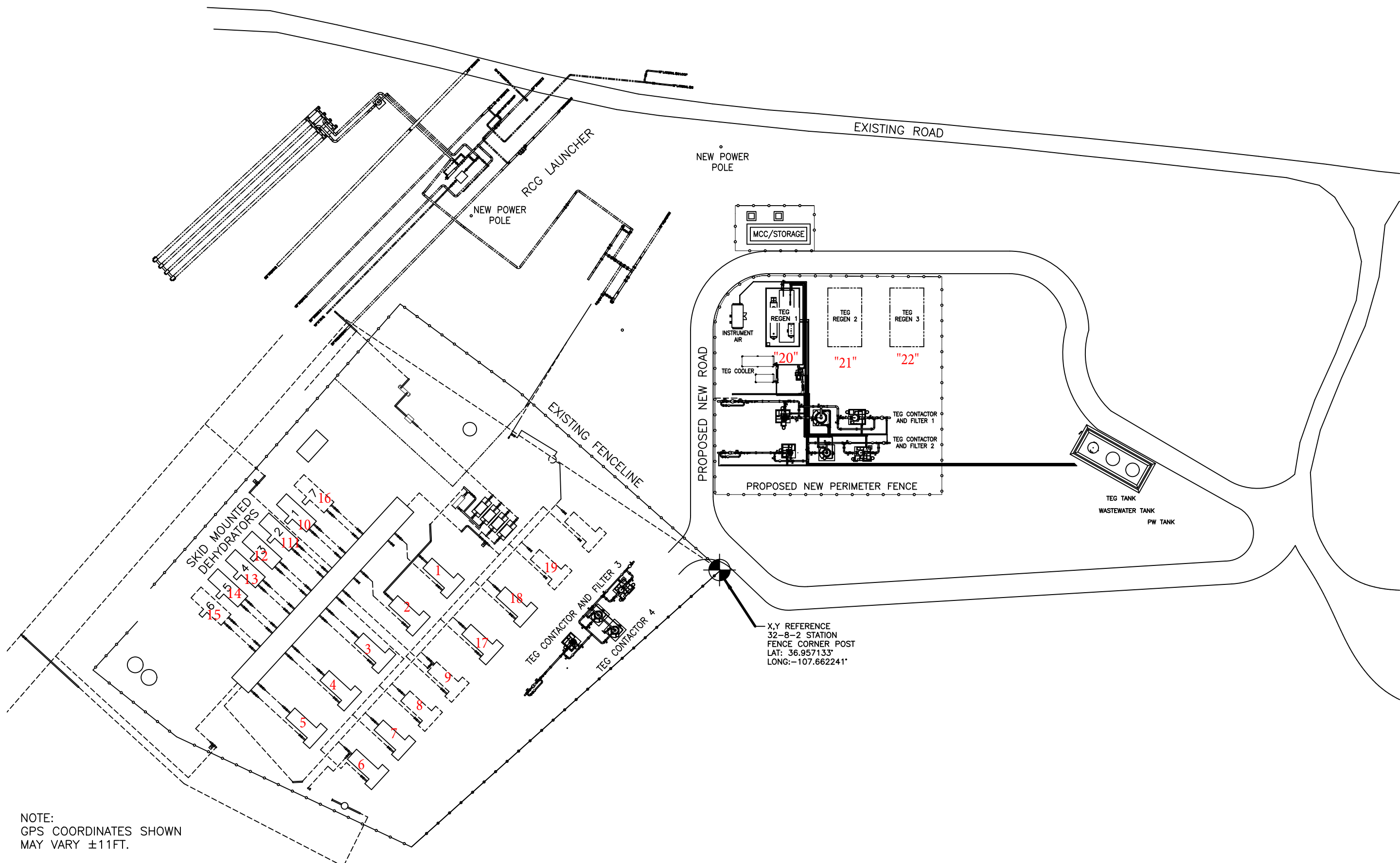
## Plot Plan Drawn To Scale

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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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An updated plot plan is provided in this section. The updated plot plan shows the new dehydrator. Please see the following page.



**NOTES:**

[illegible]

# 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 rational for why the others are reported as zero (or left blank in the SSM/GHG Tables). Refer to "Guidance for Submittal of Startup, Shutdown, Maintenance Emissions in Permit Applications ([http://www.env.nm.gov/aqb/permit/app\\_form.html](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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### ***Engines***

The engines NO<sub>x</sub>, CO, and VOC emissions were calculated from manufacturer's data. The SO<sub>2</sub>, particulate emissions, and HAP emissions were calculated using AP-42 emission factors from Table 3.2-2. All emissions were calculated assuming each engine operates at full site capacity for 8,760 hours per year.

The engines startup with no load and a rich fuel mixture. As a result, emissions are minimized. Because the engines take only minutes to reach operating temperature, emissions during startup are not expected to exceed the steady-state allowable limits. Similarly, emissions during shutdown do not exceed the steady state allowable limits, because fuel and air flow cease within seconds of shutdown. Emissions due to scheduled maintenance are negligible as the engines are not in operation during maintenance.

### ***SSM (Compressors and Piping)***

SSM blowdown emissions from the compressors and piping associated with the facility occur when high pressure gas is used to purge air from the system prior to startup. Also, after shutdowns, high pressure gas is released to atmosphere as a safety precaution.

VOC and HAP emissions from blowdowns of the turbines, compressors and piping associated with the station were calculated from the quantity of gas vented during each event, the composition of the gas, and the number of events. The quantity of gas vented during each event was determined by Harvest engineering. The composition of the gas was determined from a recent extended gas analysis. For each unit, the annual number of blowdown events were estimated based on historical operations. A safety factor was added because emissions from each blowdown event are dependent on the composition of the gas in the pipeline and because the number of blowdowns in a year may vary. Use of the safety factor is also designed to ensure an adequate emissions limit, which includes emissions from other miscellaneous startup, shutdown and maintenance activities.

The SSM emissions identified in this application are routine or predictable startup/shutdown and scheduled maintenance and do not include malfunctions or upsets.

### ***Dehydrator Still Vents***

The one new dehydrator still vent VOC and HAP emissions were calculated using GRI-GLYCalc 4.0. The new dehydrator still vent emissions will be controlled by a condenser with the non-condensables routed back to the reboiler for combustion. All emissions were calculated assuming each dehydrator operates at full capacity for 8,760 hours per year. To allow for variability in the composition of the inlet gas stream, the dehydrator still vent VOC emission rates identified on the application forms (Table 2-E) are higher than the calculated emission rates in this section.

During startup, the dehydrator reboiler is brought up to temperature before allowing glycol into the absorber. This prevents excess VOC and HAP from collecting in the glycol stream and there are no excess startup emissions above those expected during steady-state operation. During shutdown, the reboiler is shut down in conjunction with the gas flow and glycol circulation. Again, this prevents excess VOC and HAP from collecting in the glycol stream and there are no excess shutdown emissions above those expected during steady-state operation. Emissions due to scheduled maintenance are negligible; either the unit will not be in operation during maintenance or maintenance is limited to tasks for which there are no excess emissions.

### ***Dehydrator Reboilers***

The two new dehydrator reboiler NO<sub>x</sub> and CO emissions (two reboilers for each dehydrator) were calculated using EPA AP-42 emission factors from Tables 1.4-1 and 1.4-2. The particulate emissions were calculated using AP-42 emission factors from Table 1.4-2. All emissions were calculated assuming each reboiler operates 8,760 hours per year.

The dehydrator reboilers (uncontrolled) startup with less fuel input than during steady-state operation, so emissions are lower than during steady-state operation. During shutdown, the fuel supply stops quickly, but air flow may not, causing the continued formation of NO<sub>x</sub>. Even so, with no fuel, NO<sub>x</sub> formation should be less than during steady-state operation. Emissions due to scheduled maintenance are negligible as the units are not in operation.

***Truck Loading (Produced Water)***

Produced water truck loading VOC emissions were calculated using the AP-42 emissions factor identified in Section 5.2-1. The data used to calculate the emission factor was obtained assuming the liquid was pure water.

Due to the nature of the source, it is estimated that SSM emissions from truck loading are accounted for in the calculations.

The produced water truck loading is an exempt source in accordance with 20.2.72.202.B(5) NMAC (VOC emissions are less than 0.5 tons per year).

No modifications are being made to truck loading. Permitted criteria for pollutant and HAP emissions are carried forward and not revised.

***Equipment Leak Emissions***

Equipment leak VOC and HAP emissions were calculated using emission factors from Table 2.4 of the 1995 Protocol for Equipment Leak Emission Estimates published by the Environmental Protection Agency (EPA) and the gas stream composition obtained from a recent extended gas analysis. Emissions were calculated assuming the equipment operates 8,760 hours per year.

Due to the nature of the source, it is estimated that SSM emissions from the equipment are accounted for in the calculations.

The equipment leak emissions are an exempt source in accordance with 20.2.72.202.B(5) NMAC (VOC emissions are less than 0.5 tons per year).

***Malfunctions***

Malfunction emissions were set at 10.0 tons of VOC per year to account for emissions that may occur during upsets and malfunctions (including, but not limited to, unscheduled blowdowns and relief valve release). Based on the gas release rate associated with the set annual VOC emission rate, HAP emissions are calculated using a recent extended gas analysis. Note that these malfunction emissions include the venting of gas only, not combustion emissions.

Malfunction emissions have been removed from this permit.

***Storage Tanks***

Working/breathing losses for the 400 bbl produced water storage tanks were calculated using TANKS 4.0.9d. The following assumptions were made:

- Produced water was assumed to contain 99% water and 1% gasoline RVP-12.

The VOC emission rate from each produced water storage tank is 18.1 pounds per year. As such, they are exempt sources under 20.2.72.202.B(5) NMAC.

Due to the nature of operations, startup and shutdown emissions from the storage tanks are assumed to be accounted for in the calculations discussed above. Emissions due to maintenance are negligible as the units are not in operation during maintenance.

No changes are being made to the existing storage tanks or their operation. Emissions from the tanks are carried forward and not revised.

**Emissions Summary**

| Uncontrolled Emissions |                                          |                 |          |          |          |          |          |                 |          |          |          |                  |          |                   |          |                  |     |
|------------------------|------------------------------------------|-----------------|----------|----------|----------|----------|----------|-----------------|----------|----------|----------|------------------|----------|-------------------|----------|------------------|-----|
| Unit ID                | Equipment Description                    | NO <sub>x</sub> |          | CO       |          | VOC      |          | SO <sub>2</sub> |          | PM       |          | PM <sub>10</sub> |          | PM <sub>2.5</sub> |          | H <sub>2</sub> S |     |
|                        |                                          | lb/hr           | tpy      | lb/hr    | tpy      | lb/hr    | tpy      | lb/hr           | tpy      | lb/hr    | tpy      | lb/hr            | tpy      | lb/hr             | tpy      | lb/hr            | tpy |
| 1                      | Waukesha 7042GL                          | 2.70            | 11.81    | 8.24     | 36.09    | 3.00     | 13.13    | 5.92E-03        | 2.59E-02 | 1.01E-01 | 4.41E-01 | 1.01E-01         | 4.41E-01 | 1.01E-01          | 4.41E-01 | -                | -   |
| 2                      | Waukesha 7042GL                          | 2.70            | 11.81    | 8.24     | 36.09    | 3.00     | 13.13    | 5.92E-03        | 2.59E-02 | 1.01E-01 | 4.41E-01 | 1.01E-01         | 4.41E-01 | 1.01E-01          | 4.41E-01 | -                | -   |
| 3                      | Waukesha 7044GSI S5                      | 38.10           | 166.86   | 29.43    | 128.91   | 1.98     | 8.69     | 7.13E-03        | 3.12E-02 | 1.21E-01 | 5.30E-01 | 1.21E-01         | 5.30E-01 | 1.21E-01          | 5.30E-01 | -                | -   |
| 4                      | Waukesha 7044GSI S4                      | 50.37           | 220.63   | 41.11    | 180.07   | 0.07     | 0.31     | 7.71E-03        | 3.38E-02 | 1.31E-01 | 5.74E-01 | 1.31E-01         | 5.74E-01 | 1.31E-01          | 5.74E-01 | -                | -   |
| 5                      | Waukesha 7044GSI S4                      | 50.37           | 220.63   | 41.11    | 180.07   | 0.07     | 0.31     | 7.71E-03        | 3.38E-02 | 1.31E-01 | 5.74E-01 | 1.31E-01         | 5.74E-01 | 1.31E-01          | 5.74E-01 | -                | -   |
| 6                      | Waukesha 7044GSI S5                      | 38.10           | 166.86   | 29.43    | 128.91   | 1.98     | 8.69     | 7.13E-03        | 3.12E-02 | 1.21E-01 | 5.30E-01 | 1.21E-01         | 5.30E-01 | 1.21E-01          | 5.30E-01 | -                | -   |
| 7                      | Waukesha 7044GSI S4                      | 50.37           | 220.63   | 41.11    | 180.07   | 0.07     | 0.31     | 7.71E-03        | 3.38E-02 | 1.31E-01 | 5.74E-01 | 1.31E-01         | 5.74E-01 | 1.31E-01          | 5.74E-01 | -                | -   |
| 8                      | Waukesha 7044GSI S4                      | 50.37           | 220.63   | 41.11    | 180.07   | 0.07     | 0.31     | 7.71E-03        | 3.38E-02 | 1.31E-01 | 5.74E-01 | 1.31E-01         | 5.74E-01 | 1.31E-01          | 5.74E-01 | -                | -   |
| 9                      | Waukesha 7044GSI S4                      | 50.37           | 220.63   | 41.11    | 180.07   | 0.07     | 0.31     | 7.71E-03        | 3.38E-02 | 1.31E-01 | 5.74E-01 | 1.31E-01         | 5.74E-01 | 1.31E-01          | 5.74E-01 | -                | -   |
| 17                     | Waukesha 7044GSI S4                      | 50.37           | 220.63   | 41.11    | 180.07   | 0.07     | 0.31     | 7.71E-03        | 3.38E-02 | 1.31E-01 | 5.74E-01 | 1.31E-01         | 5.74E-01 | 1.31E-01          | 5.74E-01 | -                | -   |
| 18                     | Waukesha 7044GSI S4                      | 50.37           | 220.63   | 41.11    | 180.07   | 0.07     | 0.31     | 7.71E-03        | 3.38E-02 | 1.31E-01 | 5.74E-01 | 1.31E-01         | 5.74E-01 | 1.31E-01          | 5.74E-01 | -                | -   |
| 19                     | Waukesha 7044GSI S4                      | 50.37           | 220.63   | 41.11    | 180.07   | 0.07     | 0.31     | 7.71E-03        | 3.38E-02 | 1.31E-01 | 5.74E-01 | 1.31E-01         | 5.74E-01 | 1.31E-01          | 5.74E-01 | -                | -   |
| 10a                    | TEG Regenerator Still Vent (20 mmscfd)   | -               | -        | -        | -        | 0.01     | 0.06     | -               | -        | -        | -        | -                | -        | -                 | -        | -                | -   |
| 10b                    | TEG Reboiler Burner                      | 0.04            | 0.19     | 0.04     | 0.20     | 6.67E-03 | 0.03     | 8.33E-04        | 3.65E-03 | 0.01     | 0.05     | 0.01             | 0.05     | 0.01              | 0.05     | -                | -   |
| 11a                    | TEG Regenerator Still Vent (20 mmscfd)   | -               | -        | -        | -        | 0.01     | 0.06     | -               | -        | -        | -        | -                | -        | -                 | -        | -                | -   |
| 11b                    | TEG Reboiler Burner                      | 0.04            | 0.19     | 0.04     | 0.20     | 6.67E-03 | 0.03     | 8.33E-04        | 3.65E-03 | 0.01     | 0.05     | 0.01             | 0.05     | 0.01              | 0.05     | -                | -   |
| 12a                    | TEG Regenerator Still Vent (20 mmscfd)   | -               | -        | -        | -        | 0.01     | 0.06     | -               | -        | -        | -        | -                | -        | -                 | -        | -                | -   |
| 12b                    | TEG Reboiler Burner                      | 0.04            | 0.19     | 0.04     | 0.20     | 6.67E-03 | 0.03     | 8.33E-04        | 3.65E-03 | 0.01     | 0.05     | 0.01             | 0.05     | 0.01              | 0.05     | -                | -   |
| 13a                    | TEG Regenerator Still Vent (12 mmscfd)   | -               | -        | -        | -        | 0.025    | 0.11     | -               | -        | -        | -        | -                | -        | -                 | -        | -                | -   |
| 13b                    | TEG Reboiler Burner                      | 4.29E-02        | 1.88E-01 | 3.25E-02 | 1.42E-01 | 4.79E-03 | 2.10E-02 | 8.33E-04        | 3.65E-03 | 9.18E-03 | 4.02E-02 | 9.18E-03         | 4.02E-02 | 9.18E-03          | 4.02E-02 | -                | -   |
| 14a                    | TEG Regenerator Still Vent (12 mmscfd)   | -               | -        | -        | -        | 0.02     | 0.11     | -               | -        | -        | -        | -                | -        | -                 | -        | -                | -   |
| 14b                    | TEG Reboiler Burner                      | 4.29E-02        | 1.88E-01 | 3.25E-02 | 1.42E-01 | 4.79E-03 | 2.10E-02 | 8.33E-04        | 3.65E-03 | 9.18E-03 | 4.02E-02 | 9.18E-03         | 4.02E-02 | 9.18E-03          | 4.02E-02 | -                | -   |
| 15a                    | TEG Regenerator Still Vent (20 mmscfd)   | -               | -        | -        | -        | 0.01     | 0.06     | -               | -        | -        | -        | -                | -        | -                 | -        | -                | -   |
| 15b                    | TEG Reboiler Burner                      | 0.04            | 0.19     | 0.04     | 0.20     | 6.67E-03 | 0.03     | 8.33E-04        | 3.65E-03 | 0.01     | 0.05     | 0.01             | 0.05     | 0.01              | 0.05     | -                | -   |
| 16a                    | TEG Regenerator Still Vent (20 mmscfd)   | -               | -        | -        | -        | 0.01     | 0.06     | -               | -        | -        | -        | -                | -        | -                 | -        | -                | -   |
| 16b                    | TEG Reboiler Burner                      | 0.04            | 0.19     | 0.04     | 0.20     | 6.67E-03 | 0.03     | 8.33E-04        | 3.65E-03 | 0.01     | 0.05     | 0.01             | 0.05     | 0.01              | 0.05     | -                | -   |
| 20a                    | TEG Regenerator Still Vent (200 mmscfd)  | -               | -        | -        | -        | 0.37     | 1.63     | -               | -        | -        | -        | -                | -        | -                 | -        | -                | -   |
| 20b                    | TEG Reboiler Burner                      | 0.26            | 1.12     | 0.21     | 0.94     | 0.01     | 0.06     | 1.53E-03        | 6.71E-03 | 0.02     | 0.09     | 0.02             | 0.09     | 0.02              | 0.09     | -                | -   |
| 20c                    | TEG Reboiler Burner                      | 0.26            | 1.12     | 0.21     | 0.94     | 0.01     | 0.06     | 1.53E-03        | 6.71E-03 | 0.02     | 0.09     | 0.02             | 0.09     | 0.02              | 0.09     | -                | -   |
| 21a                    | TEG Regenerator Still Vent (200 mmscfd)  | -               | -        | -        | -        | 0.37     | 1.63     | -               | -        | -        | -        | -                | -        | -                 | -        | -                | -   |
| 21b                    | TEG Reboiler Burner                      | 0.44            | 1.91     | 0.37     | 1.60     | 0.02     | 0.10     | 2.61E-03        | 0.01     | 0.03     | 0.14     | 0.03             | 0.14     | 0.03              | 0.14     | -                | -   |
| 21c                    | TEG Reboiler Burner                      | 0.44            | 1.91     | 0.37     | 1.60     | 0.02     | 0.10     | 2.61E-03        | 0.01     | 0.03     | 0.14     | 0.03             | 0.14     | 0.03              | 0.14     | -                | -   |
| 22a                    | TEG Regenerator Still Vent (200 mmscfd)  | -               | -        | -        | -        | 0.37     | 1.63     | -               | -        | -        | -        | -                | -        | -                 | -        | -                | -   |
| 22b                    | TEG Reboiler Burner                      | 0.26            | 1.12     | 0.21     | 0.94     | 0.01     | 0.06     | 1.53E-03        | 6.71E-03 | 0.02     | 0.09     | 0.02             | 0.09     | 0.02              | 0.09     | -                | -   |
| 22c                    | TEG Reboiler Burner                      | 0.26            | 1.12     | 0.21     | 0.94     | 0.01     | 0.06     | 1.53E-03        | 6.71E-03 | 0.02     | 0.09     | 0.02             | 0.09     | 0.02              | 0.09     | -                | -   |
| SSM                    | Compressors & Associated Piping Blowdown | -               | -        | -        | -        | *        | 1.31     | -               | -        | -        | -        | -                | -        | -                 | -        | -                | -   |
| Total                  |                                          | 486.75          | 2,131.97 | 406.12   | 1,778.80 | 11.91    | 53.48    | 0.10            | 0.46     | 1.72     | 7.52     | 1.72             | 7.52     | 1.72              | 7.52     | -                | -   |

" - " indicates pollutants are not to be expected.

" \* " indicates lb/hr emission rates are not appropriate for this unit.

**Emissions Summary**

| Controlled Emissions |                                          |                 |          |          |          |          |       |                 |          |          |          |                  |          |                   |          |                  |     |
|----------------------|------------------------------------------|-----------------|----------|----------|----------|----------|-------|-----------------|----------|----------|----------|------------------|----------|-------------------|----------|------------------|-----|
| Unit ID              | Equipment Description                    | NO <sub>x</sub> |          | CO       |          | VOC      |       | SO <sub>2</sub> |          | PM       |          | PM <sub>10</sub> |          | PM <sub>2.5</sub> |          | H <sub>2</sub> S |     |
|                      |                                          | lb/hr           | tpy      | lb/hr    | tpy      | lb/hr    | tpy   | lb/hr           | tpy      | lb/hr    | tpy      | lb/hr            | tpy      | lb/hr             | tpy      | lb/hr            | tpy |
| 1                    | Waukesha 7042GL                          | 1.48            | 6.50     | 0.58     | 2.53     | 0.63     | 2.76  | 5.92E-03        | 2.59E-02 | 1.01E-01 | 4.41E-01 | 1.01E-01         | 4.41E-01 | 1.01E-01          | 4.41E-01 | -                | -   |
| 2                    | Waukesha 7042GL                          | 1.48            | 6.50     | 0.58     | 2.53     | 0.63     | 2.76  | 5.92E-03        | 2.59E-02 | 1.01E-01 | 4.41E-01 | 1.01E-01         | 4.41E-01 | 1.01E-01          | 4.41E-01 | -                | -   |
| 3                    | Waukesha 7044GSI S5                      | 1.52            | 6.67     | 1.97     | 8.64     | 1.98     | 8.69  | 7.13E-03        | 3.12E-02 | 1.21E-01 | 5.30E-01 | 1.21E-01         | 5.30E-01 | 1.21E-01          | 5.30E-01 | -                | -   |
| 4                    | Waukesha 7044GSI S4                      | 1.76            | 7.72     | 2.06     | 9.00     | 0.07     | 0.31  | 7.71E-03        | 3.38E-02 | 1.31E-01 | 5.74E-01 | 1.31E-01         | 5.74E-01 | 1.31E-01          | 5.74E-01 | -                | -   |
| 5                    | Waukesha 7044GSI S4                      | 1.76            | 7.72     | 2.06     | 9.00     | 0.07     | 0.31  | 7.71E-03        | 3.38E-02 | 1.31E-01 | 5.74E-01 | 1.31E-01         | 5.74E-01 | 1.31E-01          | 5.74E-01 | -                | -   |
| 6                    | Waukesha 7044GSI S5                      | 1.52            | 6.67     | 1.97     | 8.64     | 1.98     | 8.69  | 7.13E-03        | 3.12E-02 | 1.21E-01 | 5.30E-01 | 1.21E-01         | 5.30E-01 | 1.21E-01          | 5.30E-01 | -                | -   |
| 7                    | Waukesha 7044GSI S4                      | 1.76            | 7.72     | 2.06     | 9.00     | 0.07     | 0.31  | 7.71E-03        | 3.38E-02 | 1.31E-01 | 5.74E-01 | 1.31E-01         | 5.74E-01 | 1.31E-01          | 5.74E-01 | -                | -   |
| 8                    | Waukesha 7044GSI S4                      | 1.76            | 7.72     | 2.06     | 9.00     | 0.07     | 0.31  | 7.71E-03        | 3.38E-02 | 1.31E-01 | 5.74E-01 | 1.31E-01         | 5.74E-01 | 1.31E-01          | 5.74E-01 | -                | -   |
| 9                    | Waukesha 7044GSI S4                      | 1.76            | 7.72     | 2.06     | 9.00     | 0.07     | 0.31  | 7.71E-03        | 3.38E-02 | 1.31E-01 | 5.74E-01 | 1.31E-01         | 5.74E-01 | 1.31E-01          | 5.74E-01 | -                | -   |
| 17                   | Waukesha 7044GSI S4                      | 1.76            | 7.72     | 2.06     | 9.00     | 0.07     | 0.31  | 7.71E-03        | 3.38E-02 | 1.31E-01 | 5.74E-01 | 1.31E-01         | 5.74E-01 | 1.31E-01          | 5.74E-01 | -                | -   |
| 18                   | Waukesha 7044GSI S4                      | 1.76            | 7.72     | 2.06     | 9.00     | 0.07     | 0.31  | 7.71E-03        | 3.38E-02 | 1.31E-01 | 5.74E-01 | 1.31E-01         | 5.74E-01 | 1.31E-01          | 5.74E-01 | -                | -   |
| 19                   | Waukesha 7044GSI S4                      | 1.76            | 7.72     | 2.06     | 9.00     | 0.07     | 0.31  | 7.71E-03        | 3.38E-02 | 1.31E-01 | 5.74E-01 | 1.31E-01         | 5.74E-01 | 1.31E-01          | 5.74E-01 | -                | -   |
| 10a                  | TEG Regenerator Still Vent (20 mmscfd)   | -               | -        | -        | -        | 0.01     | 0.06  | -               | -        | -        | -        | -                | -        | -                 | -        | -                | -   |
| 10b                  | TEG Reboiler Burner                      | 4.29E-02        | 1.88E-01 | 4.46E-02 | 1.95E-01 | 6.67E-03 | 0.03  | 8.33E-04        | 3.65E-03 | 0.01     | 0.05     | 0.01             | 0.05     | 0.01              | 0.05     | -                | -   |
| 11a                  | TEG Regenerator Still Vent (20 mmscfd)   | -               | -        | -        | -        | 0.01     | 0.06  | -               | -        | -        | -        | -                | -        | -                 | -        | -                | -   |
| 11b                  | TEG Reboiler Burner                      | 4.29E-02        | 1.88E-01 | 4.46E-02 | 1.95E-01 | 6.67E-03 | 0.03  | 8.33E-04        | 3.65E-03 | 0.01     | 0.05     | 0.01             | 0.05     | 0.01              | 0.05     | -                | -   |
| 12a                  | TEG Regenerator Still Vent (20 mmscfd)   | -               | -        | -        | -        | 0.01     | 0.06  | -               | -        | -        | -        | -                | -        | -                 | -        | -                | -   |
| 12b                  | TEG Reboiler Burner                      | 4.29E-02        | 1.88E-01 | 4.46E-02 | 1.95E-01 | 6.67E-03 | 0.03  | 8.33E-04        | 3.65E-03 | 0.01     | 0.05     | 0.01             | 0.05     | 0.01              | 0.05     | -                | -   |
| 13a                  | TEG Regenerator Still Vent (12 mmscfd)   | -               | -        | -        | -        | 0.02     | 0.11  | -               | -        | -        | -        | -                | -        | -                 | -        | -                | -   |
| 13b                  | TEG Reboiler Burner                      | 4.29E-02        | 1.88E-01 | 3.25E-02 | 1.42E-01 | 4.79E-03 | 0.02  | 8.33E-04        | 3.65E-03 | 9.18E-03 | 0.04     | 9.18E-03         | 0.04     | 9.18E-03          | 0.04     | -                | -   |
| 14a                  | TEG Regenerator Still Vent (12 mmscfd)   | -               | -        | -        | -        | 0.02     | 0.11  | -               | -        | -        | -        | -                | -        | -                 | -        | -                | -   |
| 14b                  | TEG Reboiler Burner                      | 4.29E-02        | 1.88E-01 | 3.25E-02 | 1.42E-01 | 4.79E-03 | 0.02  | 8.33E-04        | 3.65E-03 | 9.18E-03 | 0.04     | 9.18E-03         | 0.04     | 9.18E-03          | 0.04     | -                | -   |
| 15a                  | TEG Regenerator Still Vent (20 mmscfd)   | -               | -        | -        | -        | 0.01     | 0.06  | -               | -        | -        | -        | -                | -        | -                 | -        | -                | -   |
| 15b                  | TEG Reboiler Burner                      | 4.29E-02        | 1.88E-01 | 4.46E-02 | 1.95E-01 | 6.67E-03 | 0.03  | 8.33E-04        | 3.65E-03 | 0.01     | 0.05     | 0.01             | 0.05     | 0.01              | 0.05     | -                | -   |
| 16a                  | TEG Regenerator Still Vent (20 mmscfd)   | -               | -        | -        | -        | 0.01     | 0.06  | -               | -        | -        | -        | -                | -        | -                 | -        | -                | -   |
| 16b                  | TEG Reboiler Burner                      | 4.29E-02        | 1.88E-01 | 4.46E-02 | 1.95E-01 | 6.67E-03 | 0.03  | 8.33E-04        | 3.65E-03 | 0.01     | 0.05     | 0.01             | 0.05     | 0.01              | 0.05     | -                | -   |
| 20a                  | TEG Regenerator Still Vent (200 mmscfd)  | -               | -        | -        | -        | 0.37     | 1.63  | -               | -        | -        | -        | -                | -        | -                 | -        | -                | -   |
| 20b                  | TEG Reboiler Burner                      | 0.26            | 1.12     | 0.21     | 0.94     | 0.01     | 0.06  | 0.00            | 0.01     | 0.02     | 0.09     | 0.02             | 0.09     | 0.02              | 0.09     | -                | -   |
| 20c                  | TEG Reboiler Burner                      | 0.26            | 1.12     | 0.21     | 0.94     | 0.01     | 0.06  | 0.00            | 0.01     | 0.02     | 0.09     | 0.02             | 0.09     | 0.02              | 0.09     | -                | -   |
| 21a                  | TEG Regenerator Still Vent (200 mmscfd)  | -               | -        | -        | -        | 0.37     | 1.63  | -               | -        | -        | -        | -                | -        | -                 | -        | -                | -   |
| 21b                  | TEG Reboiler Burner                      | 0.44            | 1.91     | 0.37     | 1.60     | 0.02     | 0.10  | 0.00            | 0.01     | 0.03     | 0.14     | 0.03             | 0.14     | 0.03              | 0.14     | -                | -   |
| 21c                  | TEG Reboiler Burner                      | 0.44            | 1.91     | 0.37     | 1.60     | 0.02     | 0.10  | 0.00            | 0.01     | 0.03     | 0.14     | 0.03             | 0.14     | 0.03              | 0.14     | -                | -   |
| 22a                  | TEG Regenerator Still Vent (200 mmscfd)  | -               | -        | -        | -        | 0.37     | 1.63  | -               | -        | -        | -        | -                | -        | -                 | -        | -                | -   |
| 22b                  | TEG Reboiler Burner                      | 0.26            | 1.12     | 0.21     | 0.94     | 0.01     | 0.06  | 0.002           | 0.01     | 0.02     | 0.09     | 0.02             | 0.09     | 0.02              | 0.09     | -                | -   |
| 22c                  | TEG Reboiler Burner                      | 0.26            | 1.12     | 0.21     | 0.94     | 0.01     | 0.06  | 0.002           | 0.01     | 0.02     | 0.09     | 0.02             | 0.09     | 0.02              | 0.09     | -                | -   |
| SSM                  | Compressors & Associated Piping Blowdown | -               | -        | -        | -        | *        | 1.31  | -               | -        | -        | -        | -                | -        | -                 | -        | -                | -   |
| Total                |                                          | 22.31           | 97.73    | 23.42    | 102.58   | 7.18     | 32.75 | 0.10            | 0.46     | 1.72     | 7.52     | 1.72             | 7.52     | 1.72              | 7.52     | -                | -   |

" - " indicates pollutants are not to be expected.

" \* " indicates lb/hr emission rates are not appropriate for this unit.

**Emissions Summary**

| Unit ID      | Equipment Description                    | Controlled HAP |             |              |             |             |             |             |             |             |             |
|--------------|------------------------------------------|----------------|-------------|--------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
|              |                                          | Total HAP      |             | Formaldehyde |             | Benzene     |             | Toluene     |             | Xylene      |             |
|              |                                          | lb/hr          | tpy         | lb/hr        | tpy         | lb/hr       | tpy         | lb/hr       | tpy         | lb/hr       | tpy         |
| 1            | Waukesha 7042GL                          | 0.08           | 0.37        | 0.06         | 0.27        | 0.02        | 0.07        | 5.62E-03    | 0.02        | 1.96E-03    | 8.60E-03    |
| 2            | Waukesha 7042GL                          | 0.08           | 0.37        | 0.06         | 0.27        | 0.02        | 0.07        | 5.62E-03    | 0.02        | 1.96E-03    | 8.60E-03    |
| 3            | Waukesha 7044GSI S5                      | 0.06           | 0.27        | 0.03         | 0.14        | 0.02        | 0.08        | 6.76E-03    | 0.03        | 2.36E-03    | 0.01        |
| 4            | Waukesha 7044GSI S4                      | 0.07           | 0.30        | 0.04         | 0.16        | 0.02        | 0.09        | 7.32E-03    | 0.03        | 2.56E-03    | 0.01        |
| 5            | Waukesha 7044GSI S4                      | 0.07           | 0.30        | 0.04         | 0.16        | 0.02        | 0.09        | 7.32E-03    | 0.03        | 2.56E-03    | 0.01        |
| 6            | Waukesha 7044GSI S5                      | 0.06           | 0.27        | 0.03         | 0.14        | 0.02        | 0.08        | 6.76E-03    | 0.03        | 2.36E-03    | 0.01        |
| 7            | Waukesha 7044GSI S4                      | 0.07           | 0.30        | 0.04         | 0.16        | 0.02        | 0.09        | 7.32E-03    | 0.03        | 2.56E-03    | 0.01        |
| 8            | Waukesha 7044GSI S4                      | 0.07           | 0.30        | 0.04         | 0.16        | 0.02        | 0.09        | 7.32E-03    | 0.03        | 2.56E-03    | 0.01        |
| 9            | Waukesha 7044GSI S4                      | 0.07           | 0.30        | 0.04         | 0.16        | 0.02        | 0.09        | 7.32E-03    | 0.03        | 2.56E-03    | 0.01        |
| 17           | Waukesha 7044GSI S4                      | 0.07           | 0.30        | 0.04         | 0.16        | 0.02        | 0.09        | 7.32E-03    | 0.03        | 2.56E-03    | 0.01        |
| 18           | Waukesha 7044GSI S4                      | 0.07           | 0.30        | 0.04         | 0.16        | 0.02        | 0.09        | 7.32E-03    | 0.03        | 2.56E-03    | 0.01        |
| 19           | Waukesha 7044GSI S4                      | 0.07           | 0.30        | 0.04         | 0.16        | 0.02        | 0.09        | 7.32E-03    | 0.03        | 2.56E-03    | 0.01        |
| 10a          | TEG Regenerator Still Vent (20 mmscfd)   | -              | -           | -            | -           | -           | -           | -           | -           | -           | -           |
| 10b          | TEG Reboiler Burner                      | -              | -           | -            | -           | -           | -           | -           | -           | -           | -           |
| 11a          | TEG Regenerator Still Vent (20 mmscfd)   | -              | -           | -            | -           | -           | -           | -           | -           | -           | -           |
| 11b          | TEG Reboiler Burner                      | -              | -           | -            | -           | -           | -           | -           | -           | -           | -           |
| 12a          | TEG Regenerator Still Vent (20 mmscfd)   | -              | -           | -            | -           | -           | -           | -           | -           | -           | -           |
| 12b          | TEG Reboiler Burner                      | -              | -           | -            | -           | -           | -           | -           | -           | -           | -           |
| 13a          | TEG Regenerator Still Vent (12 mmscfd)   | -              | -           | -            | -           | -           | -           | -           | -           | -           | -           |
| 13b          | TEG Reboiler Burner                      | -              | -           | -            | -           | -           | -           | -           | -           | -           | -           |
| 14a          | TEG Regenerator Still Vent (12 mmscfd)   | -              | -           | -            | -           | -           | -           | -           | -           | -           | -           |
| 14b          | TEG Reboiler Burner                      | -              | -           | -            | -           | -           | -           | -           | -           | -           | -           |
| 15a          | TEG Regenerator Still Vent (20 mmscfd)   | -              | -           | -            | -           | -           | -           | -           | -           | -           | -           |
| 15b          | TEG Reboiler Burner                      | -              | -           | -            | -           | -           | -           | -           | -           | -           | -           |
| 16a          | TEG Regenerator Still Vent (20 mmscfd)   | -              | -           | -            | -           | -           | -           | -           | -           | -           | -           |
| 16b          | TEG Reboiler Burner                      | -              | -           | -            | -           | -           | -           | -           | -           | -           | -           |
| 20a          | TEG Regenerator Still Vent (200 mmscfd)  | -              | -           | -            | -           | -           | -           | -           | -           | -           | -           |
| 20b          | TEG Reboiler Burner                      | -              | -           | -            | -           | -           | -           | -           | -           | -           | -           |
| 20c          | TEG Reboiler Burner                      | -              | -           | -            | -           | -           | -           | -           | -           | -           | -           |
| 21a          | TEG Regenerator Still Vent (200 mmscfd)  | -              | -           | -            | -           | -           | -           | -           | -           | -           | -           |
| 21b          | TEG Reboiler Burner                      | -              | -           | -            | -           | -           | -           | -           | -           | -           | -           |
| 21c          | TEG Reboiler Burner                      | -              | -           | -            | -           | -           | -           | -           | -           | -           | -           |
| 22a          | TEG Regenerator Still Vent (200 mmscfd)  | -              | -           | -            | -           | -           | -           | -           | -           | -           | -           |
| 22b          | TEG Reboiler Burner                      | -              | -           | -            | -           | -           | -           | -           | -           | -           | -           |
| 22c          | TEG Reboiler Burner                      | -              | -           | -            | -           | -           | -           | -           | -           | -           | -           |
| SSM          | Compressors & Associated Piping Blowdown | -              | -           | -            | -           | -           | -           | -           | -           | -           | -           |
| <b>Total</b> |                                          | <b>0.83</b>    | <b>3.65</b> | <b>0.48</b>  | <b>2.12</b> | <b>0.24</b> | <b>1.03</b> | <b>0.08</b> | <b>0.36</b> | <b>0.03</b> | <b>0.13</b> |

" - " indicates pollutants are not to be expected.

" \* " indicates lb/hr emission rates are not appropriate for this unit.

## Engine Exhaust Emissions Data and Calculations

Unit Number: 1-2

Description: Waukesha L7042GSI

Note: The data on this worksheet applies to each individual emissions unit identified above.

### Horsepower Calculations

6,720 ft above MSL

1,480 hp

1,359 hp

1,325 hp

Elevation

Nameplate hp

NMAQB Site-rated hp

Mfg. Site-rated hp

Mfg. data

NMAQB Procedure # 02.002-00

(loss of 3% for every 1,000 ft over 4,000 ft)

Mfg. product bulletin Power Derate,

S8154-6, April 2001

(loss of 2% for every 1,000 ft over 1,500 ft)

### Fuel Consumption

7409.56 Btu/hp-hr

10.07 MMBtu/hr

11,190 scf/hr

8,760 hr/yr

88,225 MMBtu/yr

98.03 MMscf/yr

900 Btu/scf

Brake specific fuel consumption

Hourly fuel consumption

Hourly fuel consumption

Annual operating time

Annual fuel consumption

Annual fuel consumption

Field gas heating value

Mfg. data (carried forward from previous appl.)

Btu/hp-hr x NMAQB site-rated hp / 1,000,000

MMBtu/hr x 1,000,000 / Btu/scf

MMBtu/hr x 8,760 hr/yr

scf/hr x 8,760 hr/yr / 1,000,000

Nominal heat content

### Steady-State Emission Rates

| Pollutant | Emission Factors<br>g/hp-hr | Uncontrolled Emission Rates |       | Control Efficiency | Controlled Emission Rates |      |
|-----------|-----------------------------|-----------------------------|-------|--------------------|---------------------------|------|
|           |                             | pph                         | tpy   |                    | pph                       | tpy  |
| NOX       | 0.90                        | 2.70                        | 11.81 | 45%                | 1.48                      | 6.50 |
| CO        | 2.75                        | 8.24                        | 36.09 | 93%                | 0.58                      | 2.53 |
| VOC       | 1.00                        | 3.00                        | 13.13 | 79%                | 0.63                      | 2.76 |
| CH2O      | 0.29                        | 0.87                        | 3.81  | 93%                | 0.06                      | 0.27 |

NO<sub>x</sub>, CO, & VOC emission are shown to meet the NMED ozone precursor rule standards.

Uncontrolled Emission Rates (pph) = g/hp-hr x NMAQB Site-rated hp / 453.59 g/lb

Uncontrolled Emission Rates (tpy) = Uncontrolled Emission Rates (pph) x hr/yr / 2,000 lb/ton

Control efficiency for NO<sub>x</sub> is estimated based on ozone precursor rule standards.

Control efficiency for CO based on a typical catalyst mfr. data sheet.

Control efficiency for VOC is based on Waukesha-Pearce data.

Controlled Emission Rates (pph) = Uncontrolled Emission Rates (pph) x (1 - (% / 100))

Controlled Emission Rates (tpy) = Uncontrolled Emission Rates (tpy) x (1 - (% / 100))

| Pollutant | Emission Factors<br>lb/MMBtu | Uncontrolled Emission Rates |          |
|-----------|------------------------------|-----------------------------|----------|
|           |                              | pph                         | tpy      |
| Benzene   | 1.58E-03                     | 1.59E-02                    | 6.97E-02 |
| Toluene   | 5.58E-04                     | 5.62E-03                    | 2.46E-02 |
| Xylene    | 1.95E-04                     | 1.96E-03                    | 8.60E-03 |
| SO2       | 5.88E-04                     | 5.92E-03                    | 2.59E-02 |
| TSP       | 9.99E-03                     | 1.01E-01                    | 4.41E-01 |
| PM10      | 9.99E-03                     | 1.01E-01                    | 4.41E-01 |
| PM2.5     | 9.99E-03                     | 1.01E-01                    | 4.41E-01 |

Emission factors (lb/MMBtu) taken from AP-42, Table 3.2-2

Particulate factors include both filterable and condensable emissions

Uncontrolled Emission Rates (pph) = lb/MMBtu x MMBtu/hr

Uncontrolled Emission Rates (tpy) = Uncontrolled Emission Rates (pph) x hr/yr / 2,000 lb/ton

## Engine Exhaust Emissions Data and Calculations

Unit Number: 4-5, 7-9, 17-19

Description: Waukesha L7044GSI S4

Note: The data on this worksheet applies to each individual emissions unit identified above.

### Horsepower Calculations

6,720 ft above MSL

1,900 hp

Elevation

Nameplate hp

Mfg. data

1,680 hp

Mfg. Site-rated hp

Mfg. product bulletin Power Derate,  
S8154-6, April 2001

### Fuel Consumption

7808.00 Btu/hp-hr

13.12 MMBtu/hr

14,575 scf/hr

8,760 hr/yr

114,909 MMBtu/yr

127.68 MMscf/yr

900 Btu/scf

Brake specific fuel consumption

Hourly fuel consumption

Hourly fuel consumption

Annual operating time

Annual fuel consumption

Annual fuel consumption

Field gas heating value

Mfg. data (carried forward from previous appl.)

Btu/hp-hr x Mfg. site-rated hp / 1,000,000

MMBtu/hr x 1,000,000 / Btu/scf

MMBtu/hr x 8,760 hr/yr

scf/hr x 8,760 hr/yr / 1,000,000

Nominal heat content

### Steady-State Emission Rates

| Pollutant | Emission Factors<br>g/hp-hr | Uncontrolled Emission Rates<br>(Units 4-5, 7-9, & 17-19) |        | Control Efficiency | Controlled Emission Rates<br>(Units 4-5, 7-9, & 17-19) |      |
|-----------|-----------------------------|----------------------------------------------------------|--------|--------------------|--------------------------------------------------------|------|
|           |                             | pph                                                      | tpy    |                    | pph                                                    | tpy  |
| NOX       | 13.60                       | 50.37                                                    | 220.63 | 96.5%              | 1.76                                                   | 7.72 |
| CO        | 11.10                       | 41.11                                                    | 180.07 | 95%                | 2.06                                                   | 9.00 |
| VOC       | 0.019                       | 0.07                                                     | 0.31   | 0%                 | 0.07                                                   | 0.31 |
| CH2O      | 0.050                       | 0.19                                                     | 0.81   | 80%                | 0.04                                                   | 0.16 |

NO<sub>x</sub>, CO, & VOC emission are shown to meet the NMED ozone precursor rule standards.

Uncontrolled Emission Rates (pph) = g/hp-hr x NMAQB Site-rated hp / 453.59 g/lb

Uncontrolled Emission Rates (tpy) = Uncontrolled Emission Rates (pph) x hr/yr / 2,000 lb/ton

Control efficiency for NO<sub>x</sub>, CO and VOC are estimated based on ozone precursor rule standards.

Controlled Emission Rates (pph) = Uncontrolled Emission Rates (pph) x (1 - (% / 100))

Controlled Emission Rates (tpy) = Uncontrolled Emission Rates (tpy) x (1 - (% / 100))

| Pollutant | Emission Factors<br>lb/MMBtu | Uncontrolled Emission Rates |          |
|-----------|------------------------------|-----------------------------|----------|
|           |                              | pph                         | tpy      |
| Benzene   | 1.58E-03                     | 2.07E-02                    | 9.08E-02 |
| Toluene   | 5.58E-04                     | 7.32E-03                    | 3.21E-02 |
| Xylene    | 1.95E-04                     | 2.56E-03                    | 1.12E-02 |
| SO2       | 5.88E-04                     | 7.71E-03                    | 3.38E-02 |
| TSP       | 9.99E-03                     | 1.31E-01                    | 5.74E-01 |
| PM10      | 9.99E-03                     | 1.31E-01                    | 5.74E-01 |
| PM2.5     | 9.99E-03                     | 1.31E-01                    | 5.74E-01 |

Emission factors (lb/MMBtu) taken from AP-42, Table 3.2-2

Particulate factors include both filterable and condensable emissions

Uncontrolled Emission Rates (pph) = lb/MMBtu x MMBtu/hr

Uncontrolled Emission Rates (tpy) = Uncontrolled Emission Rates (pph) x hr/yr / 2,000 lb/ton

## Engine Exhaust Emissions Data and Calculations

Unit Number: 3 &amp; 6

Description: Waukesha L7044GSI S5

Note: The data on this worksheet applies to each individual emissions unit identified above.

### Horsepower Calculations

6,720 ft above MSL

1,980 hp

Elevation

Nameplate hp

Mfg. data

1,500 hp

Mfg. Site-rated hp

Mfg. product bulletin Power Derate,  
S8154-6, April 2001

### Fuel Consumption

8081.00 Btu/hp-hr

12.12 MMBtu/hr

13,468 scf/hr

8,760 hr/yr

106,184 MMBtu/yr

117.98 MMscf/yr

900 Btu/scf

Brake specific fuel consumption

Hourly fuel consumption

Hourly fuel consumption

Annual operating time

Annual fuel consumption

Annual fuel consumption

Field gas heating value

Mfg. data (carried forward from previous appl.)

Btu/hp-hr x Mfg. site-rated hp / 1,000,000

MMBtu/hr x 1,000,000 / Btu/scf

MMBtu/hr x 8,760 hr/yr

scf/hr x 8,760 hr/yr / 1,000,000

Nominal heat content

### Steady-State Emission Rates

| Pollutant | Emission Factors<br>g/hp-hr | Uncontrolled Emission Rates<br>(Units 3 & 6) |        | Control Efficiency | Controlled Emission Rates<br>(Units 3 & 6) |      |
|-----------|-----------------------------|----------------------------------------------|--------|--------------------|--------------------------------------------|------|
|           |                             | pph                                          | tpy    |                    | pph                                        | tpy  |
| NOX       | 11.52                       | 38.10                                        | 166.86 | 96%                | 1.52                                       | 6.67 |
| CO        | 8.90                        | 29.43                                        | 128.91 | 93.3%              | 1.97                                       | 8.64 |
| VOC       | 0.60                        | 1.98                                         | 8.69   | 0%                 | 1.98                                       | 8.69 |
| CH2O      | 0.05                        | 0.17                                         | 0.72   | 80%                | 0.03                                       | 0.14 |

NO<sub>x</sub>, CO, & VOC emission are shown to meet the NMED ozone precursor rule standards.

Uncontrolled Emission Rates (pph) = g/hp-hr x NMAQB Site-rated hp / 453.59 g/lb

Uncontrolled Emission Rates (tpy) = Uncontrolled Emission Rates (pph) x hr/yr / 2,000 lb/ton

Control efficiency for NO<sub>x</sub>, CO and VOC are estimated based on ozone precursor rule standards.

Controlled Emission Rates (pph) = Uncontrolled Emission Rates (pph) x (1 - (% / 100))

Controlled Emission Rates (tpy) = Uncontrolled Emission Rates (tpy) x (1 - (% / 100))

| Pollutant | Emission Factors<br>lb/MMBtu | Uncontrolled Emission Rates |          |
|-----------|------------------------------|-----------------------------|----------|
|           |                              | pph                         | tpy      |
| Benzene   | 1.58E-03                     | 1.92E-02                    | 8.39E-02 |
| Toluene   | 5.58E-04                     | 6.76E-03                    | 2.96E-02 |
| Xylene    | 1.95E-04                     | 2.36E-03                    | 1.04E-02 |
| SO2       | 5.88E-04                     | 7.13E-03                    | 3.12E-02 |
| TSP       | 9.99E-03                     | 1.21E-01                    | 5.30E-01 |
| PM10      | 9.99E-03                     | 1.21E-01                    | 5.30E-01 |
| PM2.5     | 9.99E-03                     | 1.21E-01                    | 5.30E-01 |

Emission factors (lb/MMBtu) taken from AP-42, Table 3.2-2

Particulate factors include both filterable and condensable emissions

Uncontrolled Emission Rates (pph) = lb/MMBtu x MMBtu/hr

Uncontrolled Emission Rates (tpy) = Uncontrolled Emission Rates (pph) x hr/yr / 2,000 lb/ton

## Dehydrator Reboiler Exhaust Emissions Calculations

Unit Number: 10b, 11b, 12b, 15b, &amp; 16b

Description: Dehydrator Reboiler (20 mmscf)

Note: The data on this worksheet applies to each individual emissions unit identified above.

### Fuel Consumption

|                 |                         |                              |
|-----------------|-------------------------|------------------------------|
| 1,648 scf/hr    | Hourly fuel consumption | Mfg. data (Enertek)          |
| 900 Btu/scf     | Field gas heating value | Nominal heat content         |
| 1.483 MMBtu/hr  | Capacity                | scf/hr x Btu/scf / 1,000,000 |
| 8,760 hr/yr     | Annual operating time   |                              |
| 12,993 MMBtu/yr | Annual fuel consumption | MMBtu/hr x hr/yr             |
| 14.44 MMscf/yr  | Annual fuel consumption | scf/hr x hr/yr / 1,000,000   |

### Steady-State Emission Rates

| Pollutants | Emission Factors,<br>lb/day | Uncontrolled Emission Rates, |          |
|------------|-----------------------------|------------------------------|----------|
|            |                             | pph                          | tpy      |
| NOX        | 1.03                        | 4.29E-02                     | 1.88E-01 |
| CO         | 1.07                        | 4.46E-02                     | 1.95E-01 |
| VOC        | 0.16                        | 6.67E-03                     | 2.92E-02 |
| SO2        | 0.02                        | 8.33E-04                     | 3.65E-03 |

NOX emission factor taken from August 1994 Enertek Letter

CO, TOC and SO2 emission factors taken from July 1998 InFab Letter

50% of TOC emissions are assumed to be VOC emissions, consistent with AP-42, Table 1.4-2

Uncontrolled Emission Rates (pph) = lb/day / 24 hr/day

Uncontrolled Emission Rates (tpy) = Uncontrolled Emission Rates (pph) x hr/yr / 2,000 lb/ton

| Pollutants | Emission Factors<br>lb/MMscf | Uncontrolled Emission Rates |          |
|------------|------------------------------|-----------------------------|----------|
|            |                              | pph                         | tpy      |
| TSP        | 7.6                          | 1.25E-02                    | 5.49E-02 |
| PM10       | 7.6                          | 1.25E-02                    | 5.49E-02 |
| PM2.5      | 7.6                          | 1.25E-02                    | 5.49E-02 |

Emission factors taken from AP-42, Tables 1.4-1 &amp; 1.4-2, 07/98

Uncontrolled Emission Rates (pph) = lb/MMscf x (scf/hr / 1,000,000)

Uncontrolled Emission Rates (tpy) = Uncontrolled Emission Rates (pph) x hr/yr / 2,000 lb/ton

### Exhaust Parameters

|                      |                     |                                    |
|----------------------|---------------------|------------------------------------|
| 600.00 °F            | Exhaust temperature | Engineering Judgement              |
| 287.46 cfm           | Stack flowrate      | fps x ft <sup>2</sup> x 60 sec/min |
| 1.00 ft              | Stack diameter      | Mfg. data (InFab)                  |
| 0.79 ft <sup>2</sup> | Stack exit area     | 3.1416 x ((ft / 2) ^2)             |
| 6.10 fps             | Stack velocity      | Mfg. data (Dickson & Tryer)        |
| 19.00 ft             | Stack height        | Mfg. data (Dickson & Tryer)        |

## Dehydrator Reboiler Exhaust Emissions Calculations

Unit Number: **13b, & 14b**  
 Description: Dehydrator Reboiler (12 mmscf)

Note: The data on this worksheet applies to each individual emissions unit identified above.

### Fuel Consumption

|                     |                         |                              |
|---------------------|-------------------------|------------------------------|
| <b>1,208</b> scf/hr | Hourly fuel consumption | Mfg. data (Enertek)          |
| <b>900</b> Btu/scf  | Field gas heating value | Nominal heat content         |
| 1.087 MMBtu/hr      | Capacity                | scf/hr x Btu/scf / 1,000,000 |
| <b>8,760</b> hr/yr  | Annual operating time   |                              |
| 9,524 MMBtu/yr      | Annual fuel consumption | MMBtu/hr x hr/yr             |
| 10.58 MMscf/yr      | Annual fuel consumption | scf/hr x hr/yr / 1,000,000   |

### Steady-State Emission Rates

| Pollutants | Emission Factors, lb/day | Uncontrolled Emission Rates, |          |
|------------|--------------------------|------------------------------|----------|
|            |                          | pph                          | tpy      |
| NOX        | <b>1.03</b>              | 4.29E-02                     | 1.88E-01 |
| CO         | <b>0.78</b>              | 3.25E-02                     | 1.42E-01 |
| VOC        | <b>0.115</b>             | 4.79E-03                     | 2.10E-02 |
| SO2        | <b>0.02</b>              | 8.33E-04                     | 3.65E-03 |

NOX emission factor taken from August 1994 Enertek Letter

CO, TOC and SO2 emission factors taken from July 1998 InFab Letter

50% of TOC emissions are assumed to be VOC emissions, consistent with AP-42, Table 1.4-2

Uncontrolled Emission Rates (pph) = lb/day / 24 hr/day

Uncontrolled Emission Rates (tpy) = Uncontrolled Emission Rates (pph) x hr/yr / 2,000 lb/ton

| Pollutants | Emission Factors lb/MMscf | Uncontrolled Emission Rates |          |
|------------|---------------------------|-----------------------------|----------|
|            |                           | pph                         | tpy      |
| TSP        | <b>7.6</b>                | 9.18E-03                    | 4.02E-02 |
| PM10       | <b>7.6</b>                | 9.18E-03                    | 4.02E-02 |
| PM2.5      | <b>7.6</b>                | 9.18E-03                    | 4.02E-02 |

Emission factors taken from AP-42, Tables 1.4-1 & 1.4-2, 07/98

Uncontrolled Emission Rates (pph) = lb/MMscf x (scf/hr / 1,000,000)

Uncontrolled Emission Rates (tpy) = Uncontrolled Emission Rates (pph) x hr/yr / 2,000 lb/ton

### Exhaust Parameters

|                      |                     |                                    |
|----------------------|---------------------|------------------------------------|
| <b>600.00</b> °F     | Exhaust temperature | Engineering Judgement              |
| 199.6 cfm            | Stack flowrate      | fps x ft <sup>2</sup> x 60 sec/min |
| <b>0.83</b> ft       | Stack diameter      | Mfg. data (InFab)                  |
| 0.55 ft <sup>2</sup> | Stack exit area     | 3.1416 x ((ft / 2) ^2)             |
| <b>6.10</b> fps      | Stack velocity      | Mfg. data (Dickson & Tryer)        |
| <b>19.00</b> ft      | Stack height        | Mfg. data (Dickson & Tryer)        |

## Dehydrator Reboiler Exhaust Emissions Calculations

Unit Number: 20b, 20c, 22b, 22c

Description: Dehydrator Reboilers (200 mmscfd)

Note: The data on this worksheet applies to each individual emissions unit identified above.

### Fuel Consumption

2,555 scf/hr  
 900 Btu/scf  
 2.30 MMBtu/hr  
 8,760 hr/yr  
 20,144 MMBtu/yr  
 22.38 MMscf/yr

Hourly fuel consumption  
 Field gas heating value  
 Capacity  
 Annual operating time  
 Annual fuel consumption  
 Annual fuel consumption

Mfg. data (Enertek)  
 Nominal heat content  
 scf/hr x Btu/scf / 1,000,000  
  
 MMBtu/hr x hr/yr  
 scf/hr x hr/yr / 1,000,000

### Steady-State Emission Rates

| Pollutants | Emission Factors, lb/MMscf | Uncontrolled Emission Rates, |          |
|------------|----------------------------|------------------------------|----------|
|            |                            | pph                          | tpy      |
| NOX        | 100                        | 2.56E-01                     | 1.12     |
| CO         | 84                         | 2.15E-01                     | 0.94     |
| VOC        | 5.5                        | 1.41E-02                     | 6.15E-02 |
| SO2        | 0.6                        | 1.53E-03                     | 6.71E-03 |
| TSP        | 7.6                        | 1.94E-02                     | 8.51E-02 |
| PM10       | 7.6                        | 1.94E-02                     | 8.51E-02 |
| PM2.5      | 7.6                        | 1.94E-02                     | 8.51E-02 |

Emission factors taken from AP-42, Tables 1.4-1 &amp; 1.4-2, 07/98

Uncontrolled Emission Rates (pph) = lb/MMscf x (scf/hr / 1,000,000)

Uncontrolled Emission Rates (tpy) = Uncontrolled Emission Rates (pph) x hr/yr / 2,000 lb/ton

### Exhaust Parameters

600.00 °F  
 1,123.9 cfm  
 1.50 ft  
 1.77 ft^2  
 10.60 fps  
 25.00 ft

Exhaust temperature  
 Stack flowrate  
 Stack diameter  
 Stack exit area  
 Stack velocity  
 Stack height

Engineering Judgement  
 fps x ft^2 x 60 sec/min  
 Mfg. data (InFab)  
 3.1416 x ((ft / 2) ^2)  
 Mfg. data (Dickson & Tryer)  
 Mfg. data (Dickson & Tryer)

## Dehydrator Reboiler Exhaust Emissions Calculations

Unit Number: **21b, 21c**

Description: Dehydrator Reboiler (200 mmscfd)

Note: The data on this worksheet applies to each individual emissions unit identified above.

### Fuel Consumption

**4,355** scf/hr**900** Btu/scf

3.92 MMBtu/hr

**8,760** hr/yr

34,335 MMBtu/yr

38.15 MMscf/yr

Hourly fuel consumption

Field gas heating value

Capacity

Annual operating time

Annual fuel consumption

Annual fuel consumption

Mfg. data (Enertek)

Nominal heat content

scf/hr x Btu/scf / 1,000,000

MMBtu/hr x hr/yr

scf/hr x hr/yr / 1,000,000

### Steady-State Emission Rates

| Pollutants | Emission Factors, lb/MMscf | Uncontrolled Emission Rates, |          |
|------------|----------------------------|------------------------------|----------|
|            |                            | pph                          | tpy      |
| NOX        | <b>100</b>                 | 4.36E-01                     | 1.91     |
| CO         | <b>84</b>                  | 3.66E-01                     | 1.60     |
| VOC        | <b>5.5</b>                 | 2.40E-02                     | 1.05E-01 |
| SO2        | <b>0.6</b>                 | 2.61E-03                     | 1.14E-02 |
| TSP        | <b>7.6</b>                 | 3.31E-02                     | 1.45E-01 |
| PM10       | <b>7.6</b>                 | 3.31E-02                     | 1.45E-01 |
| PM2.5      | <b>7.6</b>                 | 3.31E-02                     | 1.45E-01 |

Emission factors taken from AP-42, Tables 1.4-1 &amp; 1.4-2, 07/98

Uncontrolled Emission Rates (pph) = lb/MMscf x (scf/hr / 1,000,000)

Uncontrolled Emission Rates (tpy) = Uncontrolled Emission Rates (pph) x hr/yr / 2,000 lb/ton

### Exhaust Parameters

**600.00** °F

1,346.6 cfm

**1.50** ft

1.77 ft^2

**12.70** fps**25.00** ft

Exhaust temperature

Stack flowrate

Stack diameter

Stack exit area

Stack velocity

Stack height

Engineering Judgement

fps x ft^2 x 60 sec/min

Mfg. data (InFab)

3.1416 x ((ft / 2) ^2)

Mfg. data (Dickson &amp; Tryer)

Mfg. data (Dickson &amp; Tryer)

## Dehy Vent Emissions Calculations

Unit Number: 10a, 11a, 12a, 131, 14a, 15a, 16a, 20a, 21a, 22a

Description: Dehy Still Vents

### Operating Time

8760 hr/yr

20 MMSCFD

12 MMSCFD

200 MMSCFD

Dehys 10a, 11a, 12a, 15a, 16a throughputs

Dehys 13a and 14a throughputs

Dehys 20, 21a, and 22a throughputs

### Uncontrolled Emission Rates

| Pollutants             | Uncontrolled Emission Rates                                        |        |                                                  |        |                                                  |         |
|------------------------|--------------------------------------------------------------------|--------|--------------------------------------------------|--------|--------------------------------------------------|---------|
|                        | 10a, 11a, 12a, 15a, 16a<br>Regenerator Vent/Flash Gas<br>Emissions |        | 13a, 14a Regenerator<br>Vent/Flash Gas Emissions |        | 20a, 21a Regenerator/Flash<br>Gas Vent Emissions |         |
|                        | pph                                                                | tpy    | pph                                              | tpy    | pph                                              | tpy     |
| Methane                | 2.0745                                                             | 9.0863 | 1.0319                                           | 4.5199 | 5.6386                                           | 24.6972 |
| Ethane                 | 0.0204                                                             | 0.0893 | 0.0152                                           | 0.0668 | 0.2709                                           | 1.1863  |
| Propane                | 0.0102                                                             | 0.0447 | 0.0127                                           | 0.0555 | 0.3187                                           | 1.3958  |
| Isobutane              | 0.0009                                                             | 0.0038 | 0.0015                                           | 0.0067 | 0.0000                                           | 0.0000  |
| n-Butane               | 0.0013                                                             | 0.0055 | 0.0028                                           | 0.0122 | 0.0000                                           | 0.0000  |
| Isopentane             | 0.0007                                                             | 0.0030 | 0.0017                                           | 0.0077 | 0.0226                                           | 0.0991  |
| n-Pentane              | 0.0007                                                             | 0.0029 | 0.0020                                           | 0.0088 | 0.0318                                           | 0.1391  |
| Cyclopentane           | 0.0001                                                             | 0.0003 | 0.0004                                           | 0.0017 | 0.0000                                           | 0.0000  |
| n-Hexane               | 0.0000                                                             | 0.0002 | 0.0002                                           | 0.0008 | 0.0000                                           | 0.0000  |
| Cyclohexane            | 0.0003                                                             | 0.0013 | 0.0019                                           | 0.0083 | 0.0000                                           | 0.0000  |
| Other Hexanes          | 0.0000                                                             | 0.0000 | 0.0000                                           | 0.0000 | 0.0000                                           | 0.0000  |
| Heptanes               | 0.0002                                                             | 0.0010 | 0.0014                                           | 0.0061 | 0.0000                                           | 0.0000  |
| Methylcycloheane       | 0.0000                                                             | 0.0000 | 0.0000                                           | 0.0000 | 0.0000                                           | 0.0000  |
| 2,2,4-Trimethylpentane | 0.0000                                                             | 0.0000 | 0.0000                                           | 0.0000 | 0.0000                                           | 0.0000  |
| Benzene                | 0.0000                                                             | 0.0000 | 0.0000                                           | 0.0000 | 0.0000                                           | 0.0000  |
| Toluene                | 0.0000                                                             | 0.0000 | 0.0000                                           | 0.0000 | 0.0000                                           | 0.0000  |
| Ethylbenzene           | 0.0000                                                             | 0.0000 | 0.0000                                           | 0.0000 | 0.0000                                           | 0.0000  |
| Xylenes                | 0.0000                                                             | 0.0000 | 0.0000                                           | 0.0000 | 0.0000                                           | 0.0000  |
| C8+ Heavies            | 0.0000                                                             | 0.0000 | 0.0000                                           | 0.0000 | 0.0000                                           | 0.0000  |
| VOC                    | 0.0144                                                             | 0.0627 | 0.0246                                           | 0.1078 | 0.3731                                           | 1.6340  |
| HAP                    | 0.0000                                                             | 0.0002 | 0.0002                                           | 0.0008 | 0.0000                                           | 0.0000  |

Emission rates obtained from GLY-Calc report

## Dehy Vent Emissions Calculations

Unit Number: 10a, 11a, 12a, 131, 14a, 15a, 16a, 20a, 21a, 22a

Description: Dehy Still Vents

| Pollutants             | Uncontrolled Emission Rates              |         |         |         |
|------------------------|------------------------------------------|---------|---------|---------|
|                        | 22a Regenerator Vent/Flash Gas Emissions |         | Total   |         |
|                        | pph                                      | tpy     | pph     | tpy     |
| Methane                | 5.6386                                   | 24.6972 | 14.3836 | 63.0006 |
| Ethane                 | 0.2709                                   | 1.1863  | 0.5774  | 2.5287  |
| Propane                | 0.3187                                   | 1.3958  | 0.6603  | 2.8918  |
| Isobutane              | 0.0000                                   | 0.0000  | 0.0024  | 0.0105  |
| n-Butane               | 0.0000                                   | 0.0000  | 0.0041  | 0.0177  |
| Isopentane             | 0.0226                                   | 0.0991  | 0.0476  | 0.2089  |
| n-Pentane              | 0.0318                                   | 0.1391  | 0.0663  | 0.2899  |
| Cyclopentane           | 0.0000                                   | 0.0000  | 0.0005  | 0.0020  |
| n-Hexane               | 0.0000                                   | 0.0000  | 0.0002  | 0.0010  |
| Cyclohexane            | 0.0000                                   | 0.0000  | 0.0022  | 0.0096  |
| Other Hexanes          | 0.0000                                   | 0.0000  | 0.0000  | 0.0000  |
| Heptanes               | 0.0000                                   | 0.0000  | 0.0016  | 0.0071  |
| Methylcycloheane       | 0.0000                                   | 0.0000  | 0.0000  | 0.0000  |
| 2,2,4-Trimethylpentane | 0.0000                                   | 0.0000  | 0.0000  | 0.0000  |
| Benzene                | 0.0000                                   | 0.0000  | 0.0000  | 0.0000  |
| Toluene                | 0.0000                                   | 0.0000  | 0.0000  | 0.0000  |
| Ethylbenzene           | 0.0000                                   | 0.0000  | 0.0000  | 0.0000  |
| Xylenes                | 0.0000                                   | 0.0000  | 0.0000  | 0.0000  |
| C8+ Heavies            | 0.0000                                   | 0.0000  | 0.0000  | 0.0000  |
| VOC                    | 0.3731                                   | 1.6340  | 0.7852  | 3.4385  |
| HAP                    | 0.0000                                   | 0.0000  | 0.0002  | 0.0010  |

Emission rates obtained from GLY-Calc report

## SSM Blowdown Emissions Calculations

Unit Number: **SSM**  
 Description: Compressors & Associated Piping Blowdown

### Throughput

|                           |                             |                                         |
|---------------------------|-----------------------------|-----------------------------------------|
| <b>12</b> # of units      | Number of units             |                                         |
| <b>200</b> events/yr/unit | Blowdowns per year per unit |                                         |
| <b>6,442</b> scf/event    | Gas loss per blowdown       |                                         |
| 15,460,800 scf/yr         | Annual gas loss             | # of units x events/yr/unit x scf/event |

### Emission Rates

| Pollutants             | Emission Factors<br>lb/scf | Uncontrolled Emission Rate<br>tpy |
|------------------------|----------------------------|-----------------------------------|
| VOC                    | 1.697E-04                  | 1.31                              |
| 2,2,4-Trimethylpentane | 0.000E+00                  | 0.00E+00                          |
| Benzene                | 8.582E-08                  | 6.63E-04                          |
| Ethylbenzene           | 0.000E+00                  | 0.00E+00                          |
| n-Hexane               | 1.788E-07                  | 1.38E-03                          |
| Toluene                | 0.000E+00                  | 0.00E+00                          |
| Xylene                 | 0.000E+00                  | 0.00E+00                          |

Emission factors calculated from gas compositions (see tables below)  
 Uncontrolled Emission Rates (tpy) = scf/yr x lb/scf / 2,000 lb/ton

### Gas Composition

| Components             | Mole Percents, % | Molecular Weights, lb/lb-mole | Emission Factors, lb/scf |
|------------------------|------------------|-------------------------------|--------------------------|
| Carbon dioxide         | 4.4513           | 44.01                         | 5.165E-03                |
| Hydrogen sulfide       | 0.0000           | 34.07                         | 0.000E+00                |
| Nitrogen               | 0.0949           | 28.01                         | 7.005E-05                |
| Methane                | 94.9234          | 16.04                         | 4.014E-02                |
| Ethane                 | 0.3946           | 30.07                         | 3.129E-04                |
| Propane                | 0.1130           | 44.09                         | 1.313E-04                |
| Isobutane              | 0.0062           | 58.12                         | 9.487E-06                |
| n-Butane               | 0.0078           | 58.12                         | 1.188E-05                |
| Isopentane             | 0.0034           | 72.15                         | 6.500E-06                |
| n-Pentane              | 0.0028           | 72.15                         | 5.258E-06                |
| Cyclopentane           | 0.0002           | 70.14                         | 2.997E-07                |
| n-Hexane               | 0.0001           | 86.17                         | 1.788E-07                |
| Cyclohexane            | 0.0002           | 84.16                         | 5.343E-07                |
| Other hexanes          | 0.0013           | 86.18                         | 3.062E-06                |
| Heptanes               | 0.0004           | 100.20                        | 1.138E-06                |
| Methylcyclohexane      | 0.0000           | 98.19                         | 0.000E+00                |
| 2,2,4-Trimethylpentane | 0.0000           | 100.21                        | 0.000E+00                |
| Benzene                | 0.0000           | 78.11                         | 8.582E-08                |
| Toluene                | 0.0000           | 92.14                         | 0.000E+00                |
| Ethylbenzene           | 0.0000           | 106.17                        | 0.000E+00                |
| Xylenes                | 0.0000           | 106.17                        | 0.000E+00                |
| C8+ Heavies            | 0.0000           | 110.00                        | 0.000E+00                |
| Total                  | 100.000          |                               |                          |
| Total VOC              |                  |                               | 1.697E-04                |

Gas stream composition obtained from the 32-8 #2 CDP ProMax process stream.

Emission Factors (lb/scf) = (% / 100) x lb/lb-mole / 379.4 scf/lb-mole

# 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)

CO<sub>2</sub>, CH<sub>4</sub>, and N<sub>2</sub>O exhaust emissions were calculated using emission factors from 40 Code of Federal Regulations (CFR), Part C, Tables C-1 & C-2 and the combustion source higher heating value (HHV) design heat rates.

The SSM and malfunction CO<sub>2</sub> and CH<sub>4</sub> emissions from blowdown events were calculated from the annual blowdown volumes and gas composition.

The reciprocating compressor CO<sub>2</sub> and CH<sub>4</sub> emissions were calculated using a combination of equations W-26 & W-36 (from Subpart W).

Dehydrator CO<sub>2</sub> and CH<sub>4</sub> emissions were calculated using GRI-GLYCalc. CO<sub>2</sub> and CH<sub>4</sub> equipment leaks emissions were calculated using the TOC emission factors and gas stream composition.

## Green House Gas Emissions Data and Calculations

| Sources                          | Facility Total Emissions |                          |                          |                   |                           |
|----------------------------------|--------------------------|--------------------------|--------------------------|-------------------|---------------------------|
|                                  | CO <sub>2</sub> ,<br>tpy | CH <sub>4</sub> ,<br>tpy | N <sub>2</sub> O,<br>tpy | GHG,<br>tpy       | CO <sub>2</sub> e,<br>tpy |
| Engine & Turbine Exhaust         | 85,418.87                | 1.61E+00                 | 1.61E-01                 | 85,420.65         | 85,507.09                 |
| SSM Blowdowns                    | 39.93                    | 310.31                   | --                       | 350.24            | 7,797.69                  |
| Reciprocating Compressor Venting | 95.15                    | 740.62                   | --                       | 835.77            | 18,610.65                 |
| Dehydrators                      | 569.42                   | 71.50                    | --                       | 640.92            | 2,357.01                  |
| Reboiler Exhaust                 | 15,126.91                | 2.85E-01                 | 2.85E-02                 | 15,127.23         | 15,142.54                 |
| <b>Total</b>                     | <b>101,250.28</b>        | <b>1,124.33</b>          | <b>1.89E-01</b>          | <b>102,374.79</b> | <b>129,414.97</b>         |

### Engine & Turbine Exhaust Emissions

| Unit Numbers | Description       | Emission Factors              |                               |                               | Emission Rates           |                          |                          |
|--------------|-------------------|-------------------------------|-------------------------------|-------------------------------|--------------------------|--------------------------|--------------------------|
|              |                   | CO <sub>2</sub> ,<br>kg/MMBtu | CH <sub>4</sub> ,<br>kg/MMBtu | N <sub>2</sub> O,<br>kg/MMBtu | CO <sub>2</sub> ,<br>tpy | CH <sub>4</sub> ,<br>tpy | N <sub>2</sub> O,<br>tpy |
| 1            | 7042GL engine     | 53.06                         | 1.00E-03                      | 1.00E-04                      | 6,010.45                 | 0.11                     | 0.01                     |
| 2            | 7042GL engine     | 53.06                         | 1.00E-03                      | 1.00E-04                      | 6,010.45                 | 0.11                     | 0.01                     |
| 3            | 7044GSI S5 engine | 53.06                         | 1.00E-03                      | 1.00E-04                      | 6,885.32                 | 0.13                     | 0.01                     |
| 4            | 7044GSI S4 engine | 53.06                         | 1.00E-03                      | 1.00E-04                      | 7,453.42                 | 0.14                     | 0.01                     |
| 5            | 7044GSI S4 engine | 53.06                         | 1.00E-03                      | 1.00E-04                      | 7,453.42                 | 0.14                     | 0.01                     |
| 6            | 7044GSI S5 engine | 53.06                         | 1.00E-03                      | 1.00E-04                      | 6,885.32                 | 0.13                     | 0.01                     |
| 7            | 7044GSI S4 engine | 53.06                         | 1.00E-03                      | 1.00E-04                      | 7,453.42                 | 0.14                     | 0.01                     |
| 8            | 7044GSI S4 engine | 53.06                         | 1.00E-03                      | 1.00E-04                      | 7,453.42                 | 0.14                     | 0.01                     |
| 9            | 7044GSI S4 engine | 53.06                         | 1.00E-03                      | 1.00E-04                      | 7,453.42                 | 0.14                     | 0.01                     |
| 17           | 7044GSI S4 engine | 53.06                         | 1.00E-03                      | 1.00E-04                      | 7,453.42                 | 0.14                     | 0.01                     |
| 18           | 7044GSI S4 engine | 53.06                         | 1.00E-03                      | 1.00E-04                      | 7,453.42                 | 0.14                     | 0.01                     |
| 19           | 7044GSI S4 engine | 53.06                         | 1.00E-03                      | 1.00E-04                      | 7,453.42                 | 0.14                     | 0.01                     |
|              | <b>Total</b>      |                               |                               |                               | <b>85,418.87</b>         | <b>1.61</b>              | <b>0.16</b>              |

The emissions factors are taken from 40 CFR 98, Subpart C, Tables C-1 & C-2

Emission Rates (tpy) = kg/MMBtu x 2.2 lb/kg x MMBtu/yr / 2,000 lb/ton

| Unit Numbers | Description       | Fuel Types | Operating Times, hr/yr | LHV Design Heat Rates, MMBtu/hr | HHV                         |                       |
|--------------|-------------------|------------|------------------------|---------------------------------|-----------------------------|-----------------------|
|              |                   |            |                        |                                 | Design Heat Rates, MMBtu/hr | Fuel Usages, MMBtu/yr |
| 1            | 7042GL engine     | Nat. Gas   | 8,760                  | 10.58                           | 11.76                       | 102,978.67            |
| 2            | 7042GL engine     | Nat. Gas   | 8,760                  | 10.58                           | 11.76                       | 102,978.67            |
| 3            | 7044GSI S5 engine | Nat. Gas   | 8,760                  | 12.12                           | 13.47                       | 117,968.00            |
| 4            | 7044GSI S4 engine | Nat. Gas   | 8,760                  | 13.12                           | 14.58                       | 127,701.33            |
| 5            | 7044GSI S4 engine | Nat. Gas   | 8,760                  | 13.12                           | 14.58                       | 127,701.33            |
| 6            | 7044GSI S5 engine | Nat. Gas   | 8,760                  | 12.12                           | 13.47                       | 117,968.00            |
| 7            | 7044GSI S4 engine | Nat. Gas   | 8,760                  | 13.12                           | 14.58                       | 127,701.33            |
| 8            | 7044GSI S4 engine | Nat. Gas   | 8,760                  | 13.12                           | 14.58                       | 127,701.33            |
| 9            | 7044GSI S4 engine | Nat. Gas   | 8,760                  | 13.12                           | 14.58                       | 127,701.33            |
| 17           | 7044GSI S4 engine | Nat. Gas   | 8,760                  | 13.12                           | 14.58                       | 127,701.33            |
| 18           | 7044GSI S4 engine | Nat. Gas   | 8,760                  | 13.12                           | 14.58                       | 127,701.33            |
| 19           | 7044GSI S4 engine | Nat. Gas   | 8,760                  | 13.12                           | 14.58                       | 127,701.33            |

The fuel type and operating time are provided Harvest Midstream.

HHV Design Heat Rates (MMBtu/hr) = LHV Design Heat Rate (MMBtu/hr) / 0.9 LHV/HHV

HHV Fuel Usages (MMBtu/yr) = HHV Design Heat Rates (MMBtu/hr) x hr/yr

### SSM Emissions

| Unit Numbers | Description | Total Gas Losses, scf/yr | CO <sub>2</sub> Emission Factors, lb/scf | CH <sub>4</sub> Emission Factors, lb/scf | Emission Rates        |                       |
|--------------|-------------|--------------------------|------------------------------------------|------------------------------------------|-----------------------|-----------------------|
|              |             |                          |                                          |                                          | CO <sub>2</sub> , tpy | CH <sub>4</sub> , tpy |
| SSM          | SSM         | 15,460,800               | 0.0052                                   | 0.0401                                   | 39.93                 | 310.31                |

The annual blowdown volume is calculated from data provided by Harvest Midstream.

The CO<sub>2</sub> and CH<sub>4</sub> emission factors are calculated from the facility extended gas analysis

Emission Rates (tpy) = scf/yr x lb/scf / 2,000 lb/ton

## Green House Gas Emissions Data and Calculations

### Reciprocating Compressor Venting Emissions

| Unit Numbers | Description             | Emission Rates |          |
|--------------|-------------------------|----------------|----------|
|              |                         | CO2, tpy       | CH4, tpy |
| NA           | Blowdown Valve Leakage  | 9.09           | 70.75    |
| NA           | Rod Packing Emissions   | 86.06          | 669.87   |
| NA           | Isolation Valve Leakage | 0.00           | 0.00     |
| Total        |                         | 95.15          | 740.62   |

Operating or standby mode - includes blowdown valve leakage through blowdown vent stack

Operating mode - includes rod packing emissions

Non-operating depressurized mode - includes isolation valve leakage through open blowdown vents (without blind flanges)

Rod packing gas emissions assume 4 cylinders per compressor

A combination of equations W-26 & W-36 (Subpart W) is used to calculate reciprocating compressor emissions

As the NMED requires CO2 & CH4 emissions rather than CO2e emissions, it is not necessary to include the global warming potential from equation W-36

CO2 Emission Rates (tpy) = # x scf/hr x hr/yr x (CO2 Mole Percent (%) / 100) x CO2 Density (kg/scf)  
x (2,204.6 lb/tonne / 2,000 lb/ton) / 1,000 kg/tonne

CH4 Emission Rates (tpy) = # x scf/hr x hr/yr x (CH4 Mole Percent (%) / 100) x CH4 Density (kg/scf)  
x (2,204.6 lb/tonne / 2,000 lb/ton) / 1,000 kg/tonne

| Unit Numbers | Description             | Number of Compressors # | Gas Emissions, scf/hr | Operating Times, hr/yr | CO2 Mole Percents, % | CH4 Mole Percents, % | CO2 Density, kg/scf | CH4 Density, kg/scf |
|--------------|-------------------------|-------------------------|-----------------------|------------------------|----------------------|----------------------|---------------------|---------------------|
| NA           | Blowdown Valve Leakage  | 12                      | 33.5                  | 8,760                  | 4.45                 | 94.92                | 0.0526              | 0.0192              |
| NA           | Rod Packing Emissions   | 12                      | 317.2                 | 8,760                  | 4.45                 | 94.92                | 0.0526              | 0.0192              |
| NA           | Isolation Valve Leakage | 12                      | 10.5                  | 0                      | 4.45                 | 94.92                | 0.0526              | 0.0192              |

The number of compressors is provided by Harvest

Blowdown valve leakage (33.5 scf/hr) and rod packing emissions occur in operating mode

Blowdown valve leakage (10.5 scf/hr) occurs in standby pressurized mode

Emission factors are the three year rolling average (2012-2014) of all measurements in the **Williams Field Services, LLC** compressor fleet located at natural gas processing plants

The operating times (the average operating times for all station compressors combined) are provided by Harvest

The facility CO2 and CH4 contents are taken from the facility extended gas analysis

The CO2 & CH4 densities (kg/scf) are taken from Subpart W, Paragraph 98.233(v)

### Dehydrator Emissions

| Unit Numbers | Description             | Emission Rates |          |
|--------------|-------------------------|----------------|----------|
|              |                         | CO2, tpy       | CH4, tpy |
| 10a          | Dehydrator (20 MMSCFD)  | 9.99           | 1.88     |
| 11a          | Dehydrator (20 MMSCFD)  | 9.99           | 1.88     |
| 12a          | Dehydrator (20 MMSCFD)  | 9.99           | 1.88     |
| 13a          | Dehydrator (12 MMSCFD)  | 4.17           | 0.77     |
| 14a          | Dehydrator (12 MMSCFD)  | 4.17           | 0.77     |
| 15a          | Dehydrator (20 MMSCFD)  | 9.99           | 1.88     |
| 16a          | Dehydrator (20 MMSCFD)  | 9.99           | 1.88     |
| 20a          | Dehydrator (200 MMSCFD) | 170.38         | 20.19    |
| 21a          | Dehydrator (200 MMSCFD) | 170.38         | 20.19    |
| 22a          | Dehydrator (200 MMSCFD) | 170.38         | 20.19    |
| Total        |                         | 569.42         | 71.50    |

The emission rates are taken from the GRI-GLYCalc output file

## Green House Gas Emissions Data and Calculations

### Reboiler Exhaust Emissions

| Unit Numbers | Description           | Emission Factors              |                               |                               | Emission Rates           |                          |                          |
|--------------|-----------------------|-------------------------------|-------------------------------|-------------------------------|--------------------------|--------------------------|--------------------------|
|              |                       | CO <sub>2</sub> ,<br>kg/MMBtu | CH <sub>4</sub> ,<br>kg/MMBtu | N <sub>2</sub> O,<br>kg/MMBtu | CO <sub>2</sub> ,<br>tpy | CH <sub>4</sub> ,<br>tpy | N <sub>2</sub> O,<br>tpy |
| 10b          | Reboiler (20 MMSCFD)  | 53.06                         | 1.00E-03                      | 1.00E-04                      | 842.60                   | 1.59E-02                 | 1.59E-03                 |
| 11b          | Reboiler (20 MMSCFD)  | 53.06                         | 1.00E-03                      | 1.00E-04                      | 842.60                   | 1.59E-02                 | 1.59E-03                 |
| 12b          | Reboiler (20 MMSCFD)  | 53.06                         | 1.00E-03                      | 1.00E-04                      | 842.60                   | 1.59E-02                 | 1.59E-03                 |
| 13b          | Reboiler (12 MMSCFD)  | 53.06                         | 1.00E-03                      | 1.00E-04                      | 617.63                   | 1.16E-02                 | 1.16E-03                 |
| 14b          | Reboiler (12 MMSCFD)  | 53.06                         | 1.00E-03                      | 1.00E-04                      | 617.63                   | 1.16E-02                 | 1.16E-03                 |
| 15b          | Reboiler (20 MMSCFD)  | 53.06                         | 1.00E-03                      | 1.00E-04                      | 842.60                   | 1.59E-02                 | 1.59E-03                 |
| 16b          | Reboiler (20 MMSCFD)  | 53.06                         | 1.00E-03                      | 1.00E-04                      | 842.60                   | 1.59E-02                 | 1.59E-03                 |
| 20b          | Reboiler (200 MMSCFD) | 53.06                         | 1.00E-03                      | 1.00E-04                      | 1306.34                  | 2.46E-02                 | 2.46E-03                 |
| 20c          | Reboiler (200 MMSCFD) | 53.06                         | 1.00E-03                      | 1.00E-04                      | 1306.34                  | 2.46E-02                 | 2.46E-03                 |
| 21b          | Reboiler (200 MMSCFD) | 53.06                         | 1.00E-03                      | 1.00E-04                      | 2226.65                  | 4.20E-02                 | 4.20E-03                 |
| 21c          | Reboiler (200 MMSCFD) | 53.06                         | 1.00E-03                      | 1.00E-04                      | 2226.65                  | 4.20E-02                 | 4.20E-03                 |
| 22b          | Reboiler (200 MMSCFD) | 53.06                         | 1.00E-03                      | 1.00E-04                      | 1306.34                  | 2.46E-02                 | 2.46E-03                 |
| 22c          | Reboiler (200 MMSCFD) | 53.06                         | 1.00E-03                      | 1.00E-04                      | 1306.34                  | 2.46E-02                 | 2.46E-03                 |
| Total        |                       |                               |                               |                               | 15126.91                 | 2.85E-01                 | 2.85E-02                 |

The emissions factors are taken from 40 CFR 98, Subpart C, Tables C-1 & C-2

Emission Rates (tpy) = kg/MMBtu x 2.2 lb/kg x MMBtu/yr / 2,000 lb/ton

| Unit Numbers | Description           | Fuel Types | Operating Times<br>hr/yr | LHV                    |                                |                          | HHV                      |                          |
|--------------|-----------------------|------------|--------------------------|------------------------|--------------------------------|--------------------------|--------------------------|--------------------------|
|              |                       |            |                          | Fuel Usages,<br>scf/hr | Fuel Heat Contents,<br>Btu/scf | Fuel Usages,<br>MMBtu/hr | Fuel Usages,<br>MMBtu/hr | Fuel Usages,<br>MMBtu/yr |
| 10b          | Reboiler (20 MMSCFD)  | Nat. Gas   | 8,760                    | 1648                   | 900                            | 1.48                     | 1.65                     | 14,436                   |
| 11b          | Reboiler (20 MMSCFD)  | Nat. Gas   | 8,760                    | 1648                   | 900                            | 1.48                     | 1.65                     | 14,436                   |
| 12b          | Reboiler (20 MMSCFD)  | Nat. Gas   | 8,760                    | 1648                   | 900                            | 1.48                     | 1.65                     | 14,436                   |
| 13b          | Reboiler (12 MMSCFD)  | Nat. Gas   | 8,760                    | 1208                   | 900                            | 1.09                     | 1.21                     | 10,582                   |
| 14b          | Reboiler (12 MMSCFD)  | Nat. Gas   | 8,760                    | 1208                   | 900                            | 1.09                     | 1.21                     | 10,582                   |
| 15b          | Reboiler (20 MMSCFD)  | Nat. Gas   | 8,760                    | 1648                   | 900                            | 1.48                     | 1.65                     | 14,436                   |
| 16b          | Reboiler (20 MMSCFD)  | Nat. Gas   | 8,760                    | 1648                   | 900                            | 1.48                     | 1.65                     | 14,436                   |
| 20b          | Reboiler (200 MMSCFD) | Nat. Gas   | 8,760                    | 2555                   | 900                            | 2.30                     | 2.56                     | 22,382                   |
| 20c          | Reboiler (200 MMSCFD) | Nat. Gas   | 8,760                    | 2555                   | 900                            | 2.30                     | 2.56                     | 22,382                   |
| 21b          | Reboiler (200 MMSCFD) | Nat. Gas   | 8,760                    | 4355                   | 900                            | 3.92                     | 4.36                     | 38,150                   |
| 21c          | Reboiler (200 MMSCFD) | Nat. Gas   | 8,760                    | 4355                   | 900                            | 3.92                     | 4.36                     | 38,150                   |
| 22b          | Reboiler (200 MMSCFD) | Nat. Gas   | 8,760                    | 2555                   | 900                            | 2.30                     | 2.56                     | 22,382                   |
| 22c          | Reboiler (200 MMSCFD) | Nat. Gas   | 8,760                    | 2555                   | 900                            | 2.30                     | 2.56                     | 22,382                   |

The fuel types and operating times are provided by Harvest Midstream.

The LHV design heat rates are taken from manufacturers data

HHV Design Heat Rates (MMBtu/hr) = LHV Design Heat Rate (MMBtu/hr) / 0.9 LHV/HHV

HHV Fuel Usages (MMBtu/yr) = HHV Design Heat Rate (MMBtu/hr) x hr/yr

## Green House Gas Emissions Data and Calculations

### Gas Stream Composition

| Components             | Mole<br>Percents,<br>% | Molecular<br>Weights,<br>lb/lb-mole | Component<br>Weights,<br>lb/lb-mole | Weight<br>Percent<br>of Total,<br>% | Emission<br>Factors,<br>lb/scf |
|------------------------|------------------------|-------------------------------------|-------------------------------------|-------------------------------------|--------------------------------|
| Carbon Dioxide         | 4.4513                 | 44.01                               | 1.96                                | 11.2623                             | 0.0052                         |
| Hydrogen Sulfide       | 0.0000                 | 34.07                               | 0.00                                | 0.0000                              | 0.0000                         |
| Nitrogen               | 0.0949                 | 28.01                               | 0.03                                | 0.1527                              | 0.0001                         |
| Methane                | 94.9234                | 16.04                               | 15.23                               | 87.5326                             | 0.0401                         |
| Ethane                 | 0.3946                 | 30.07                               | 0.12                                | 0.6822                              | 0.0003                         |
| Propane                | 0.1130                 | 44.09                               | 0.05                                | 0.2863                              | 0.0001                         |
| IsoButane              | 0.0062                 | 58.12                               | 0.00                                | 0.0207                              | 0.0000                         |
| Normal Butane          | 0.0078                 | 58.12                               | 0.00                                | 0.0259                              | 0.0000                         |
| IsoPentane             | 0.0034                 | 72.15                               | 0.00                                | 0.0142                              | 0.0000                         |
| Normal Pentane         | 0.0028                 | 72.15                               | 0.00                                | 0.0115                              | 0.0000                         |
| Cyclopentane           | 0.0002                 | 70.14                               | 0.00                                | 0.0007                              | 0.0000                         |
| n-Hexane               | 0.0001                 | 86.17                               | 0.00                                | 0.0004                              | 0.0000                         |
| Cyclohexane            | 0.0002                 | 84.16                               | 0.00                                | 0.0012                              | 0.0000                         |
| Other Hexanes          | 0.0013                 | 86.18                               | 0.00                                | 0.0067                              | 0.0000                         |
| Heptanes               | 0.0004                 | 100.20                              | 0.00                                | 0.0025                              | 0.0000                         |
| Methylcyclohexane      | 0.0000                 | 98.19                               | 0.00                                | 0.0000                              | 0.0000                         |
| 2,2,4-Trimethylpentane | 0.0000                 | 100.21                              | 0.00                                | 0.0000                              | 0.0000                         |
| Benzene                | 0.0000                 | 78.11                               | 0.00                                | 0.0002                              | 0.0000                         |
| Toluene                | 0.0000                 | 92.14                               | 0.00                                | 0.0000                              | 0.0000                         |
| Ethylbenzene           | 0.0000                 | 106.17                              | 0.00                                | 0.0000                              | 0.0000                         |
| Xylenes                | 0.0000                 | 106.17                              | 0.00                                | 0.0000                              | 0.0000                         |
| C8+ heavies            | 0.0000                 | 110.00                              | 0.00                                | 0.0000                              | 0.0000                         |
| Total                  | 100.000                |                                     | 17.39                               | 100.0000                            | 0.0459                         |
| VOC                    |                        |                                     | 0.06                                | --                                  | 0.0002                         |

Gas stream composition obtained from the 32-8 #2 CDP ProMax process stream.

Component Weights (lb/lb-mole) = [Mole Percents (%) / 100] x Molecular Weights (lb/lb-mole)

Weight Percent of Total (%) = 100 x Component Weights (lb/lb-mole) / Total Component Weight (lb/lb-mole)

Emission Factors (lb/scf) = [Mole Percents (%) / 100] x Molecular Weights (lb/lb-mole) / 379.3 scf/lb-mole

# 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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Please see the following pages.

## STANDARD EQUIPMENT

**AIR CLEANER** – Two, 3" dry type filter with hinged rain shield and service indicator.

**AIR FUEL RATIO CONTROL (AFR)** – Integrated ESM® - AFR catalyst rich-burn control, main fuel gas regulator actuators, exhaust O<sub>2</sub> sensor(s), and post turbocharger exhaust thermocouple. Factory mounted and tested. AFR maintains emissions through load and speed changes. The ESM AFR meets Canadian Standards Association Class 1, Division 2, Group D hazardous location requirements. Note: For dual fuel applications, ESM AFR system will control the primary fuel source only.

**BARRING DEVICE** – Manual.

**BATTERY BOX** – Ship loose battery box designed to accommodate two Series 31 12 VDC batteries. Includes power disconnect switch and 20 foot (6.1 m) cable for connection to ESM® Power Distribution Box.

**BEARINGS** – Heavy duty, replaceable, precision type.

**BREATHING** – Self regulating, closed system.

**CONNECTING RODS** – Drop forged steel, rifle drilled.

**CONTROL SYSTEM** – Waukesha Engine System Manager (ESM®) integrates spark timing control, speed governing, detonation detection, start-stop control, diagnostic tools, fault logging and engine safeties. Engine Control Unit (ECU) is central brain of the control system and main customer interface. Interface with ESM is through 25 foot (7.6 m) harness to local panel, through MODBUS RTU slave connection RS-485 multidrop hardware, and through the Electronic Service Program (ESP). Customer connections are only required to the local panel, fuel valve, and 24V DC power supply. Compatible with Woodward load sharing module. ESM meets Canadian Standards Association Class I, Division 2, Group D, hazardous location requirements.

**CRANKCASE** – Integral crankcase and cylinder frame. Main bearing caps drilled and tapped for temperature sensors. Does not include sensors.

**CRANKSHAFT** – Counterweighted, forged steel, seven main bearings, and dynamically balanced.

**CYLINDERS** – Removable wet type bainitic cast iron cylinder liners, chrome plated on outer diameter.

**CYLINDER HEADS** – Twelve interchangeable. Two hard faced intake and two hard faced exhaust valves per cylinder. Hard faced intake and exhaust valve seat inserts. Roller valve lifters and hydraulic push rods.

**ELECTRONIC SERVICE PROGRAM (ESP)** – Microsoft® Windows-based program provided on CD-ROM for programming and interface to ESM. Includes E-Help for troubleshooting any ESM faults. Serial harness is provided for connection of a customer supplied laptop to the ECU RS-232 port.

**ENGINE MONITORING DEVICES** – Factory mounted and wired sensors for lube oil pressure and temperature; intake manifold temperature and pressure; overspeed; and jacket water temperature; all accessible through ESM®. ESM continually monitors combustion performance through accelerometers to provide detonation protection. Dual magnetic pick-ups are used for accurate engine speed monitoring. ESM provides predictive spark plug diagnostics as well as advanced diagnostics of engine and all ESM sensors and logs any faults into non-volatile flash memory.

**ENGINE ROTATION** – Counterclockwise when facing flywheel.

**EXHAUST OUTLET** – Single vertical at rear. Flexible stainless steel connection with 8" (203 mm) pipe flange.

**FLYWHEEL** – Approx. WR<sup>2</sup> = 155000 lb-in<sup>2</sup>; with ring gear (208 teeth), machined to accept two drive adapters: 31.88" (810 mm) pilot bore, 30.25" (768 mm) bolt circle, (12) 0.75"-10 tapped holes; or 28.88" (734 mm) pilot bore, 27.25" (692 mm) bolt circle, (12) 0.625"-11 tapped holes and (12) 0.75"-10 tapped holes.

**FLYWHEEL HOUSING** – No. 00 SAE.

**FUEL SYSTEM** – Single 3" ANSI flange fuel inlet connection. Two natural gas, 4" (102 mm) updraft carburetors and two mounted Mooney Flowgrid 250, 2" (51 mm) gas regulators, 30 – 60 psi (207 – 414 kPa) fuel inlet pressure required. 10 foot (3 m) harness provided for ESM control of customer supplied fuel shutoff valve

**GOVERNOR** – Electric throttle actuator controlled by ESM with throttle position feedback. Governor tuning is performed using ESP. ESM includes option of a load-coming feature to improve engine response to step loads.

**IGNITION** – Ignition Power Module (IPM) controlled by ESM, with spark timing. Dual voltage energy levels automatically controlled by ESM to maximize spark plug life.

**INTERCOOLER** – Air-to-water.

**LEVELING BOLTS**

**LIFTING EYES** – Requires 9.5 ton Working Load Limit (W.L.L.) anchor shackles.

**LUBRICATION** – Full pressure, gear type pump. Engine mounted full flow lube oil micro-fiberglass filters. MICROSPIN® bypass filter, engine mounted. Air/gas motor driven prelube pump, requires final piping.

**MANIFOLDS** – Exhaust, (2) water cooled.

**OIL COOLER** – Shell and tube type, with thermostatic temperature controller and pressure regulating valve. Factory mounted.

**OIL PAN** – Deep sump type. 190 gallon (719 L) capacity including filter and cooler.

**PAINT** – Oilfield orange primer.

**PISTONS** – Aluminum with floating pin. Oil cooled.

**SHIPPING SKID** – For domestic truck or rail.

**TURBOCHARGERS** – Two dry type. Wastegate controlled.

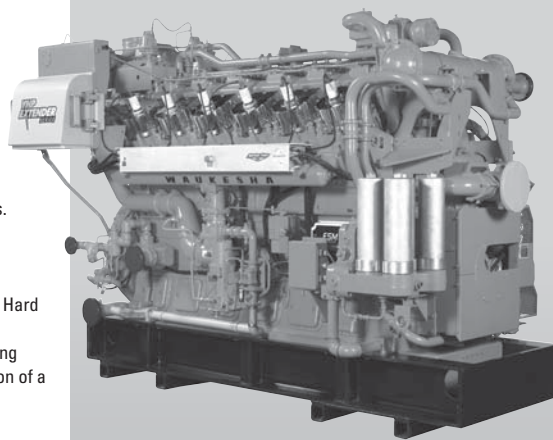
**VIBRATION DAMPER** – Viscous type. Guard included with remote mounted radiator or no radiator.

**WATER CIRCULATING SYSTEM, AUXILIARY CIRCUIT** – Belt driven water circulating high capacity pump for intercooler and lube oil cooler. See S6543-36 performance curve for use with standard 10 diameter crankshaft pulley.

**WATER CIRCULATING SYSTEM, ENGINE JACKET** – Belt driven water circulating pump, cluster type thermostatic temperature regulating valve, full flow bypass type. Flange connections and mating flanges for (2) 4" (102 mm) inlets and (1) 5" (127 mm) outlet.

## VHP® Series Gas Engine Extender Series®

987 - 1547 BHP  
(736 - 1154 kWb)



Engine shown with options.

## Model L7042GSI with ESM

Turbocharged and Intercooled, Twelve  
Cylinder, Four-Cycle Gas Fueled Engine

## SPECIFICATIONS

|                          |                          |
|--------------------------|--------------------------|
| <b>Cylinders</b>         | <b>Lube Oil Capacity</b> |
| V 12                     | 190 gal. (719 L)         |
| <b>Piston</b>            | <b>Starting System</b>   |
| <b>Displacement</b>      | 125 - 150                |
| 7040 cu. in.             | psi air/gas              |
| (115 L)                  | 24 V electric            |
| <b>Bore &amp; Stroke</b> | <b>Dry Weight</b>        |
| 9.375" x 8.5"            | 21,000 lb.               |
| (238 x 216 mm)           | (9525 kg)                |
| <b>Compression Ratio</b> |                          |
| 8:1                      |                          |
| <b>Jacket Water</b>      |                          |
| <b>System Capacity</b>   |                          |
| 107 gal. (405 L)         |                          |



## POWER RATINGS: L7042GSI VHP® GAS ENGINE

| Brake Horsepower (kWb Output) |                                          |      |            |            |            |             |
|-------------------------------|------------------------------------------|------|------------|------------|------------|-------------|
| Model                         | I.C. Water Inlet Temp.<br>°F (°C) (Tcra) | C.R. | 800 rpm    | 900 rpm    | 1000 rpm   | 1200 rpm    |
| L7042GSI                      | 85° (29°)                                | 8:1  | 1031 (769) | 1160 (865) | 1289 (961) | 1547 (1154) |
|                               | 130° (54°)                               | 8:1  | 987 (736)  | 1110 (828) | 1233 (920) | 1480 (1104) |

Rating Standard: All models: Ratings are based on ISO 3046/1-1995 with mechanical efficiency of 90% and auxiliary water temperature Tcra (clause 10.1) as specified above limited to  $\pm 10^\circ\text{F}$  ( $\pm 5^\circ\text{C}$ ). Ratings are also valid for SAE J1349, BS5514, DIN6271 and AP17B-11C standard atmospheric conditions.

ISO Standard Power/Continuous Power Rating: The highest load and speed which can be applied 24 hours a day, seven days a week, 365 days per year except for normal maintenance. It is permissible to operate the engine at up to 10% overload, or maximum load indicated by the intermittent rating, whichever is lower, for two hours in each 24 hour period.

All natural gas engine ratings are based on a fuel of 900 Btu/ft<sup>3</sup> (35.3 MJ/nm<sup>3</sup>) SLHV, with a 91 WKI®.

For conditions or fuels other than standard, contact the Dresser Waukesha Application Engineering Department.

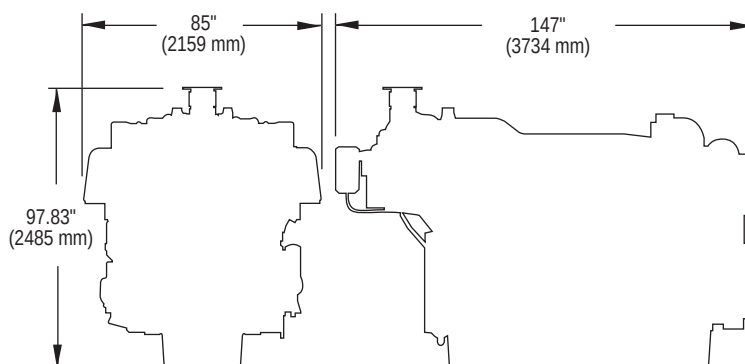
## PERFORMANCE: L7042GSI VHP® GAS ENGINE

| English 130° F I.C. Water Temperature |                     |      |      | Metric 54° C I.C. Water Temperature |                           |       |       |
|---------------------------------------|---------------------|------|------|-------------------------------------|---------------------------|-------|-------|
| Catalyst<br>Settings                  | RPM                 | 1200 | 1000 | Catalyst<br>Settings                | RPM                       | 1200  | 1000  |
|                                       | Power (Bhp)         | 1480 | 1233 |                                     | Power (kWb)               | 1104  | 920   |
|                                       | BSFC (Btu/bhp-hr)   | 7675 | 7440 |                                     | BSFC (kJ/kW-hr)           | 10860 | 10525 |
|                                       | NOx (grams/bhp-hr)  | 16.0 | 16.0 |                                     | NOx (g/nm <sup>3</sup> )  | 5.9   | 5.9   |
|                                       | CO (grams/bhp-hr)   | 13.0 | 13.0 |                                     | CO (g/nm <sup>3</sup> )   | 4.8   | 4.8   |
|                                       | NMHC (grams/bhp-hr) | 0.25 | 0.25 |                                     | NMHC (g/nm <sup>3</sup> ) | 0.1   | 0.1   |

## NOTES:

- Fuel consumption and exhaust emissions are based on ISO 3046/1-1995 standard reference conditions and commercial quality natural gas of 900 Btu/ft<sup>3</sup> (35.38 MJ/m<sup>3</sup> [25, V(0; 101.325)]) saturated lower heat value, Waukesha Knock Index® of 91 and 93% methane content by volume. ISO 3046/1-1995 standard reference conditions are 77°F (25°C) ambient temperature, 29.54 inches Hg (100 kPa) barometric pressure, 30% relative humidity (1kPa/0.3 inches Hg water vapor pressure).
- S.I. exhaust emissions are corrected to 5% O<sub>2</sub> (0°C and 101.325 kPa).
- Data will vary due to variations in site conditions. For conditions and/or fuels other than standard, consult the Dresser Waukesha Application Engineering Department.
- Fuel consumption based on ISO 3046/1-1995 with a +5% tolerance for commercial quality natural gas having a 900 Btu/ft<sup>3</sup> saturated low heat valve

Consult your local Waukesha Distributor for system application assistance. The manufacturer reserves the right to change or modify without notice, the design or equipment specifications as herein set forth without incurring any obligation either with respect to equipment previously sold or in the process of construction except where otherwise specifically guaranteed by the manufacturer.



Bulletin 7011 1008

Dresser Waukesha  
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Phone: (262) 547-3311 · Fax: (262) 549-2795

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**DRESSER® Waukesha**

www.dresser.com

# ENVIRONMENTAL 9

## VHP EMISSION LEVELS

| MODEL                            | CARBURETOR<br>SETTING                            | GRAMS/BHP-HR                   |      |                     |     | % OBSERVED DRY |                | MASS<br>AFR <sup>(2)</sup> | VOLUME<br>AFR <sup>(2)</sup> | EXCESS<br>AIR<br>RATIO |
|----------------------------------|--------------------------------------------------|--------------------------------|------|---------------------|-----|----------------|----------------|----------------------------|------------------------------|------------------------|
|                                  |                                                  | NO <sub>x</sub> <sup>(1)</sup> | CO   | NMHC <sup>(4)</sup> | THC | CO             | O <sub>2</sub> |                            |                              |                        |
| G, GSI                           | Lowest Manifold<br>(Best Power)                  | 8.5                            | 32.0 | 0.35                | 2.3 | 1.15           | 0.30           | 15.5:1                     | 9.3:1                        | 0.97                   |
|                                  | Equal NO <sub>x</sub> & CO                       | 12.0                           | 12.0 | 0.35                | 2.3 | 0.45           | 0.30           | 15.9:1                     | 9.6:1                        | 0.99                   |
|                                  | Catalytic Conv.<br>Input (3-way <sup>(3)</sup> ) | 13.0                           | 9.0  | 0.30                | 2.0 | 0.38           | 0.30           | 15.95:1                    | 9.6:1                        | 0.99                   |
|                                  | Standard (Best<br>Economy)                       | 22.0                           | 1.5  | 0.25                | 1.5 | 0.02           | 1.35           | 17.0:1                     | 10.2:1                       | 1.06                   |
| F3514GSI<br>F3524GSI<br>L7044GSI | Equal NO <sub>x</sub> & CO                       | 14.0                           | 14.0 | 0.25                | 1.1 | 0.45           | 0.30           | 15.85:1                    | 9.5:1                        | 0.99                   |
|                                  | Catalytic Conv.<br>Input (3-way <sup>(3)</sup> ) | 15.0                           | 13.0 | 0.20                | 1.0 | 0.38           | 0.30           | 15.95:1                    | 9.6:1                        | 0.99                   |
| L5794GSI                         | Equal NO <sub>x</sub> & CO                       | 13.5                           | 13.5 | 0.45                | 3.0 | 0.45           | 0.30           | 15.85:1                    | 9.5:1                        | 0.99                   |
|                                  | Catalytic Conv.<br>Input (3-way <sup>(3)</sup> ) | 14.5                           | 11.0 | 0.45                | 2.9 | 0.38           | 0.30           | 15.95:1                    | 9.6:1                        | 0.99                   |
| GL                               | Standard                                         | 1.5                            | 2.65 | 1.0                 | 5.5 | 0.06           | 9.8            | 28.0:1                     | 16.8:1                       | 1.74                   |
| L5774LT#                         | Standard                                         | 2.6                            | 2.0  | 0.60                | 4.0 | 0.04           | 7.8            | 24.5:1                     | 14.7:1                       | 1.52                   |
| L5794LT#                         | Standard                                         | 2.6                            | 2.0  | 0.60                | 4.0 | 0.04           | 7.8            | 24.5:1                     | 14.7:1                       | 1.52                   |

# L5774LT and L5794LT emission levels are based on 1000 – 1200 rpm operation. For information at all other speeds contact Waukesha's Application Engineering Department.

**NOTE:** The above table indicates emission levels that are valid for new engines for the duration of the standard warranty period and are attainable by an engine in good operating condition running on commercial quality natural gas of 900 BTU/ft<sup>3</sup> (35.38 MJ/m<sup>3</sup> [25, V(0; 101.325)]) SLHV, Waukesha Knock Index<sup>®</sup> of 91 or higher, 93% methane content by volume, and at ISO standard conditions. Emissions are based on standard engine timing at 91 WKI<sup>®</sup> with an absolute humidity of 42 grains/lb. Refer to engine specific WKI<sup>®</sup> Power & Timing curves for standard timing. Unless otherwise noted these emission levels can be achieved across the continuous duty speed range and from 75% to 110% of the ISO Standard Power (continuous duty) rating. **Contact your local Waukesha representative or Waukesha's Application Engineering Department for emission values which can be obtained on a case-by-case basis for specific ratings, fuels, and site conditions.**

|                                       |            |                     |
|---------------------------------------|------------|---------------------|
| GAS ENGINE<br>EXHAUST EMISSION LEVELS | EN: 141359 | Ref.<br>S<br>8483-6 |
|                                       | DATE: 4/07 |                     |

**Prepared For:**Tom Ellis  
Harvest Midstream**Date:** February 2, 2023**APPLICATION INFORMATION****DRIVER**

Make: WAUKESHA  
Model: L7042GSI  
Horsepower: 1,480  
RPM: 1,200  
Compression Ratio: 8  
Exhaust Flow Rate: 7,056  
Exhaust Temperature: 909  
Fuel: WAUK Natural Gas  
Annual Operating Hours: 8,760

**UNCONTROLLED EMISSIONS DATA**

|                   | <u>g/bhp-hr</u> | <u>lb/hr</u> | <u>Tons/Year</u> |
|-------------------|-----------------|--------------|------------------|
| NO <sub>x</sub> : | 13.00           | 42.42        | 185.79           |
| CO:               | 9.00            | 29.37        | 128.62           |
| THC:              | 2.00            | 6.53         | 28.58            |
| NMHC:             | 0.30            | 0.98         | 4.29             |
| NMNEHC:           | 0.15            | 0.49         | 2.14             |
| HCHO:             | 0.05            | 0.16         | 0.71             |
| Oxygen:           | 0.30%           |              |                  |

**CATALYST ELEMENT**

Model: RT-2415-T  
Catalyst Type: NSCR, Standard Precious Metals Group  
Substrate Type: Brazed  
Element Size: Rectangle, 24 x 15 x 3.5  
Element Quantity: 3

**POST CATALYST EMISSIONS DATA**

|                   | <u>g/bhp-hr</u> | <u>lb/hr</u> | <u>Tons/Year</u> |
|-------------------|-----------------|--------------|------------------|
| NO <sub>x</sub> : | < 0.50          | 1.24         | 5.43             |
| CO                | < 0.36          | 1.17         | 5.14             |
| VOC               | < 0.05          | 0.16         | 0.71             |
| HCHO              | < 0.01          | 0.03         | 0.14             |

Catalyst Temperature: 976 °F

**\*\*POST CATALYST EMISSIONS ARE ONLY GUARANTEED  
FOR CATALYST ELEMENTS SUPPLIED BY EMIT**



## **WARRANTY**

EMIT Technologies, Inc. warrants that the goods supplied will be free from defects in workmanship by EMIT Technologies, Inc. for a period of one (1) year from date of shipment. EMIT Technologies, Inc. will not be responsible for any defects which result from improper use, neglect, failure to properly maintain or which are attributable to defects, errors or omissions in any drawings, specifications, plans or descriptions, whether written or oral, supplied to EMIT Technologies, Inc. by Buyer.

Catalyst performance using an EMIT Air/Fuel ratio controller is dependent upon properly defined set-points, variable with engine and fuel gas composition. Air/fuel ratio controller performance is guaranteed, but not limited, to fuel gas with an HHV content of 1400 BTU/SCF.

Catalyst performance will be guaranteed for a period of 2 years from installation, or 17,000 operating hours, whichever comes first. The catalyst shall be operated with an automatic air/fuel ratio controller. The performance guarantee shall not cover the effects of excessive ash masking due to operation at low load, improper engine maintenance, or inappropriate lubrication oil. The performance guarantee shall not cover the effects of continuous engine misfires (cylinder or ignition) exposing the catalyst to excessive exothermic reaction temperatures.

Unless otherwise stated the exhaust temperature operating range at the converter inlet is 600°F minimum for oxidation catalyst and 750°F for NSCR catalyst and 1250°F maximum.

If a high temperature shut down switch is not installed, thermal deactivation of catalyst at temperatures above 1300 °F is not covered.

The catalyst conversion efficiencies (% reduction) will be guaranteed for engine loads of 50 to 100 percent.

Engine lubrication oil shall contain less than 0.6% ash (by weight) with a maximum allowable specific oil consumption of 0.01 gal/bhp-hr. The maximum ash loading on the catalyst shall be limited to 350 g/m<sup>3</sup>. Phosphorous and zinc additives are limited to 0.03% (by weight).

The catalyst must not be exposed to the following known poisoning agents, including: iron, nickel, sodium, chromium, arsenic, zinc, lead, phosphorous, silicon, potassium, magnesium, copper, tin, and mercury. Total poison concentrations in the gas are limited to 0.3 ppm.

Shipment - Promised shipping dates are approximate and are not guaranteed and are from the point of manufacture. EMIT Technologies, Inc. will not be liable for any loss, damage or delay in manufacture or delivery resulting from any cause beyond its control including, but not limited to a period equal to the time lost by reason of that delay. All products will be crated as per best practice to prevent any damage during shipment. Unless otherwise specified, Buyer will pay for any special packing and shipping requirements. Acceptance of goods by common carrier constitutes delivery to Buyer. EMIT Technologies, Inc. shall not be responsible for goods damaged or lost in transit.

## **PAYMENT TERMS AND ADVANCE PAYMENT REQUIREMENT**

Terms: Credit is extended to purchaser for net 30 time period. If payment is not received in the net 30 timeframe, interest on the unpaid balance will accrue at a rate of 1.5% per month from the invoice date.

Advance Payment Requirement: Proposals with a project value of \$100,000 or greater, and 60 days or greater time to completion, will require an advance payment of 30% of the total value. The advance payment will be invoiced to the customer upon receipt of the customer's purchase order. Advance payment is due 30 days after the date of the invoice. If payment is not received in the net 30 timeframe, interest on the unpaid balance will accrue at the rate of 1.5% per month from the invoice date. Failure to pay this invoice may delay completion of the project outlined in this proposal.

Order Cancellation Terms: Upon cancellation of an order once submittal of a Purchase Order has occurred, the customer will pay a 25% restocking fee for Catalyst Housings, Catalyst Elements, and Air/Fuel Ratio Controllers; 50% restocking fee for Cooler Top Solutions, Exhaust System Accessories, and other Custom Built Products; 100% of all associated shipping costs incurred by EMIT; 100% of all project expenses incurred by EMIT for Field Services.



Harvest Midstream - 32-8#2

VHP - L7044GSI

|                          |                         |                                       |                   |  |  |
|--------------------------|-------------------------|---------------------------------------|-------------------|--|--|
| WPI                      | MHM                     | Gas Compression                       |                   |  |  |
| ENGINE SPEED (rpm):      | 1200                    | NOx SELECTION (g/bhp-hr):             | Customer Catalyst |  |  |
| DISPLACEMENT (in3):      | 7040                    | COOLING SYSTEM:                       | JW, IC + OC       |  |  |
| COMPRESSION RATIO:       | 8:1                     | INTERCOOLER WATER INLET (°F):         | 130               |  |  |
| IGNITION SYSTEM:         | ESM2                    | JACKET WATER OUTLET (°F):             | 180               |  |  |
| EXHAUST MANIFOLD:        | Water Cooled            | JACKET WATER CAPACITY (gal):          | 100               |  |  |
| COMBUSTION:              | Rich Burn, Turbocharged | AUXILIARY WATER CAPACITY (gal):       | 11                |  |  |
| ENGINE DRY WEIGHT (lbs): | 24250                   | LUBE OIL CAPACITY (gal):              | 190               |  |  |
| AIR/FUEL RATIO SETTING:  | 0.38% CO                | MAX. EXHAUST BACKPRESSURE (in. H2O):  | 18                |  |  |
| ENGINE SOUND LEVEL (dBA) | 104                     | MAX. AIR INLET RESTRICTION (in. H2O): | 15                |  |  |
| IGNITION TIMING:         | ESM2 Controlled         | EXHAUST SOUND LEVEL (dBA)             | 111               |  |  |

|                             |             |                                     |       |  |  |
|-----------------------------|-------------|-------------------------------------|-------|--|--|
| <b>SITE CONDITIONS:</b>     |             |                                     |       |  |  |
| FUEL:                       | Natural Gas | ALTITUDE (ft):                      | 6628  |  |  |
| FUEL PRESSURE RANGE (psig): | 40 - 60     | MAXIMUM INLET AIR TEMPERATURE (°F): | 100   |  |  |
| FUEL HHV (BTU/ft3):         | 976.1       | FUEL WKI:                           | 101.9 |  |  |
| FUEL LHV (BTU/ft3):         | 882.4       |                                     |       |  |  |

| SITE SPECIFIC TECHNICAL DATA              |           | 106%<br>OVERLOAD<br>SITE DATA<br><small>(See note 18)</small> | MAX RATING<br>AT 100 °F<br>AIR TEMP | SITE RATING AT MAXIMUM INLET AIR<br>TEMPERATURE OF 100 °F |      |      |
|-------------------------------------------|-----------|---------------------------------------------------------------|-------------------------------------|-----------------------------------------------------------|------|------|
|                                           |           |                                                               |                                     | 100%                                                      | 75%  | 50%  |
| POWER RATING                              | UNITS     |                                                               |                                     |                                                           |      |      |
| CONTINUOUS ENGINE POWER                   | BHP       | 1784                                                          | 1681                                | 1680                                                      | 1260 | 843  |
| OVERLOAD                                  | % 2/24 hr | Note 18                                                       | 6                                   | 6                                                         | -    | -    |
| MECHANICAL EFFICIENCY (LHV)               | %         | 31.5                                                          | 31.2                                | 31.2                                                      | 29.2 | 26.0 |
| CONTINUOUS POWER AT FLYWHEEL              | BHP       | 1709                                                          | 1606                                | 1605                                                      | 1185 | 768  |
| <small>based on 75 HP cooling fan</small> |           |                                                               |                                     |                                                           |      |      |

|                                |     |            |
|--------------------------------|-----|------------|
| AVAILABLE TURNDOWN SPEED RANGE | RPM | 700 - 1200 |
|--------------------------------|-----|------------|

| FUEL CONSUMPTION                          |            |      |      |      |      |      |
|-------------------------------------------|------------|------|------|------|------|------|
| FUEL CONSUMPTION (LHV)                    | BTU/BHP-hr | 7740 | 7807 | 7808 | 8192 | 8917 |
| FUEL CONSUMPTION (HHV)                    | BTU/BHP-hr | 8562 | 8637 | 8638 | 9062 | 9864 |
| FUEL FLOW                                 | SCFM       | 261  | 248  | 248  | 195  | 142  |
| <small>based on fuel analysis LHV</small> |            |      |      |      |      |      |

| HEAT REJECTION    |               |      |      |      |      |      |
|-------------------|---------------|------|------|------|------|------|
| JACKET WATER (JW) | BTU/hr x 1000 | 3991 | 3823 | 3821 | 3168 | 2499 |
| LUBE OIL (OC)     | BTU/hr x 1000 | 588  | 580  | 580  | 543  | 472  |
| INTERCOOLER (IC)  | BTU/hr x 1000 | 324  | 300  | 300  | 200  | 97   |
| EXHAUST           | BTU/hr x 1000 | 3988 | 3760 | 3758 | 2817 | 1918 |
| RADIATION         | BTU/hr x 1000 | 645  | 637  | 637  | 587  | 530  |

| EMISSIONS (ENGINE OUT): |          |       |       |       |       |       |
|-------------------------|----------|-------|-------|-------|-------|-------|
| NOx (NO + NO2)          | g/bhp-hr | 13.1  | 13.6  | 13.6  | 15.3  | 16.1  |
| CO                      | g/bhp-hr | 11.0  | 11.1  | 11.1  | 11.5  | 11.8  |
| THC                     | g/bhp-hr | 2.5   | 2.5   | 2.5   | 2.3   | 2.1   |
| NMHC                    | g/bhp-hr | 0.019 | 0.019 | 0.019 | 0.017 | 0.015 |
| NM,NEHC (VOC)           | g/bhp-hr | 0.006 | 0.006 | 0.006 | 0.005 | 0.005 |
| CO2                     | g/bhp-hr | 480   | 484   | 484   | 508   | 553   |
| CO2e (Methane GWP: 25)  | g/bhp-hr | 543   | 546   | 546   | 565   | 604   |
| CH2O                    | g/bhp-hr | 0.050 | 0.050 | 0.050 | 0.050 | 0.050 |
| CH4                     | g/bhp-hr | 2.53  | 2.48  | 2.48  | 2.29  | 2.05  |

| AIR INTAKE / EXHAUST GAS                  |       |       |       |       |      |      |
|-------------------------------------------|-------|-------|-------|-------|------|------|
| INDUCTION AIR FLOW                        | SCFM  | 2528  | 2403  | 2402  | 1890 | 1376 |
| EXHAUST GAS MASS FLOW                     | lb/hr | 11758 | 11176 | 11170 | 8790 | 6399 |
| EXHAUST GAS FLOW                          | ACFM  | 8528  | 8072  | 8067  | 6173 | 4331 |
| EXHAUST TEMPERATURE                       | °F    | 1172  | 1165  | 1165  | 1120 | 1063 |
| <small>at exhaust temp, 14.5 psia</small> |       |       |       |       |      |      |

| HEAT EXCHANGER SIZING <sup>12</sup>     |               |      |      |
|-----------------------------------------|---------------|------|------|
| TOTAL JACKET WATER CIRCUIT (JW)         | BTU/hr x 1000 | 4526 | 4336 |
| TOTAL AUXILIARY WATER CIRCUIT (IC + OC) | BTU/hr x 1000 | 1035 | 998  |

| COOLING SYSTEM WITH ENGINE MOUNTED WATER PUMPS |      |     |
|------------------------------------------------|------|-----|
| JACKET WATER PUMP MIN. DESIGN FLOW             | GPM  | 450 |
| JACKET WATER PUMP MAX. EXTERNAL RESTRICTION    | psig | 16  |
| AUX WATER PUMP MIN. DESIGN FLOW                | GPM  | 79  |
| AUX WATER PUMP MAX. EXTERNAL RESTRICTION       | psig | 44  |



Harvest Midstream - 32-8#2

VHP - L7044GSI

WPI    MHM

Gas Compression

FUEL COMPOSITION

| HYDROCARBONS:     |                  |  | Mole or Volume % | FUEL:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | Natural Gas |
|-------------------|------------------|--|------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------|
| Methane           | CH4              |  | 96.144           | FUEL PRESSURE RANGE (psig):                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | 40 - 60     |
| Ethane            | C2H6             |  | 0.27             | FUEL WKI:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | 101.9       |
| Propane           | C3H8             |  | 0.07             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |             |
| Iso-Butane        | I-C4H10          |  | 0.001            | FUEL SLHV (BTU/ft3):                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | 867.00      |
| Normal Butane     | N-C4H10          |  | 0.001            | FUEL SLHV (MJ/Nm3):                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | 34.09       |
| Iso-Pentane       | I-C5H12          |  | 0.001            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |             |
| Normal Pentane    | N-C5H12          |  | 0.001            | FUEL LHV (BTU/ft3):                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | 882.35      |
| Hexane            | C6H14            |  | 0.0013           | FUEL LHV (MJ/Nm3):                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | 34.70       |
| Heptane           | C7H16            |  | 0                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |             |
| Ethene            | C2H4             |  | 0                | FUEL HHV (BTU/ft3):                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | 976.05      |
| Propene           | C3H6             |  | 0                | FUEL HHV (MJ/Nm3):                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | 38.38       |
|                   | SUM HYDROCARBONS |  | 96.489           | FUEL DENSITY (SG):                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | 0.59        |
| NON-HYDROCARBONS: |                  |  |                  | <div>Standard Conditions per ASTM D3588-91 [60°F and 14.696psia] and ISO 6976:1996-02-01[25, V(0;101.325)].</div> <div>Based on the fuel composition, supply pressure and temperature, liquid hydrocarbons may be present in the fuel. No liquid hydrocarbons are allowed in the fuel. The fuel must not contain any liquid water. Waukesha recommends both of the following:</div> <div>1) Dew point of the fuel gas to be at least 20°F (11°C) below the measured temperature of the gas at the inlet of the engine fuel regulator.</div> <div>2) A fuel filter separator to be used on all fuels except commercial quality natural gas.</div> <div>Refer to the 'Fuel and Lubrication' section of 'Technical Data' or contact the Waukesha Application Engineering Department for additional information on fuels, or LHV and WKI* calculations.</div> <div>* Trademark of INNIO Waukesha Gas Engines Inc.</div> |             |
| Nitrogen          | N2               |  | 0.3601           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |             |
| Oxygen            | O2               |  | 0                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |             |
| Helium            | He               |  | 0                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |             |
| Carbon Dioxide    | CO2              |  | 3.1505           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |             |
| Carbon Monoxide   | CO               |  | 0                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |             |
| Hydrogen          | H2               |  | 0                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |             |
| Water Vapor       | H2O              |  | 0                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |             |
|                   | TOTAL FUEL       |  | 100              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |             |
|                   |                  |  |                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |             |

FUEL CONTAMINANTS

|                                    |   |          |                           |   |        |
|------------------------------------|---|----------|---------------------------|---|--------|
| Total Sulfur Compounds             | 0 | % volume | Total Sulfur Compounds    | 0 | µg/BTU |
| Total Halogen as Chloride          | 0 | % volume | Total Halogen as Chloride | 0 | µg/BTU |
| Total Ammonia                      | 0 | % volume | Total Ammonia             | 0 | µg/BTU |
|                                    |   |          |                           |   |        |
| <u>Siloxanes</u>                   |   |          | Total Siloxanes (as Si)   | 0 | µg/BTU |
| Tetramethyl silane                 | 0 | % volume |                           |   |        |
| Trimethyl silanol                  | 0 | % volume |                           |   |        |
| Hexamethyldisiloxane (L2)          | 0 | % volume |                           |   |        |
| Hexamethylcyclotrisiloxane (D3)    | 0 | % volume |                           |   |        |
| Octamethyltrisiloxane (L3)         | 0 | % volume |                           |   |        |
| Octamethylcyclotetrasiloxane (D4)  | 0 | % volume |                           |   |        |
| Decamethyltetrasiloxane (L4)       | 0 | % volume |                           |   |        |
| Decamethylcyclopentasiloxane (D5)  | 0 | % volume |                           |   |        |
| Dodecamethylpentasiloxane (L5)     | 0 | % volume |                           |   |        |
| Dodecamethylcyclohexasiloxane (D6) | 0 | % volume |                           |   |        |
| Others                             | 0 | % volume |                           |   |        |

Calculated fuel contaminant analysis will depend on the entered fuel composition and selected engine model.

No water or hydrocarbon condensates are allowed in the engine. Requires liquids removal.

**VHP - L7044GSI**

Gas Compression

**Harvest Midstream - 32-8#2**

WPI    MHM

**NOTES**

1. All data is based on engines with standard configurations unless noted otherwise.
2. Power rating is adjusted for fuel, site altitude, and site air inlet temperature, in accordance with ISO 3046/1 with tolerance of  $\pm 3\%$ .
3. Fuel consumption is presented in accordance with ISO 3046/1 with a tolerance of  $-0 / +5\%$  at maximum rating. Fuel flow calculation based on fuel LHV and fuel consumption with a tolerance of  $-0/+5\%$ . For sizing piping and fuel equipment, it is recommended to include the 5% tolerance.
4. Heat rejection tolerances are  $\pm 30\%$  for radiation, and  $\pm 8\%$  for jacket water, lube oil, intercooler, and exhaust energy.
5. Emission levels for engines with Waukesha supplied 3-way catalyst are given at catalyst outlet flange. For all other engine models, emission levels are given at engine exhaust outlet flange prior to any after treatment. Values are based on a new engine operating at indicated site conditions, and adjusted to the specified timing and air/fuel ratio at rated load. Catalyst out emission levels represent emission levels the catalyst is sized to achieve. Manual adjustment may be necessary to achieve compliance as catalyst/engine age. Catalyst-out emission levels are valid for the duration of the engine warranty. Emissions are at an absolute humidity of 75 grains H<sub>2</sub>O/lb (10.71 g H<sub>2</sub>O/kg) of dry air. Emission levels may vary subject to instrumentation, measurement, ambient conditions, fuel quality, and engine variation. Engine may require adjustment on-site to meet emission values, which may affect engine performance and heat output. NO<sub>x</sub>, CO, THC, NMHC, CO<sub>2</sub>, and CO<sub>2e</sub> emission levels are listed as a not to exceed limit, all other emission levels are estimated. CO<sub>2</sub> emissions based on EPA Federal Register/Vol. 74, No. 209/Friday, October 30, 2009 Rules and Regulations 56398, 56399 (3) Tier 3 Calculation Methodology, Equation C-5.
6. Air flow is based on undried air with a tolerance of  $\pm 7\%$ .
7. Exhaust temperature given at engine exhaust outlet flange with a tolerance of  $\pm 50^{\circ}\text{F}$  ( $28^{\circ}\text{C}$ ).
8. Exhaust gas mass flow value is based on a "wet basis" with a tolerance of  $\pm 7\%$ .
9. Inlet air restrictions based on full rated engine load. Exhaust backpressure based on 158 PSI BMEP and 1200 RPM. Refer to the engine specification section of Waukesha's standard technical data for more information.
10. Cooling circuit capacity, lube oil capacity, and engine dry weight values are typical.
11. Fuel must conform to Waukesha's "Gaseous Fuel Specification" S7884-7 or most current version. Fuel may require treatment to meet current fuel specification.
12. Heat exchanger sizing values given as the maximum heat rejection of the circuit, with applied tolerances and an additional 5% reserve factor.
13. Fuel volume flow calculation in english units is based on 100% relative humidity of the fuel gas at standard conditions of  $60^{\circ}\text{F}$  and 14.696 psia (29.92 inches of mercury; 101.325 kPa).
14. Fuel volume flow calculation in metric units is based on 100% relative humidity of the fuel gas at a combustion temperature of  $25^{\circ}\text{C}$  and metering conditions of  $0^{\circ}\text{C}$  and 101.325 kPa (14.696 psia; 29.92 inches of mercury). This is expressed as  $[25, V(0;101.325)]$ .
15. Engine sound data taken with the microphone at 1 m (3.3 ft) from the side of the engine at the approximate front-to-back centerline. Microphone height was at intake manifold level. Engine sound pressure data may be different at front, back and opposite side locations. Exhaust sound data taken with microphone 1 meter (3.3 ft) away and 1 meter (3.3 ft) to the side of the exhaust outlet.
16. Due to variation between test conditions and final site conditions, such as exhaust configuration and background sound level, sound pressure levels under site conditions may be different than those tabulated above.
17. Cooling system design flow is based on minimum allowable cooling system flow. Cooling system maximum external restriction is defined as the allowable restriction at the minimum cooling system flow.
18. Continuous Power Rating: The highest load and speed that can be applied 24 hours per day, seven days per week, 365 days per year except for normal maintenance at indicated ambient reference conditions and fuel. It is permissible to operate the engine at the indicated overload power, for two hours in every 24 hour period.
19. emPact emission compliance available for entire range of operable fuels; however, fuel system and/or O<sub>2</sub> set point may need to be adjusted in order to maintain compliance. VHP emPact particulate emissions measured as condensable PM<sub>2.5</sub> per 40 CFR Part 1065 gravimetric reference method.
20. In cold ambient temperatures, heating of the engine jacket water, lube oil and combustion air may be required. See Waukesha Technical Data.
21. Available Turndown Speed Range refers to the constant torque speed range available. Reduced power may be available at speeds outside of this range. Contact application engineering.

**SPECIAL REQUIREMENTS**

**Prepared For:**

Tom Ellis  
Harvest

**Date:** July 17, 2025
**APPLICATION INFORMATION  
DRIVER**

Make: Waukesha  
Model: L7044GSI S4  
Horsepower: 1784  
RPM: 1200  
Compression Ratio: 8  
Exhaust Flow Rate: 8528  
Exhaust Temperature: 1165  
Reference: 32-8#2 EngCalc  
Fuel: 32-8#2 Fuel  
Annual Operating Hours: 8760

**UNCONTROLLED EMISSIONS DATA**

|                   | <u>g/bhp-hr</u> | <u>lb/hr</u> | <u>Tons/Year</u> |
|-------------------|-----------------|--------------|------------------|
| NO <sub>x</sub> : | 13.10           | 51.52        | 225.67           |
| CO:               | 11.00           | 43.26        | 189.49           |
| THC:              | 2.50            | 9.83         | 43.07            |
| NMHC:             | 0.019           | 0.07         | 0.33             |
| NMNEHC:           | 0.006           | 0.02         | 0.10             |
| HCHO:             | 0.05            | 0.20         | 0.86             |
| Oxygen:           | 0.38%           |              |                  |

**CATALYST ELEMENT**

Model: RT-2415-T  
Catalyst Type: NSCR, Standard Precious Metals Group  
Substrate Type: Brazed  
Element Size: Rectangle, 24" x 15" x 3.5"  
Element Quantity: 4

**POST CATALYST EMISSIONS DATA**

|                   | <u>g/bhp-hr</u> | <u>lb/hr</u> | <u>Tons/Year</u> | <u>% Reduction</u> |
|-------------------|-----------------|--------------|------------------|--------------------|
| NO <sub>x</sub> : | < 0.50          | 1.30         | 5.68             | 97.5%              |
| CO                | < 0.39          | 1.53         | 6.72             | 96.5%              |
| VOC               | < 0.00          | 0.02         | 0.07             | 33.3%              |
| HCHO              | < 0.01          | 0.04         | 0.17             | 80.0%              |

Catalyst Temperature: 1022 °F

**\*\*POST CATALYST EMISSIONS ARE ONLY GUARANTEED  
FOR CATALYST ELEMENTS SUPPLIED BY EMIT**



## WARRANTY

EMIT Technologies, Inc. warrants that the goods supplied will be free from defects in workmanship by EMIT Technologies, Inc. for a period of one (1) year from date of shipment. EMIT Technologies, Inc. will not be responsible for any defects which result from improper use, neglect, failure to properly maintain or which are attributable to defects, errors or omissions in any drawings, specifications, plans or descriptions, whether written or oral, supplied to EMIT Technologies, Inc. by Buyer.

DCT Addendum: Any Dynamic Control Touchscreen (DCT, 20370-\*) used as part of a telematics ("EMIT Connect") subscription will have an additional three (3) year warranty for a total of four (4) years of warranty coverage. The warranty will not cover broken glass due to mishandling. Past the first year of date of shipment (years 2-4 inclusive) the warranty will cover repair and return of module only and only ground shipping costs will be included.

Catalyst performance using an EMIT Air/Fuel ratio controller is dependent upon properly defined set-points, variable with engine and fuel gas composition. Air/fuel ratio controller performance is guaranteed, but not limited, to fuel gas with an HHV content of 1400 BTU/SCF.

Catalyst performance will be guaranteed for a period of 2 years from installation, or 17,000 operating hours, whichever comes first. The catalyst shall be operated with an automatic air/fuel ratio controller. The performance guarantee shall not cover the effects of excessive ash masking due to operation at low load, improper engine maintenance, or inappropriate lubrication oil. The performance guarantee shall not cover the effects of continuous engine misfires (cylinder or ignition) exposing the catalyst to excessive exothermic reaction temperatures.

Unless otherwise stated the exhaust temperature operating range at the converter inlet is 600°F minimum for oxidation catalyst and 750°F for NSCR catalyst and 1250°F maximum.

If a high temperature shut down switch is not installed, thermal deactivation of catalyst at temperatures above 1300 °F is not covered.

The catalyst conversion efficiencies (% reduction) will be guaranteed for engine loads of 50 to 100 percent.

Engine lubrication oil shall contain less than 0.6% ash (by weight) with a maximum allowable specific oil consumption of 0.01 gal/bhp-hr. The maximum ash loading on the catalyst shall be limited to 350 g/m<sup>3</sup>. Phosphorous and zinc additives are limited to 0.03% (by weight).

The catalyst must not be exposed to the following known poisoning agents, including: iron, nickel, sodium, chromium, arsenic, zinc, lead, phosphorous, silicon, potassium, magnesium, copper, tin, and mercury. Total poison concentrations in the gas are limited to 0.3 ppm.

Shipment - Promised shipping dates are approximate and are not guaranteed and are from the point of manufacture. EMIT Technologies, Inc. will not be liable for any loss, damage or delay in manufacture or delivery resulting from any cause beyond its control including, but not limited to a period equal to the time lost by reason of that delay. All products will be crated as per best practice to prevent any damage during shipment. Unless otherwise specified, Buyer will pay for any special packing and shipping requirements. Acceptance of goods by common carrier constitutes delivery to Buyer. EMIT Technologies, Inc. shall not be responsible for goods damaged or lost in transit.

## PAYMENT TERMS AND ADVANCE PAYMENT REQUIREMENT

Terms: Credit is extended to purchaser for net 30 time period. If payment is not received in the net 30 timeframe, interest on the unpaid balance will accrue at a rate of 1.5% per month from the invoice date.

Advance Payment Requirement: Proposals with a project value of \$100,000 or greater, and 60 days or greater time to completion, will require an advance payment of 30% of the total value. The advance payment will be invoiced to the customer upon receipt of the customer's purchase order. Advance payment is due 30 days after the date of the invoice. If payment is not received in the net 30 timeframe, interest on the unpaid balance will accrue at the rate of 1.5% per month from the invoice date. Failure to pay this invoice may delay completion of the project outlined in this proposal.

Order Cancellation Terms: Upon cancellation of an order once submittal of a Purchase Order has occurred, the customer will pay a 25% restocking fee for Catalyst Housings, Catalyst Elements, and Air/Fuel Ratio Controllers; 50% restocking fee for Cooler Top Solutions, Exhaust System Accessories, and other Custom Built Products; 100% of all associated shipping costs incurred by EMIT; 100% of all project expenses incurred by EMIT for Field Services.

# VHP Series Five L7044GSI S5

## With ESM2 and emPact Emission Control System

1,900 BHP (1,416 kWb) @ 1,200 RPM

### Technical Data

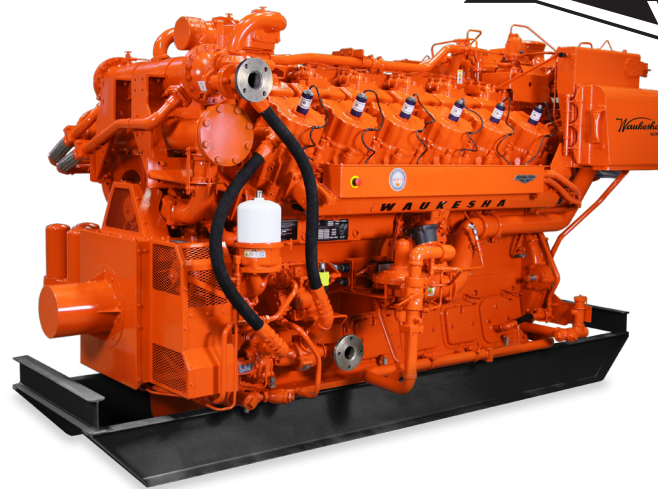
| Cylinders                    | V12                                   |
|------------------------------|---------------------------------------|
| Piston displacement          | 7,040 cu. in. (115 L)                 |
| Compression ratio            | 9.7:1                                 |
| Bore & stroke                | 9.375" x 8.5"<br>(238 x 216mm)        |
| Jacket water system capacity | 100 gal. (379 L)                      |
| Lube oil capacity            | 190 gal. (719 L)                      |
| Starting system              | 125 - 150 psi air/gas<br>24V electric |

### Dimensions l x w x h inch (mm)

147 (3,734) x 85 (2,159) x 97.83 (2,485)

### Weights lb (kg)

24,250 (11,000)



INNIO's Waukesha\* VHP\* Series Five rich-burn engines combine the most advanced technology available with the history and experience of the VHP platform, resulting in an engine with 13% more power, better fuel flexibility, 10% lower fuel consumption, up to 20% lower lifecycle costs, and over 30% longer service intervals.

Although Series Five engines are capable of higher power levels than previous versions, the stresses on the components have not increased. This is made possible by enhanced rich-burn combustion through the Miller Cycle, an improved cylinder head design that reduces temperatures in key regions, and an optimized piston design.

Used previously on the P9394GSI engine, the Miller Cycle moves work from the piston to the turbocharger, reducing combustion and exhaust temperatures and making the L7044GSI S5 the most fuel efficient VHP engine ever.

The improved cylinder head design reduces key internal temperatures by up to 40%, increasing reliability and extending the life of the head.

## Performance Data

### Intercooler Water Temperature 130°F (54°C)

|                       |                                                                 | 1200 RPM       | 1000 RPM       |
|-----------------------|-----------------------------------------------------------------|----------------|----------------|
|                       | Power bhp (kWb)                                                 | 1,900 (1,416)  | 1,583 (1,181)  |
|                       | BSFC (LHV) Btu/bhp-hr (kJ/kWh)                                  | 7,63 (9,993)   | 6,913 (9,780)  |
|                       | Fuel Consumption Btu/hr x 1000 (kW)                             | 13,385 (3,923) | 10,962 (3,213) |
| Engine-Out Emissions  | NOx g/bhp-hr (mg/Nm <sup>3</sup> @ 5% O <sub>2</sub> )          | 10.9 (4,680)   | 10.8 (4,748)   |
|                       | CO g/bhp-hr (mg/Nm <sup>3</sup> @ 5% O <sub>2</sub> )           | 9.2 (3,950)    | 7.6 (3,340)    |
|                       | NMHC g/bhp-hr (mg/Nm <sup>3</sup> @ 5% O <sub>2</sub> )         | 0.11 (48)      | 0.11 (48)      |
|                       | THC g/bhp-hr (mg/Nm <sup>3</sup> @ 5% O <sub>2</sub> )          | 0.4 (172)      | 0.5 (220)      |
|                       | Formaldehyde g/bhp-hr (mg/nm <sup>3</sup> @ 5% O <sub>2</sub> ) | 0.05 (19)      |                |
| Heat Balance          | Heat to Jacket Water Btu/hr x 1000 (kW)                         | 3,512 (1,029)  | 2,947 (864)    |
|                       | Heat to Lube Oil Btu/hr x 1000 (kW)                             | 518 (152)      | 395 (116)      |
|                       | Heat to Intercooler Btu/hr x 1000 (kW)                          | 517 (152)      | 356 (104)      |
|                       | Heat to Radiation Btu/hr x 1000 (kW)                            | 731 (214)      | 636 (186)      |
|                       | Total Exhaust Heat Btu/hr x 1000 (kW)                           | 3,612 (1,059)  | 2,860 (838)    |
| Intake/Exhaust System | Induction Air Flow scfm (Nm <sup>3</sup> /hr)                   | 2,391 (3,601)  | 1,958 (2,949)  |
|                       | Exhaust Flow lb/hr (kg/hr)                                      | 11,622 (5,272) | 9,521 (4,319)  |
|                       | Exhaust Temperature °F (°C)                                     | 1,108 (598)    | 1,080 (582)    |

All data according to full load and subject to technical development and modification.

Data based on commercial quality natural gas, 100 °F ambient temperature and 850 ft elevation. Contact your local Waukesha representative for site specific technical data. Fuel consumption and BSFC data based on fuel LHV with a tolerance per ISO 3046/1 of -0/+5%. Heat balance and intake/exhaust data is nominal.

Consult your local Waukesha representative for system application assistance. The manufacturer reserves the right to change or modify without notice, the design or equipment specifications as herein set forth without incurring any obligation either with respect to equipment previously sold or in the process of construction except where otherwise specifically guaranteed by the manufacturer.

INNIO\* is a leading solutions provider of gas engines, power equipment, a digital platform and related services for power generation and gas compression at or near the point of use. With our Jenbacher\* and Waukesha\* product brands, INNIO pushes beyond the possible and looks boldly toward tomorrow. Our diverse portfolio of reliable, economical and sustainable industrial gas engines generates 200 kW to 10 MW of power for numerous industries globally. We can provide life cycle support to the more than 48,000 delivered gas engines worldwide. And, backed by our service network in more than 100 countries, INNIO connects with you locally for rapid response to your service needs. Headquartered in Jenbach, Austria, the business also has primary operations in Welland, Ontario, Canada, and Waukesha, Wisconsin, US.

IWK-119054-EN

\*Indicates a trademark

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**Prepared For:**Brandon Pearson  
Harvest Midstream**Date:** September 16, 2022**APPLICATION INFORMATION****DRIVER**

Make: WAUKESHA  
Model: L7044GSI S5  
Horsepower: 1,500  
RPM: 1,200  
Compression Ratio: 9.7  
Exhaust Flow Rate: 6,429  
Exhaust Temperature: 1,165  
Fuel: Fuel Analysis  
Annual Operating Hours: 8,760

**UNCONTROLLED EMISSIONS DATA**

|                   | <u>g/bhp-hr</u> | <u>lb/hr</u> | <u>Tons/Year</u> |
|-------------------|-----------------|--------------|------------------|
| NO <sub>x</sub> : | 11.67           | 38.59        | 169.03           |
| CO:               | 8.94            | 29.56        | 129.49           |
| THC:              | 0.60            | 1.98         | 8.69             |
| NMHC:             | 0.02            | 0.06         | 0.25             |
| NMNEHC:           | 0.01            | 0.04         | 0.16             |
| HCHO:             | 0.05            | 0.17         | 0.72             |
| Oxygen:           | 0.30%           |              |                  |

**CATALYST ELEMENT**

Model: RT-2415-T  
Catalyst Type: NSCR, Standard Precious Metals Group  
Substrate Type: Brazed  
Element Size: Rectangle, 24 x 15 x 3.5  
Element Quantity: 3

**POST CATALYST EMISSIONS DATA**

|                   | <u>g/bhp-hr</u> | <u>lb/hr</u> | <u>Tons/Year</u> |
|-------------------|-----------------|--------------|------------------|
| NO <sub>x</sub> : | < 0.50          | 1.16         | 5.07             |
| CO                | < 0.36          | 1.19         | 5.21             |
| VOC               | < 0.01          | 0.03         | 0.14             |
| HCHO              | < 0.01          | 0.03         | 0.14             |

Catalyst Temperature: 932 °F

**\*\*POST CATALYST EMISSIONS ARE ONLY GUARANTEED  
FOR CATALYST ELEMENTS SUPPLIED BY EMIT**



## **WARRANTY**

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Catalyst performance using an EMIT Air/Fuel ratio controller is dependent upon properly defined set-points, variable with engine and fuel gas composition. Air/fuel ratio controller performance is guaranteed, but not limited, to fuel gas with an HHV content of 1400 BTU/SCF.

Catalyst performance will be guaranteed for a period of 2 years from installation, or 17,000 operating hours, whichever comes first. The catalyst shall be operated with an automatic air/fuel ratio controller. The performance guarantee shall not cover the effects of excessive ash masking due to operation at low load, improper engine maintenance, or inappropriate lubrication oil. The performance guarantee shall not cover the effects of continuous engine misfires (cylinder or ignition) exposing the catalyst to excessive exothermic reaction temperatures.

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The catalyst must not be exposed to the following known poisoning agents, including: iron, nickel, sodium, chromium, arsenic, zinc, lead, phosphorous, silicon, potassium, magnesium, copper, tin, and mercury. Total poison concentrations in the gas are limited to 0.3 ppm.

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

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

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

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

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

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

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

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

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

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

<sup>d</sup> Based on 99.5% conversion of the fuel carbon to CO<sub>2</sub>. CO<sub>2</sub> [lb/MMBtu] = (3.67)(%CON)(C)(D)(1/h), where %CON = percent conversion of fuel carbon to CO<sub>2</sub>, C = carbon content of fuel by weight (0.75), D = density of fuel, 4.1 E+04 lb/10<sup>6</sup> scf, and

- h = heating value of natural gas (assume 1020 Btu/scf at 60°F).
- <sup>e</sup> Based on 100% conversion of fuel sulfur to SO<sub>2</sub>. Assumes sulfur content in natural gas of 2,000 gr/10<sup>6</sup> scf.
- <sup>f</sup> Emission factor for TOC is based on measured emission levels from 22 source tests.
- <sup>g</sup> Emission factor for methane is determined by subtracting the VOC and ethane emission factors from the TOC emission factor. Measured emission factor for methane compares well with the calculated emission factor, 1.31 lb/MMBtu vs. 1.25 lb/MMBtu, respectively.
- <sup>h</sup> VOC emission factor is based on the sum of the emission factors for all speciated organic compounds less ethane and methane.
- <sup>i</sup> Considered  $\leq 1 \mu\text{m}$  in aerodynamic diameter. Therefore, for filterable PM emissions, PM<sub>10</sub>(filterable) = PM<sub>2.5</sub>(filterable).
- <sup>j</sup> PM Condensable = PM Condensable Inorganic + PM-Condensable Organic
- <sup>k</sup> Hazardous Air Pollutant as defined by Section 112(b) of the Clean Air Act.
- <sup>l</sup> For lean burn engines, aldehyde emissions quantification using CARB 430 may reflect interference with the sampling compounds due to the nitrogen concentration in the stack. The presented emission factor is based on FTIR measurements. Emissions data based on CARB 430 are available in the background report.

TABLE 1.4-2. EMISSION FACTORS FOR CRITERIA POLLUTANTS AND GREENHOUSE GASES FROM NATURAL GAS COMBUSTION<sup>a</sup>

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

<sup>a</sup> Reference 11. Units are in pounds of pollutant per million standard cubic feet of natural gas fired. Data are for all natural gas combustion sources. To convert from lb/10<sup>6</sup> scf to kg/10<sup>6</sup> m<sup>3</sup>, multiply by 16. To convert from lb/10<sup>6</sup> scf to 1b/MMBtu, divide by 1,020. The emission factors in this table may be converted to other natural gas heating values by multiplying the given emission factor by the ratio of the specified heating value to this average heating value. TOC = Total Organic Compounds.

VOC = Volatile Organic Compounds.

<sup>b</sup> Based on approximately 100% conversion of fuel carbon to CO<sub>2</sub>. CO<sub>2</sub>[lb/10<sup>6</sup> scf] = (3.67) (CON) (C)(D), where CON = fractional conversion of fuel carbon to CO<sub>2</sub>, C = carbon content of fuel by weight (0.76), and D = density of fuel, 4.2x10<sup>4</sup> lb/10<sup>6</sup> scf.

<sup>c</sup> All PM (total, condensable, and filterable) is assumed to be less than 1.0 micrometer in diameter. Therefore, the PM emission factors presented here may be used to estimate PM<sub>10</sub>, PM<sub>2.5</sub> or PM<sub>1</sub> emissions. Total PM is the sum of the filterable PM and condensable PM. Condensable PM is the particulate matter collected using EPA Method 202 (or equivalent). Filterable PM is the particulate matter collected on, or prior to, the filter of an EPA Method 5 (or equivalent) sampling train.

<sup>d</sup> Based on 100% conversion of fuel sulfur to SO<sub>2</sub>.

Assumes sulfur content is natural gas of 2,000 grains/10<sup>6</sup> scf. The SO<sub>2</sub> emission factor in this table can be converted to other natural gas sulfur contents by multiplying the SO<sub>2</sub> emission factor by the ratio of the site-specific sulfur content (grains/10<sup>6</sup> scf) to 2,000 grains/10<sup>6</sup> scf.

## GRI-GLYCalc VERSION 4.0 - SUMMARY OF INPUT VALUES

Case Name: 32-8 #2 CDP 20 mmscfd dehy PTE emissions  
 File Name: P:\Harvest Midstream\New Mexico\32-8#2\202508 Sig  
 Revision\Dehys\Dehydrator 10-12,15-16.ddf  
 Date: August 27, 2025

## DESCRIPTION:

Description: Units 10, 11, 12, 15, 16  
 20 mmscfd & 2.9 gpm

Annual Hours of Operation: 8760.0 hours/yr

## WET GAS:

Temperature: 85.00 deg. F  
 Pressure: 900.00 psig  
 Wet Gas Water Content: Saturated

| Component      | Conc.<br>(vol %) |
|----------------|------------------|
| Carbon Dioxide | 4.4513           |
| Nitrogen       | 0.0949           |
| Methane        | 94.9234          |
| Ethane         | 0.3946           |
| Propane        | 0.1130           |
| Isobutane      | 0.0062           |
| n-Butane       | 0.0078           |
| Isopentane     | 0.0034           |
| n-Pentane      | 0.0028           |
| Cyclopentane   | 0.0001           |
| n-Hexane       | 0.0001           |
| Cyclohexane    | 0.0002           |
| Heptanes       | 0.0003           |

## DRY GAS:

Flow Rate: 18.0 MMSCF/day  
 Water Content: 1.8 lbs. H2O/MMSCF

## LEAN GLYCOL:

Glycol Type: TEG  
 Water Content: 1.5 wt% H2O  
 Flow Rate: 2.9 gpm

## PUMP:

Glycol Pump Type: Gas Injection  
 Gas Injection Pump Volume Ratio: 0.080 acfm gas/gpm glycol

## FLASH TANK:

Flash Control: Combustion device  
Flash Control Efficiency: 95.00 %  
Temperature: 70.0 deg. F  
Pressure: 65.0 psig

REGENERATOR OVERHEADS CONTROL DEVICE:

---

Control Device: Condenser  
Temperature: 55.0 deg. F  
Pressure: 14.7 psia  
  
Control Device: Combustion Device  
Destruction Efficiency: 95.0 %  
Excess Oxygen: 5.0 %  
Ambient Air Temperature: 68.0 deg. F

Case Name: 32-8 #2 CDP 20 mmscfd dehy PTE emissions  
 File Name: P:\Harvest Midstream\New Mexico\32-8#2\202508 Sig  
 Revision\Dehys\Dehydrator 10-12,15-16.ddf  
 Date: August 27, 2025

## DESCRIPTION:

Description: Units 10, 11, 12, 15, 16  
 20 mmscfd & 2.9 gpm

Annual Hours of Operation: 8760.0 hours/yr

## EMISSIONS REPORTS:

## CONTROLLED REGENERATOR EMISSIONS

| Component                   | lbs/hr  | lbs/day | tons/yr |
|-----------------------------|---------|---------|---------|
| Methane                     | 0.0215  | 0.515   | 0.0940  |
| Ethane                      | 0.0009  | 0.021   | 0.0039  |
| Propane                     | 0.0011  | 0.025   | 0.0046  |
| Isobutane                   | 0.0001  | 0.004   | 0.0006  |
| n-Butane                    | 0.0003  | 0.007   | 0.0012  |
| Isopentane                  | 0.0002  | 0.004   | 0.0008  |
| n-Pentane                   | 0.0002  | 0.005   | 0.0010  |
| Cyclopentane                | <0.0001 | 0.001   | 0.0002  |
| n-Hexane                    | <0.0001 | 0.001   | 0.0001  |
| Cyclohexane                 | 0.0002  | 0.006   | 0.0010  |
| Heptanes                    | 0.0002  | 0.004   | 0.0007  |
| Total Emissions             | 0.0247  | 0.593   | 0.1083  |
| Total Hydrocarbon Emissions | 0.0247  | 0.593   | 0.1083  |
| Total VOC Emissions         | 0.0024  | 0.057   | 0.0104  |
| Total HAP Emissions         | <0.0001 | 0.001   | 0.0001  |

## UNCONTROLLED REGENERATOR EMISSIONS

| Component                   | lbs/hr | lbs/day | tons/yr |
|-----------------------------|--------|---------|---------|
| Methane                     | 0.4295 | 10.307  | 1.8811  |
| Ethane                      | 0.0179 | 0.429   | 0.0783  |
| Propane                     | 0.0212 | 0.510   | 0.0930  |
| Isobutane                   | 0.0030 | 0.071   | 0.0129  |
| n-Butane                    | 0.0057 | 0.136   | 0.0249  |
| Isopentane                  | 0.0037 | 0.089   | 0.0162  |
| n-Pentane                   | 0.0044 | 0.106   | 0.0193  |
| Cyclopentane                | 0.0010 | 0.023   | 0.0042  |
| n-Hexane                    | 0.0004 | 0.010   | 0.0018  |
| Cyclohexane                 | 0.0047 | 0.112   | 0.0204  |
| Heptanes                    | 0.0034 | 0.081   | 0.0148  |
| Total Emissions             | 0.4948 | 11.874  | 2.1671  |
| Total Hydrocarbon Emissions | 0.4948 | 11.874  | 2.1671  |
| Total VOC Emissions         | 0.0474 | 1.138   | 0.2077  |



|                             |         |        |        |
|-----------------------------|---------|--------|--------|
| Cyclohexane                 | 0.0003  | 0.007  | 0.0013 |
| Heptanes                    | 0.0002  | 0.006  | 0.0010 |
| -----                       |         |        |        |
| Total Emissions             | 2.1092  | 50.621 | 9.2384 |
| -----                       |         |        |        |
| Total Hydrocarbon Emissions | 2.1092  | 50.621 | 9.2384 |
| Total VOC Emissions         | 0.0143  | 0.344  | 0.0627 |
| Total HAP Emissions         | <0.0001 | 0.001  | 0.0002 |

## COMBINED REGENERATOR VENT/FLASH GAS EMISSION CONTROL REPORT:

| Component                   | Uncontrolled<br>tons/yr | Controlled<br>tons/yr | % Reduction |
|-----------------------------|-------------------------|-----------------------|-------------|
| -----                       |                         |                       |             |
| Methane                     | 181.7279                | 9.0863                | 95.00       |
| Ethane                      | 1.7863                  | 0.0893                | 95.00       |
| Propane                     | 0.8935                  | 0.0447                | 95.00       |
| Isobutane                   | 0.0758                  | 0.0038                | 95.00       |
| n-Butane                    | 0.1109                  | 0.0055                | 95.00       |
| -----                       |                         |                       |             |
| Isopentane                  | 0.0602                  | 0.0030                | 95.00       |
| n-Pentane                   | 0.0585                  | 0.0029                | 95.00       |
| Cyclopentane                | 0.0063                  | 0.0003                | 95.01       |
| n-Hexane                    | 0.0036                  | 0.0002                | 95.00       |
| Cyclohexane                 | 0.0252                  | 0.0013                | 95.01       |
| Heptanes                    | 0.0205                  | 0.0010                | 95.00       |
| -----                       |                         |                       |             |
| Total Emissions             | 184.7686                | 9.2384                | 95.00       |
| -----                       |                         |                       |             |
| Total Hydrocarbon Emissions | 184.7686                | 9.2384                | 95.00       |
| Total VOC Emissions         | 1.2545                  | 0.0627                | 95.00       |
| Total HAP Emissions         | 0.0036                  | 0.0002                | 95.00       |

## EQUIPMENT REPORTS:

## CONDENSER AND COMBUSTION DEVICE

Condenser Outlet Temperature: 55.00 deg. F  
 Condenser Pressure: 14.70 psia  
 Condenser Duty: 2.83e-003 MM BTU/hr  
 Produced Water: 1.99 bbls/day  
 Ambient Temperature: 68.00 deg. F  
 Excess Oxygen: 5.00 %  
 Combustion Efficiency: 95.00 %  
 Supplemental Fuel Requirement: 2.83e-003 MM BTU/hr

| Component    | Emitted | Destroyed |
|--------------|---------|-----------|
| -----        |         |           |
| Methane      | 5.00%   | 95.00%    |
| Ethane       | 5.00%   | 95.00%    |
| Propane      | 5.00%   | 95.00%    |
| Isobutane    | 5.00%   | 95.00%    |
| n-Butane     | 5.00%   | 95.00%    |
| -----        |         |           |
| Isopentane   | 5.00%   | 95.00%    |
| n-Pentane    | 5.00%   | 95.00%    |
| Cyclopentane | 4.98%   | 95.02%    |

|             |       |        |
|-------------|-------|--------|
| n-Hexane    | 5.00% | 95.00% |
| Cyclohexane | 4.99% | 95.01% |
| Heptanes    | 5.00% | 95.00% |

## ABSORBER

-----

Calculated Absorber Stages: 1.33  
 Specified Dry Gas Dew Point: 1.80 lbs. H2O/MMSCF  
 Temperature: 85.0 deg. F  
 Pressure: 900.0 psig  
 Dry Gas Flow Rate: 18.0000 MMSCF/day  
 Glycol Losses with Dry Gas: 0.1053 lb/hr  
 Wet Gas Water Content: Saturated  
 Calculated Wet Gas Water Content: 40.49 lbs. H2O/MMSCF  
 Calculated Lean Glycol Recirc. Ratio: 6.00 gal/lb H2O

| Component      | Remaining<br>in Dry Gas | Absorbed<br>in Glycol |
|----------------|-------------------------|-----------------------|
| Water          | 4.44%                   | 95.56%                |
| Carbon Dioxide | 99.77%                  | 0.23%                 |
| Nitrogen       | 99.98%                  | 0.02%                 |
| Methane        | 99.98%                  | 0.02%                 |
| Ethane         | 99.95%                  | 0.05%                 |
| Propane        | 99.92%                  | 0.08%                 |
| Isobutane      | 99.88%                  | 0.12%                 |
| n-Butane       | 99.84%                  | 0.16%                 |
| Isopentane     | 99.84%                  | 0.16%                 |
| n-Pentane      | 99.79%                  | 0.21%                 |
| Cyclopentane   | 99.08%                  | 0.92%                 |
| n-Hexane       | 99.64%                  | 0.36%                 |
| Cyclohexane    | 98.39%                  | 1.61%                 |
| Heptanes       | 99.33%                  | 0.67%                 |

## FLASH TANK

-----

Flash Control: Combustion device  
 Flash Control Efficiency: 95.00 %  
 Flash Temperature: 70.0 deg. F  
 Flash Pressure: 65.0 psig

| Component      | Left in<br>Glycol | Removed in<br>Flash Gas |
|----------------|-------------------|-------------------------|
| Water          | 99.97%            | 0.03%                   |
| Carbon Dioxide | 16.64%            | 83.36%                  |
| Nitrogen       | 1.00%             | 99.00%                  |
| Methane        | 1.04%             | 98.96%                  |
| Ethane         | 4.38%             | 95.62%                  |
| Propane        | 10.41%            | 89.59%                  |
| Isobutane      | 17.07%            | 82.93%                  |
| n-Butane       | 22.45%            | 77.55%                  |
| Isopentane     | 27.18%            | 72.82%                  |
| n-Pentane      | 33.25%            | 66.75%                  |
| Cyclopentane   | 66.22%            | 33.78%                  |
| n-Hexane       | 51.56%            | 48.44%                  |
| Cyclohexane    | 81.64%            | 18.36%                  |
| Heptanes       | 72.17%            | 27.83%                  |

## REGENERATOR

No Stripping Gas used in regenerator.

| Component      | Remaining<br>in Glycol | Distilled<br>Overhead |
|----------------|------------------------|-----------------------|
| Water          | 45.73%                 | 54.27%                |
| Carbon Dioxide | 0.00%                  | 100.00%               |
| Nitrogen       | 0.00%                  | 100.00%               |
| Methane        | 0.00%                  | 100.00%               |
| Ethane         | 0.00%                  | 100.00%               |
| Propane        | 0.00%                  | 100.00%               |
| Isobutane      | 0.00%                  | 100.00%               |
| n-Butane       | 0.00%                  | 100.00%               |
| Isopentane     | 1.05%                  | 98.95%                |
| n-Pentane      | 0.95%                  | 99.05%                |
| Cyclopentane   | 0.67%                  | 99.33%                |
| n-Hexane       | 0.72%                  | 99.28%                |
| Cyclohexane    | 3.65%                  | 96.35%                |
| Heptanes       | 0.59%                  | 99.41%                |

## STREAM REPORTS:

## WET GAS STREAM

Temperature: 85.00 deg. F  
 Pressure: 914.70 psia  
 Flow Rate: 7.51e+005 scfh

| Component        | Conc.<br>(vol%) | Loading<br>(lb/hr) |
|------------------|-----------------|--------------------|
| Water            | 8.53e-002       | 3.04e+001          |
| Carbon Dioxide   | 4.45e+000       | 3.87e+003          |
| Nitrogen         | 9.48e-002       | 5.26e+001          |
| Methane          | 9.48e+001       | 3.01e+004          |
| Ethane           | 3.94e-001       | 2.35e+002          |
| Propane          | 1.13e-001       | 9.85e+001          |
| Isobutane        | 6.19e-003       | 7.12e+000          |
| n-Butane         | 7.79e-003       | 8.96e+000          |
| Isopentane       | 3.40e-003       | 4.85e+000          |
| n-Pentane        | 2.80e-003       | 3.99e+000          |
| Cyclopentane     | 9.99e-005       | 1.39e-001          |
| n-Hexane         | 9.99e-005       | 1.70e-001          |
| Cyclohexane      | 2.00e-004       | 3.33e-001          |
| Heptanes         | 3.00e-004       | 5.94e-001          |
| Total Components | 100.00          | 3.44e+004          |

## DRY GAS STREAM

Temperature: 85.00 deg. F  
 Pressure: 914.70 psia  
 Flow Rate: 7.50e+005 scfh

| Component        | Conc.<br>(vol%) | Loading<br>(lb/hr) |
|------------------|-----------------|--------------------|
| -----            | -----           | -----              |
| Water            | 3.79e-003       | 1.35e+000          |
| Carbon Dioxide   | 4.44e+000       | 3.86e+003          |
| Nitrogen         | 9.49e-002       | 5.25e+001          |
| Methane          | 9.49e+001       | 3.01e+004          |
| Ethane           | 3.94e-001       | 2.34e+002          |
| Propane          | 1.13e-001       | 9.84e+001          |
| Isobutane        | 6.19e-003       | 7.12e+000          |
| n-Butane         | 7.79e-003       | 8.95e+000          |
| Isopentane       | 3.40e-003       | 4.84e+000          |
| n-Pentane        | 2.79e-003       | 3.99e+000          |
| Cyclopentane     | 9.91e-005       | 1.37e-001          |
| n-Hexane         | 9.97e-005       | 1.70e-001          |
| Cyclohexane      | 1.97e-004       | 3.27e-001          |
| Heptanes         | 2.98e-004       | 5.90e-001          |
| -----            | -----           | -----              |
| Total Components | 100.00          | 3.44e+004          |

## LEAN GLYCOL STREAM

-----

Temperature: 85.00 deg. F  
Flow Rate: 2.90e+000 gpm

| Component        | Conc.<br>(wt%) | Loading<br>(lb/hr) |
|------------------|----------------|--------------------|
| -----            | -----          | -----              |
| TEG              | 9.85e+001      | 1.61e+003          |
| Water            | 1.50e+000      | 2.45e+001          |
| Carbon Dioxide   | 5.50e-011      | 8.98e-010          |
| Nitrogen         | 5.62e-014      | 9.18e-013          |
| Methane          | 9.59e-018      | 1.57e-016          |
| Ethane           | 3.49e-009      | 5.70e-008          |
| Propane          | 2.08e-010      | 3.40e-009          |
| Isobutane        | 1.58e-011      | 2.58e-010          |
| n-Butane         | 2.18e-011      | 3.56e-010          |
| Isopentane       | 2.40e-006      | 3.92e-005          |
| n-Pentane        | 2.60e-006      | 4.25e-005          |
| Cyclopentane     | 3.93e-007      | 6.41e-006          |
| n-Hexane         | 1.88e-007      | 3.07e-006          |
| Cyclohexane      | 1.08e-005      | 1.77e-004          |
| Heptanes         | 1.22e-006      | 1.99e-005          |
| -----            | -----          | -----              |
| Total Components | 100.00         | 1.63e+003          |

## RICH GLYCOL AND PUMP GAS STREAM

-----

Temperature: 85.00 deg. F  
Pressure: 914.70 psia  
Flow Rate: 3.08e+000 gpm  
NOTE: Stream has more than one phase.

| Component      | Conc.<br>(wt%) | Loading<br>(lb/hr) |
|----------------|----------------|--------------------|
| -----          | -----          | -----              |
| TEG            | 9.36e+001      | 1.61e+003          |
| Water          | 3.12e+000      | 5.36e+001          |
| Carbon Dioxide | 7.98e-001      | 1.37e+001          |
| Nitrogen       | 4.27e-003      | 7.34e-002          |
| Methane        | 2.42e+000      | 4.15e+001          |

|                  |           |           |
|------------------|-----------|-----------|
| Ethane           | 2.37e-002 | 4.08e-001 |
| Propane          | 1.19e-002 | 2.04e-001 |
| Isobutane        | 1.01e-003 | 1.73e-002 |
| n-Butane         | 1.47e-003 | 2.53e-002 |
| Isopentane       | 8.02e-004 | 1.38e-002 |
| n-Pentane        | 7.79e-004 | 1.34e-002 |
| Cyclopentane     | 8.45e-005 | 1.45e-003 |
| n-Hexane         | 4.78e-005 | 8.22e-004 |
| Cyclohexane      | 3.46e-004 | 5.94e-003 |
| Heptanes         | 2.74e-004 | 4.71e-003 |
| -----            |           |           |
| Total Components | 100.00    | 1.72e+003 |

## FLASH TANK OFF GAS STREAM

-----

Temperature: 70.00 deg. F  
Pressure: 79.70 psia  
Flow Rate: 1.08e+003 scfh

| Component        | Conc.<br>(vol%) | Loading<br>(lb/hr) |
|------------------|-----------------|--------------------|
| -----            |                 |                    |
| Water            | 3.18e-002       | 1.63e-002          |
| Carbon Dioxide   | 9.14e+000       | 1.14e+001          |
| Nitrogen         | 9.13e-002       | 7.27e-002          |
| Methane          | 9.01e+001       | 4.11e+001          |
| Ethane           | 4.56e-001       | 3.90e-001          |
| Propane          | 1.46e-001       | 1.83e-001          |
| Isobutane        | 8.69e-003       | 1.44e-002          |
| n-Butane         | 1.19e-002       | 1.96e-002          |
| Isopentane       | 4.90e-003       | 1.00e-002          |
| n-Pentane        | 4.36e-003       | 8.94e-003          |
| Cyclopentane     | 2.46e-004       | 4.90e-004          |
| n-Hexane         | 1.63e-004       | 3.98e-004          |
| Cyclohexane      | 4.56e-004       | 1.09e-003          |
| Heptanes         | 4.60e-004       | 1.31e-003          |
| -----            |                 |                    |
| Total Components | 100.00          | 5.32e+001          |

## FLASH TANK GLYCOL STREAM

-----

Temperature: 70.00 deg. F  
Flow Rate: 2.96e+000 gpm

| Component      | Conc.<br>(wt%) | Loading<br>(lb/hr) |
|----------------|----------------|--------------------|
| -----          |                |                    |
| TEG            | 9.66e+001      | 1.61e+003          |
| Water          | 3.22e+000      | 5.36e+001          |
| Carbon Dioxide | 1.37e-001      | 2.28e+000          |
| Nitrogen       | 4.40e-005      | 7.32e-004          |
| Methane        | 2.58e-002      | 4.29e-001          |
| Ethane         | 1.07e-003      | 1.79e-002          |
| Propane        | 1.28e-003      | 2.12e-002          |
| Isobutane      | 1.78e-004      | 2.95e-003          |
| n-Butane       | 3.41e-004      | 5.68e-003          |
| Isopentane     | 2.25e-004      | 3.75e-003          |
| n-Pentane      | 2.67e-004      | 4.45e-003          |
| Cyclopentane   | 5.78e-005      | 9.61e-004          |
| n-Hexane       | 2.54e-005      | 4.24e-004          |

|                  |           |           |
|------------------|-----------|-----------|
| Cyclohexane      | 2.91e-004 | 4.85e-003 |
| Heptanes         | 2.04e-004 | 3.40e-003 |
| -----            |           |           |
| Total Components | 100.00    | 1.66e+003 |

## FLASH GAS EMISSIONS

-----  
Flow Rate: 2.95e+003 scfh  
Control Method: Combustion Device  
Control Efficiency: 95.00

| Component        | Conc.<br>(vol%) | Loading<br>(lb/hr) |
|------------------|-----------------|--------------------|
| -----            |                 |                    |
| Water            | 6.32e+001       | 8.86e+001          |
| Carbon Dioxide   | 3.51e+001       | 1.20e+002          |
| Nitrogen         | 3.33e-002       | 7.27e-002          |
| Methane          | 1.64e+000       | 2.05e+000          |
| Ethane           | 8.33e-003       | 1.95e-002          |
| Propane          | 2.66e-003       | 9.14e-003          |
| Isobutane        | 1.59e-004       | 7.18e-004          |
| n-Butane         | 2.17e-004       | 9.81e-004          |
| Isopentane       | 8.93e-005       | 5.02e-004          |
| n-Pentane        | 7.95e-005       | 4.47e-004          |
| Cyclopentane     | 4.49e-006       | 2.45e-005          |
| n-Hexane         | 2.97e-006       | 1.99e-005          |
| Cyclohexane      | 8.32e-006       | 5.45e-005          |
| Heptanes         | 8.40e-006       | 6.55e-005          |
| -----            |                 |                    |
| Total Components | 100.00          | 2.11e+002          |

## REGENERATOR OVERHEADS STREAM

-----  
Temperature: 212.00 deg. F  
Pressure: 14.70 psia  
Flow Rate: 6.43e+002 scfh

| Component        | Conc.<br>(vol%) | Loading<br>(lb/hr) |
|------------------|-----------------|--------------------|
| -----            |                 |                    |
| Water            | 9.53e+001       | 2.91e+001          |
| Carbon Dioxide   | 3.06e+000       | 2.28e+000          |
| Nitrogen         | 1.54e-003       | 7.32e-004          |
| Methane          | 1.58e+000       | 4.29e-001          |
| Ethane           | 3.51e-002       | 1.79e-002          |
| Propane          | 2.84e-002       | 2.12e-002          |
| Isobutane        | 3.00e-003       | 2.95e-003          |
| n-Butane         | 5.77e-003       | 5.68e-003          |
| Isopentane       | 3.03e-003       | 3.71e-003          |
| n-Pentane        | 3.61e-003       | 4.41e-003          |
| Cyclopentane     | 8.04e-004       | 9.55e-004          |
| n-Hexane         | 2.88e-004       | 4.21e-004          |
| Cyclohexane      | 3.27e-003       | 4.67e-003          |
| Heptanes         | 1.99e-003       | 3.38e-003          |
| -----            |                 |                    |
| Total Components | 100.00          | 3.18e+001          |

## CONDENSER PRODUCED WATER STREAM

-----  
Temperature: 55.00 deg. F

Flow Rate: 5.81e-002 gpm

| Component        | Conc.<br>(wt%) | Loading<br>(lb/hr) | (ppm)    |
|------------------|----------------|--------------------|----------|
| Water            | 9.99e+001      | 2.90e+001          | 998643.  |
| Carbon Dioxide   | 1.35e-001      | 3.91e-002          | 1346.    |
| Nitrogen         | 7.27e-007      | 2.12e-007          | 0.       |
| Methane          | 9.69e-004      | 2.82e-004          | 10.      |
| Ethane           | 5.95e-005      | 1.73e-005          | 1.       |
| Propane          | 3.49e-005      | 1.02e-005          | 0.       |
| Isobutane        | 2.90e-006      | 8.42e-007          | 0.       |
| n-Butane         | 8.04e-006      | 2.34e-006          | 0.       |
| Isopentane       | 4.11e-006      | 1.20e-006          | 0.       |
| n-Pentane        | 5.56e-006      | 1.62e-006          | 0.       |
| Cyclopentane     | 1.08e-005      | 3.13e-006          | 0.       |
| n-Hexane         | 5.12e-007      | 1.49e-007          | 0.       |
| Cyclohexane      | 4.05e-005      | 1.18e-005          | 0.       |
| Heptanes         | 2.52e-006      | 7.34e-007          | 0.       |
| Total Components | 100.00         | 2.91e+001          | 1000000. |

## CONDENSER RECOVERED OIL STREAM

Temperature: 55.00 deg. F

The calculated flow rate is less than 0.000001 #mol/hr.  
The stream flow rate and composition are not reported.

## CONDENSER VENT STREAM

Temperature: 55.00 deg. F

Pressure: 14.70 psia

Flow Rate: 3.05e+001 scfh

| Component        | Conc.<br>(vol%) | Loading<br>(lb/hr) |
|------------------|-----------------|--------------------|
| Water            | 1.49e+000       | 2.16e-002          |
| Carbon Dioxide   | 6.34e+001       | 2.24e+000          |
| Nitrogen         | 3.25e-002       | 7.32e-004          |
| Methane          | 3.33e+001       | 4.29e-001          |
| Ethane           | 7.39e-001       | 1.79e-002          |
| Propane          | 5.99e-001       | 2.12e-002          |
| Isobutane        | 6.32e-002       | 2.95e-003          |
| n-Butane         | 1.22e-001       | 5.68e-003          |
| Isopentane       | 6.39e-002       | 3.71e-003          |
| n-Pentane        | 7.60e-002       | 4.41e-003          |
| Cyclopentane     | 1.69e-002       | 9.52e-004          |
| n-Hexane         | 6.07e-003       | 4.20e-004          |
| Cyclohexane      | 6.88e-002       | 4.66e-003          |
| Heptanes         | 4.19e-002       | 3.38e-003          |
| Total Components | 100.00          | 2.76e+000          |

## COMBUSTION DEVICE OFF GAS STREAM

Temperature: 1000.00 deg. F

Pressure: 14.70 psia

Flow Rate: 5.35e-001 scfh

| Component        | Conc.<br>(vol%) | Loading<br>(lb/hr) |
|------------------|-----------------|--------------------|
| -----            | -----           | -----              |
| Methane          | 9.49e+001       | 2.15e-002          |
| Ethane           | 2.11e+000       | 8.93e-004          |
| Propane          | 1.71e+000       | 1.06e-003          |
| Isobutane        | 1.80e-001       | 1.48e-004          |
| n-Butane         | 3.47e-001       | 2.84e-004          |
|                  |                 |                    |
| Isopentane       | 1.82e-001       | 1.85e-004          |
| n-Pentane        | 2.17e-001       | 2.20e-004          |
| Cyclopentane     | 4.81e-002       | 4.76e-005          |
| n-Hexane         | 1.73e-002       | 2.10e-005          |
| Cyclohexane      | 1.96e-001       | 2.33e-004          |
|                  |                 |                    |
| Heptanes         | 1.20e-001       | 1.69e-004          |
| -----            | -----           | -----              |
| Total Components | 100.00          | 2.47e-002          |

## GRI-GLYCalc VERSION 4.0 - SUMMARY OF INPUT VALUES

Case Name: 32-8 #2 CDP 12 mmscfd dehy PTE emissions  
 File Name: P:\Harvest Midstream\New Mexico\32-8#2\202508 Sig  
 Revision\Dehys\Dehydrator 13-14.ddf  
 Date: August 27, 2025

## DESCRIPTION:

Description: Units 13 & 14  
 12 mmscfd & 1.7 gpm

Annual Hours of Operation: 8760.0 hours/yr

## WET GAS:

Temperature: 85.00 deg. F  
 Pressure: 900.00 psig  
 Wet Gas Water Content: Saturated

| Component      | Conc.<br>(vol %) |
|----------------|------------------|
| Carbon Dioxide | 4.4513           |
| Nitrogen       | 0.0949           |
| Methane        | 94.9234          |
| Ethane         | 0.3946           |
| Propane        | 0.1130           |
| Isobutane      | 0.0062           |
| n-Butane       | 0.0078           |
| Isopentane     | 0.0034           |
| n-Pentane      | 0.0028           |
| Cyclopentane   | 0.0001           |
| n-Hexane       | 0.0001           |
| Cyclohexane    | 0.0002           |
| Heptanes       | 0.0003           |

## DRY GAS:

Flow Rate: 12.0 MMSCF/day  
 Water Content: 1.8 lbs. H2O/MMSCF

## LEAN GLYCOL:

Glycol Type: TEG  
 Water Content: 1.5 wt% H2O  
 Flow Rate: 1.2 gpm

## PUMP:

Glycol Pump Type: Gas Injection  
 Gas Injection Pump Volume Ratio: 0.080 acfm gas/gpm glycol

## FLASH TANK:

Flash Control: Combustion device  
Flash Control Efficiency: 95.00 %  
Temperature: 67.0 deg. F  
Pressure: 65.0 psig

Case Name: 32-8 #2 CDP 12 mmscfd dehy PTE emissions  
 File Name: P:\Harvest Midstream\New Mexico\32-8#2\202508 Sig  
 Revision\Dehys\Dehydrator 13-14.ddf  
 Date: August 27, 2025

## DESCRIPTION:

Description: Units 13 & 14  
 12 mmscfd & 1.7 gpm

Annual Hours of Operation: 8760.0 hours/yr

## EMISSIONS REPORTS:

## UNCONTROLLED REGENERATOR EMISSIONS

| Component                   | lbs/hr | lbs/day | tons/yr |
|-----------------------------|--------|---------|---------|
| Methane                     | 0.1754 | 4.210   | 0.7684  |
| Ethane                      | 0.0072 | 0.172   | 0.0314  |
| Propane                     | 0.0089 | 0.213   | 0.0389  |
| Isobutane                   | 0.0012 | 0.030   | 0.0054  |
| n-Butane                    | 0.0024 | 0.057   | 0.0104  |
| Isopentane                  | 0.0015 | 0.037   | 0.0068  |
| n-Pentane                   | 0.0018 | 0.044   | 0.0080  |
| Cyclopentane                | 0.0004 | 0.009   | 0.0017  |
| n-Hexane                    | 0.0002 | 0.004   | 0.0008  |
| Cyclohexane                 | 0.0019 | 0.045   | 0.0082  |
| Heptanes                    | 0.0014 | 0.033   | 0.0060  |
| Total Emissions             | 0.2023 | 4.854   | 0.8859  |
| Total Hydrocarbon Emissions | 0.2023 | 4.854   | 0.8859  |
| Total VOC Emissions         | 0.0197 | 0.472   | 0.0861  |
| Total HAP Emissions         | 0.0002 | 0.004   | 0.0008  |

## FLASH GAS EMISSIONS

| Component                   | lbs/hr  | lbs/day | tons/yr |
|-----------------------------|---------|---------|---------|
| Methane                     | 0.8565  | 20.556  | 3.7515  |
| Ethane                      | 0.0081  | 0.194   | 0.0354  |
| Propane                     | 0.0038  | 0.091   | 0.0166  |
| Isobutane                   | 0.0003  | 0.007   | 0.0013  |
| n-Butane                    | 0.0004  | 0.010   | 0.0018  |
| Isopentane                  | 0.0002  | 0.005   | 0.0009  |
| n-Pentane                   | 0.0002  | 0.004   | 0.0008  |
| Cyclopentane                | <0.0001 | <0.001  | <0.0001 |
| n-Hexane                    | <0.0001 | <0.001  | <0.0001 |
| Cyclohexane                 | <0.0001 | 0.001   | 0.0001  |
| Heptanes                    | <0.0001 | 0.001   | 0.0001  |
| Total Emissions             | 0.8695  | 20.869  | 3.8086  |
| Total Hydrocarbon Emissions | 0.8695  | 20.869  | 3.8086  |
| Total VOC Emissions         | 0.0049  | 0.119   | 0.0217  |

Total HAP Emissions <0.0001 <0.001 <0.0001

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#### FLASH TANK OFF GAS

| Component                   | lbs/hr  | lbs/day | tons/yr |
|-----------------------------|---------|---------|---------|
| Methane                     | 17.1301 | 411.124 | 75.0301 |
| Ethane                      | 0.1617  | 3.880   | 0.7081  |
| Propane                     | 0.0758  | 1.820   | 0.3321  |
| Isobutane                   | 0.0059  | 0.142   | 0.0260  |
| n-Butane                    | 0.0081  | 0.194   | 0.0354  |
| Isopentane                  | 0.0041  | 0.099   | 0.0181  |
| n-Pentane                   | 0.0037  | 0.088   | 0.0160  |
| Cyclopentane                | 0.0002  | 0.005   | 0.0009  |
| n-Hexane                    | 0.0002  | 0.004   | 0.0007  |
| Cyclohexane                 | 0.0004  | 0.011   | 0.0019  |
| Heptanes                    | 0.0005  | 0.013   | 0.0023  |
| Total Emissions             | 17.3908 | 417.379 | 76.1717 |
| Total Hydrocarbon Emissions | 17.3908 | 417.379 | 76.1717 |
| Total VOC Emissions         | 0.0990  | 2.375   | 0.4335  |
| Total HAP Emissions         | 0.0002  | 0.004   | 0.0007  |

#### COMBINED REGENERATOR VENT/FLASH GAS EMISSIONS

| Component                   | lbs/hr | lbs/day | tons/yr |
|-----------------------------|--------|---------|---------|
| Methane                     | 1.0319 | 24.767  | 4.5199  |
| Ethane                      | 0.0152 | 0.366   | 0.0668  |
| Propane                     | 0.0127 | 0.304   | 0.0555  |
| Isobutane                   | 0.0015 | 0.037   | 0.0067  |
| n-Butane                    | 0.0028 | 0.067   | 0.0122  |
| Isopentane                  | 0.0017 | 0.042   | 0.0077  |
| n-Pentane                   | 0.0020 | 0.048   | 0.0088  |
| Cyclopentane                | 0.0004 | 0.009   | 0.0017  |
| n-Hexane                    | 0.0002 | 0.004   | 0.0008  |
| Cyclohexane                 | 0.0019 | 0.045   | 0.0083  |
| Heptanes                    | 0.0014 | 0.034   | 0.0061  |
| Total Emissions             | 1.0718 | 25.723  | 4.6945  |
| Total Hydrocarbon Emissions | 1.0718 | 25.723  | 4.6945  |
| Total VOC Emissions         | 0.0246 | 0.591   | 0.1078  |
| Total HAP Emissions         | 0.0002 | 0.004   | 0.0008  |

#### COMBINED REGENERATOR VENT/FLASH GAS EMISSION CONTROL REPORT:

| Component  | Uncontrolled tons/yr | Controlled tons/yr | % Reduction |
|------------|----------------------|--------------------|-------------|
| Methane    | 75.7985              | 4.5199             | 94.04       |
| Ethane     | 0.7395               | 0.0668             | 90.97       |
| Propane    | 0.3710               | 0.0555             | 85.04       |
| Isobutane  | 0.0314               | 0.0067             | 78.67       |
| n-Butane   | 0.0458               | 0.0122             | 73.46       |
| Isopentane | 0.0248               | 0.0077             | 69.14       |

|                             |         |        |       |
|-----------------------------|---------|--------|-------|
| n-Pentane                   | 0.0241  | 0.0088 | 63.29 |
| Cyclopentane                | 0.0026  | 0.0017 | 32.74 |
| n-Hexane                    | 0.0015  | 0.0008 | 45.84 |
| Cyclohexane                 | 0.0102  | 0.0083 | 18.23 |
| Heptanes                    | 0.0083  | 0.0061 | 26.35 |
| <hr/>                       |         |        |       |
| Total Emissions             | 77.0576 | 4.6945 | 93.91 |
| <hr/>                       |         |        |       |
| Total Hydrocarbon Emissions | 77.0576 | 4.6945 | 93.91 |
| Total VOC Emissions         | 0.5196  | 0.1078 | 79.25 |
| Total HAP Emissions         | 0.0015  | 0.0008 | 45.84 |

## EQUIPMENT REPORTS:

## ABSORBER

Calculated Absorber Stages: 1.55  
 Specified Dry Gas Dew Point: 1.80 lbs. H2O/MMSCF  
 Temperature: 85.0 deg. F  
 Pressure: 900.0 psig  
 Dry Gas Flow Rate: 12.0000 MMSCF/day  
 Glycol Losses with Dry Gas: 0.0702 lb/hr  
 Wet Gas Water Content: Saturated  
 Calculated Wet Gas Water Content: 40.49 lbs. H2O/MMSCF  
 Calculated Lean Glycol Recirc. Ratio: 3.72 gal/lb H2O

| Component      | Remaining<br>in Dry Gas | Absorbed<br>in Glycol |
|----------------|-------------------------|-----------------------|
| Water          | 4.44%                   | 95.56%                |
| Carbon Dioxide | 99.86%                  | 0.14%                 |
| Nitrogen       | 99.99%                  | 0.01%                 |
| Methane        | 99.99%                  | 0.01%                 |
| Ethane         | 99.97%                  | 0.03%                 |
| Propane        | 99.95%                  | 0.05%                 |
| Isobutane      | 99.93%                  | 0.07%                 |
| n-Butane       | 99.90%                  | 0.10%                 |
| Isopentane     | 99.90%                  | 0.10%                 |
| n-Pentane      | 99.87%                  | 0.13%                 |
| Cyclopentane   | 99.45%                  | 0.55%                 |
| n-Hexane       | 99.78%                  | 0.22%                 |
| Cyclohexane    | 99.03%                  | 0.97%                 |
| Heptanes       | 99.60%                  | 0.40%                 |

## FLASH TANK

Flash Control: Combustion device  
 Flash Control Efficiency: 95.00 %  
 Flash Temperature: 67.0 deg. F  
 Flash Pressure: 65.0 psig

| Component      | Left in<br>Glycol | Removed in<br>Flash Gas |
|----------------|-------------------|-------------------------|
| Water          | 99.97%            | 0.03%                   |
| Carbon Dioxide | 16.79%            | 83.21%                  |
| Nitrogen       | 0.96%             | 99.04%                  |

|              |        |        |
|--------------|--------|--------|
| Methane      | 1.01%  | 98.99% |
| Ethane       | 4.24%  | 95.76% |
| Propane      | 10.48% | 89.52% |
| Isobutane    | 17.19% | 82.81% |
| n-Butane     | 22.68% | 77.32% |
| Isopentane   | 27.42% | 72.58% |
| n-Pentane    | 33.59% | 66.41% |
| Cyclopentane | 65.69% | 34.31% |
| n-Hexane     | 51.93% | 48.07% |
| Cyclohexane  | 81.38% | 18.62% |
| Heptanes     | 72.37% | 27.63% |

# REGENERATOR

No Stripping Gas used in regenerator.

| Component      | Remaining<br>in Glycol | Distilled<br>Overhead |
|----------------|------------------------|-----------------------|
| Water          | 34.34%                 | 65.66%                |
| Carbon Dioxide | 0.00%                  | 100.00%               |
| Nitrogen       | 0.00%                  | 100.00%               |
| Methane        | 0.00%                  | 100.00%               |
| Ethane         | 0.00%                  | 100.00%               |
| Propane        | 0.00%                  | 100.00%               |
| Isobutane      | 0.00%                  | 100.00%               |
| n-Butane       | 0.00%                  | 100.00%               |
| Isopentane     | 1.03%                  | 98.97%                |
| n-Pentane      | 0.94%                  | 99.06%                |
| Cyclopentane   | 0.67%                  | 99.33%                |
| n-Hexane       | 0.71%                  | 99.29%                |
| Cyclohexane    | 3.65%                  | 96.35%                |
| Heptanes       | 0.58%                  | 99.42%                |

# STREAM REPORTS:

## WET GAS STREAM

Temperature: 85.00 deg. F  
Pressure: 914.70 psia  
Flow Rate: 5.01e+005 scfh

| Component      | Conc.<br>(vol%) | Loading<br>(lb/hr) |
|----------------|-----------------|--------------------|
| Water          | 8.53e-002       | 2.03e+001          |
| Carbon Dioxide | 4.45e+000       | 2.58e+003          |
| Nitrogen       | 9.48e-002       | 3.50e+001          |
| Methane        | 9.48e+001       | 2.01e+004          |
| Ethane         | 3.94e-001       | 1.56e+002          |
| Propane        | 1.13e-001       | 6.57e+001          |
| Isobutane      | 6.19e-003       | 4.75e+000          |
| n-Butane       | 7.79e-003       | 5.97e+000          |
| Isopentane     | 3.40e-003       | 3.23e+000          |
| n-Pentane      | 2.80e-003       | 2.66e+000          |

|                  |           |           |
|------------------|-----------|-----------|
| Cyclopentane     | 9.99e-005 | 9.24e-002 |
| n-Hexane         | 9.99e-005 | 1.14e-001 |
| Cyclohexane      | 2.00e-004 | 2.22e-001 |
| Heptanes         | 3.00e-004 | 3.96e-001 |
| -----            |           |           |
| Total Components | 100.00    | 2.29e+004 |

# DRY GAS STREAM

Temperature: 85.00 deg. F  
 Pressure: 914.70 psia  
 Flow Rate: 5.00e+005 scfh

| Component        | Conc.<br>(vol%) | Loading<br>(lb/hr) |
|------------------|-----------------|--------------------|
| -----            |                 |                    |
| Water            | 3.79e-003       | 9.00e-001          |
| Carbon Dioxide   | 4.45e+000       | 2.58e+003          |
| Nitrogen         | 9.49e-002       | 3.50e+001          |
| Methane          | 9.49e+001       | 2.01e+004          |
| Ethane           | 3.95e-001       | 1.56e+002          |
| Propane          | 1.13e-001       | 6.56e+001          |
| Isobutane        | 6.20e-003       | 4.75e+000          |
| n-Butane         | 7.79e-003       | 5.97e+000          |
| Isopentane       | 3.40e-003       | 3.23e+000          |
| n-Pentane        | 2.80e-003       | 2.66e+000          |
| Cyclopentane     | 9.95e-005       | 9.19e-002          |
| n-Hexane         | 9.98e-005       | 1.13e-001          |
| Cyclohexane      | 1.98e-004       | 2.20e-001          |
| Heptanes         | 2.99e-004       | 3.95e-001          |
| -----            |                 |                    |
| Total Components | 100.00          | 2.29e+004          |

# LEAN GLYCOL STREAM

Temperature: 85.00 deg. F  
 Flow Rate: 1.20e+000 gpm

| Component        | Conc.<br>(wt%) | Loading<br>(lb/hr) |
|------------------|----------------|--------------------|
| -----            |                |                    |
| TEG              | 9.85e+001      | 6.65e+002          |
| Water            | 1.50e+000      | 1.01e+001          |
| Carbon Dioxide   | 5.46e-011      | 3.69e-010          |
| Nitrogen         | 5.47e-014      | 3.69e-013          |
| Methane          | 9.41e-018      | 6.36e-017          |
| Ethane           | 3.41e-009      | 2.30e-008          |
| Propane          | 2.06e-010      | 1.39e-009          |
| Isobutane        | 1.56e-011      | 1.05e-010          |
| n-Butane         | 2.15e-011      | 1.46e-010          |
| Isopentane       | 2.37e-006      | 1.60e-005          |
| n-Pentane        | 2.57e-006      | 1.73e-005          |
| Cyclopentane     | 3.81e-007      | 2.57e-006          |
| n-Hexane         | 1.84e-007      | 1.24e-006          |
| Cyclohexane      | 1.05e-005      | 7.11e-005          |
| Heptanes         | 1.19e-006      | 8.03e-006          |
| -----            |                |                    |
| Total Components | 100.00         | 6.76e+002          |

# RICH GLYCOL AND PUMP GAS STREAM

Temperature: 85.00 deg. F  
 Pressure: 914.70 psia  
 Flow Rate: 1.29e+000 gpm  
 NOTE: Stream has more than one phase.

| Component        | Conc.<br>(wt%) | Loading<br>(lb/hr) |
|------------------|----------------|--------------------|
| TEG              | 9.26e+001      | 6.65e+002          |
| Water            | 4.11e+000      | 2.95e+001          |
| Carbon Dioxide   | 7.90e-001      | 5.67e+000          |
| Nitrogen         | 4.26e-003      | 3.06e-002          |
| Methane          | 2.41e+000      | 1.73e+001          |
| Ethane           | 2.35e-002      | 1.69e-001          |
| Propane          | 1.18e-002      | 8.47e-002          |
| Isobutane        | 9.98e-004      | 7.16e-003          |
| n-Butane         | 1.46e-003      | 1.05e-002          |
| Isopentane       | 7.91e-004      | 5.68e-003          |
| n-Pentane        | 7.67e-004      | 5.51e-003          |
| Cyclopentane     | 8.15e-005      | 5.85e-004          |
| n-Hexane         | 4.68e-005      | 3.36e-004          |
| Cyclohexane      | 3.33e-004      | 2.39e-003          |
| Heptanes         | 2.66e-004      | 1.91e-003          |
| Total Components | 100.00         | 7.18e+002          |

## FLASH TANK OFF GAS STREAM

Temperature: 67.00 deg. F  
 Pressure: 79.70 psia  
 Flow Rate: 4.49e+002 scfh

| Component        | Conc.<br>(vol%) | Loading<br>(lb/hr) |
|------------------|-----------------|--------------------|
| Water            | 3.84e-002       | 8.19e-003          |
| Carbon Dioxide   | 9.06e+000       | 4.72e+000          |
| Nitrogen         | 9.13e-002       | 3.03e-002          |
| Methane          | 9.02e+001       | 1.71e+001          |
| Ethane           | 4.54e-001       | 1.62e-001          |
| Propane          | 1.45e-001       | 7.58e-002          |
| Isobutane        | 8.62e-003       | 5.93e-003          |
| n-Butane         | 1.17e-002       | 8.09e-003          |
| Isopentane       | 4.83e-003       | 4.12e-003          |
| n-Pentane        | 4.28e-003       | 3.66e-003          |
| Cyclopentane     | 2.42e-004       | 2.01e-004          |
| n-Hexane         | 1.58e-004       | 1.62e-004          |
| Cyclohexane      | 4.46e-004       | 4.45e-004          |
| Heptanes         | 4.45e-004       | 5.28e-004          |
| Total Components | 100.00          | 2.21e+001          |

## FLASH TANK GLYCOL STREAM

Temperature: 67.00 deg. F  
 Flow Rate: 1.24e+000 gpm

| Component | Conc.<br>(wt%) | Loading<br>(lb/hr) |
|-----------|----------------|--------------------|
| TEG       | 9.56e+001      | 6.65e+002          |

|                |           |           |
|----------------|-----------|-----------|
| Water          | 4.24e+000 | 2.95e+001 |
| Carbon Dioxide | 1.37e-001 | 9.52e-001 |
| Nitrogen       | 4.23e-005 | 2.94e-004 |
| Methane        | 2.52e-002 | 1.75e-001 |

|            |           |           |
|------------|-----------|-----------|
| Ethane     | 1.03e-003 | 7.16e-003 |
| Propane    | 1.28e-003 | 8.88e-003 |
| Isobutane  | 1.77e-004 | 1.23e-003 |
| n-Butane   | 3.41e-004 | 2.37e-003 |
| Isopentane | 2.24e-004 | 1.56e-003 |

|              |           |           |
|--------------|-----------|-----------|
| n-Pentane    | 2.66e-004 | 1.85e-003 |
| Cyclopentane | 5.52e-005 | 3.84e-004 |
| n-Hexane     | 2.51e-005 | 1.75e-004 |
| Cyclohexane  | 2.79e-004 | 1.94e-003 |
| Heptanes     | 1.99e-004 | 1.38e-003 |

|                  |        |           |
|------------------|--------|-----------|
| Total Components | 100.00 | 6.96e+002 |
|------------------|--------|-----------|

## FLASH GAS EMISSIONS

Flow Rate: 1.23e+003 scfh  
Control Method: Combustion Device  
Control Efficiency: 95.00

| Component | Conc.<br>(vol%) | Loading<br>(lb/hr) |
|-----------|-----------------|--------------------|
|-----------|-----------------|--------------------|

|                |           |           |
|----------------|-----------|-----------|
| Water          | 6.32e+001 | 3.70e+001 |
| Carbon Dioxide | 3.51e+001 | 5.01e+001 |
| Nitrogen       | 3.33e-002 | 3.03e-002 |
| Methane        | 1.64e+000 | 8.57e-001 |
| Ethane         | 8.28e-003 | 8.08e-003 |

|            |           |           |
|------------|-----------|-----------|
| Propane    | 2.65e-003 | 3.79e-003 |
| Isobutane  | 1.57e-004 | 2.97e-004 |
| n-Butane   | 2.14e-004 | 4.04e-004 |
| Isopentane | 8.80e-005 | 2.06e-004 |
| n-Pentane  | 7.81e-005 | 1.83e-004 |

|              |           |           |
|--------------|-----------|-----------|
| Cyclopentane | 4.41e-006 | 1.00e-005 |
| n-Hexane     | 2.89e-006 | 8.08e-006 |
| Cyclohexane  | 8.14e-006 | 2.22e-005 |
| Heptanes     | 8.11e-006 | 2.64e-005 |

|                  |        |           |
|------------------|--------|-----------|
| Total Components | 100.00 | 8.80e+001 |
|------------------|--------|-----------|

## REGENERATOR OVERHEADS STREAM

Temperature: 212.00 deg. F  
Pressure: 14.70 psia  
Flow Rate: 4.21e+002 scfh

| Component | Conc.<br>(vol%) | Loading<br>(lb/hr) |
|-----------|-----------------|--------------------|
|-----------|-----------------|--------------------|

|                |           |           |
|----------------|-----------|-----------|
| Water          | 9.70e+001 | 1.94e+001 |
| Carbon Dioxide | 1.95e+000 | 9.52e-001 |
| Nitrogen       | 9.47e-004 | 2.94e-004 |
| Methane        | 9.86e-001 | 1.75e-001 |
| Ethane         | 2.15e-002 | 7.16e-003 |

|            |           |           |
|------------|-----------|-----------|
| Propane    | 1.82e-002 | 8.88e-003 |
| Isobutane  | 1.91e-003 | 1.23e-003 |
| n-Butane   | 3.68e-003 | 2.37e-003 |
| Isopentane | 1.93e-003 | 1.54e-003 |

|                  |           |           |
|------------------|-----------|-----------|
| n-Pentane        | 2.29e-003 | 1.83e-003 |
| Cyclopentane     | 4.91e-004 | 3.82e-004 |
| n-Hexane         | 1.81e-004 | 1.73e-004 |
| Cyclohexane      | 2.01e-003 | 1.87e-003 |
| Heptanes         | 1.24e-003 | 1.37e-003 |
| -----            | -----     | -----     |
| Total Components | 100.00    | 2.05e+001 |

## GRI-GLYCalc VERSION 4.0 - SUMMARY OF INPUT VALUES

Case Name: 32-8 #2 CDP 200 mmscfd dehy PTE emissions  
File Name: P:\Harvest Midstream\New Mexico\32-8#2\202508 Sig  
Revision\Dehys\Dehydrator 20-22.ddf  
Date: August 27, 2025

## DESCRIPTION:

Description: Units 20, 21, & 22  
200 mmscfd & 40 gpm

Annual Hours of Operation: 8760.0 hours/yr

## WET GAS:

Temperature: 68.00 deg. F  
Pressure: 318.00 psig  
Wet Gas Water Content: Saturated

| Component      | Conc.<br>(vol %) |
|----------------|------------------|
| Carbon Dioxide | 4.3338           |
| Nitrogen       | 0.0873           |
| Methane        | 95.1985          |
| Ethane         | 0.2993           |
| Propane        | 0.0791           |
| Isopentane     | 0.0010           |
| n-Pentane      | 0.0010           |

## DRY GAS:

Flow Rate: 200.0 MMSCF/day  
Water Content: 7.0 lbs. H2O/MMSCF

## LEAN GLYCOL:

Glycol Type: TEG  
Water Content: 1.5 wt% H2O  
Flow Rate: 40.0 gpm

## PUMP:

Glycol Pump Type: Electric/Pneumatic

## FLASH TANK:

Flash Control: Combustion device  
Flash Control Efficiency: 95.00 %  
Temperature: 178.0 deg. F  
Pressure: 65.0 psig

REGENERATOR OVERHEADS CONTROL DEVICE:

---

Control Device: Condenser  
Temperature: 100.0 deg. F  
Pressure: 14.7 psia

Case Name: 32-8 #2 CDP 200 mmscfd dehy PTE emissions  
 File Name: P:\Harvest Midstream\New Mexico\32-8#2\202508 Sig  
 Revision\Dehys\Dehydrator 20-22.ddf  
 Date: August 27, 2025

## DESCRIPTION:

Description: Units 20, 21, & 22  
 200 mmscfd & 40 gpm

Annual Hours of Operation: 8760.0 hours/yr

## EMISSIONS REPORTS:

## CONTROLLED REGENERATOR EMISSIONS

| Component                   | lbs/hr | lbs/day | tons/yr |
|-----------------------------|--------|---------|---------|
| Methane                     | 4.6124 | 110.697 | 20.2022 |
| Ethane                      | 0.2523 | 6.055   | 1.1051  |
| Propane                     | 0.3074 | 7.378   | 1.3464  |
| Isopentane                  | 0.0222 | 0.532   | 0.0971  |
| n-Pentane                   | 0.0312 | 0.750   | 0.1368  |
| Total Emissions             | 5.2255 | 125.412 | 22.8877 |
| Total Hydrocarbon Emissions | 5.2255 | 125.412 | 22.8877 |
| Total VOC Emissions         | 0.3608 | 8.660   | 1.5804  |

## UNCONTROLLED REGENERATOR EMISSIONS

| Component                   | lbs/hr | lbs/day | tons/yr |
|-----------------------------|--------|---------|---------|
| Methane                     | 4.6141 | 110.739 | 20.2099 |
| Ethane                      | 0.2524 | 6.058   | 1.1056  |
| Propane                     | 0.3075 | 7.381   | 1.3470  |
| Isopentane                  | 0.0222 | 0.532   | 0.0972  |
| n-Pentane                   | 0.0312 | 0.750   | 0.1369  |
| Total Emissions             | 5.2275 | 125.460 | 22.8965 |
| Total Hydrocarbon Emissions | 5.2275 | 125.460 | 22.8965 |
| Total VOC Emissions         | 0.3610 | 8.663   | 1.5810  |

## FLASH GAS EMISSIONS

| Component                   | lbs/hr | lbs/day | tons/yr |
|-----------------------------|--------|---------|---------|
| Methane                     | 1.0272 | 24.652  | 4.4991  |
| Ethane                      | 0.0186 | 0.446   | 0.0814  |
| Propane                     | 0.0113 | 0.272   | 0.0496  |
| Isopentane                  | 0.0005 | 0.011   | 0.0020  |
| n-Pentane                   | 0.0005 | 0.013   | 0.0023  |
| Total Emissions             | 1.0581 | 25.394  | 4.6344  |
| Total Hydrocarbon Emissions | 1.0581 | 25.394  | 4.6344  |
| Total VOC Emissions         | 0.0123 | 0.296   | 0.0540  |

## FLASH TANK OFF GAS

| Component                   | lbs/hr  | lbs/day | tons/yr |
|-----------------------------|---------|---------|---------|
| Methane                     | 20.5437 | 493.048 | 89.9813 |
| Ethane                      | 0.3718  | 8.923   | 1.6284  |
| Propane                     | 0.2266  | 5.439   | 0.9927  |
| Isopentane                  | 0.0091  | 0.219   | 0.0399  |
| n-Pentane                   | 0.0106  | 0.256   | 0.0466  |
| Total Emissions             | 21.1619 | 507.885 | 92.6889 |
| Total Hydrocarbon Emissions | 21.1619 | 507.885 | 92.6889 |
| Total VOC Emissions         | 0.2464  | 5.914   | 1.0792  |

## COMBINED REGENERATOR VENT/FLASH GAS EMISSIONS

| Component                   | lbs/hr | lbs/day | tons/yr |
|-----------------------------|--------|---------|---------|
| Methane                     | 5.6395 | 135.349 | 24.7012 |
| Ethane                      | 0.2709 | 6.502   | 1.1865  |
| Propane                     | 0.3187 | 7.650   | 1.3961  |
| Isopentane                  | 0.0226 | 0.543   | 0.0991  |
| n-Pentane                   | 0.0318 | 0.763   | 0.1392  |
| Total Emissions             | 6.2836 | 150.806 | 27.5221 |
| Total Hydrocarbon Emissions | 6.2836 | 150.806 | 27.5221 |
| Total VOC Emissions         | 0.3731 | 8.955   | 1.6344  |

## COMBINED REGENERATOR VENT/FLASH GAS EMISSION CONTROL REPORT:

| Component                   | Uncontrolled<br>tons/yr | Controlled<br>tons/yr | % Reduction |
|-----------------------------|-------------------------|-----------------------|-------------|
| Methane                     | 110.1912                | 24.7012               | 77.58       |
| Ethane                      | 2.7341                  | 1.1865                | 56.60       |
| Propane                     | 2.3397                  | 1.3961                | 40.33       |
| Isopentane                  | 0.1370                  | 0.0991                | 27.66       |
| n-Pentane                   | 0.1835                  | 0.1392                | 24.16       |
| Total Emissions             | 115.5855                | 27.5221               | 76.19       |
| Total Hydrocarbon Emissions | 115.5855                | 27.5221               | 76.19       |
| Total VOC Emissions         | 2.6602                  | 1.6344                | 38.56       |

## EQUIPMENT REPORTS:

## CONDENSER

Condenser Outlet Temperature: 100.00 deg. F  
 Condenser Pressure: 14.70 psia  
 Condenser Duty: 3.35e-001 MM BTU/hr  
 Produced Water: 29.15 bbls/day  
 VOC Control Efficiency: 0.04 %

HAP Control Efficiency: 0.00 %  
 BTEX Control Efficiency: 0.00 %  
 Dissolved Hydrocarbons in Water: 4.75 mg/L

| Component      | Emitted | Condensed |
|----------------|---------|-----------|
| Water          | 0.35%   | 99.65%    |
| Carbon Dioxide | 99.17%  | 0.83%     |
| Nitrogen       | 99.98%  | 0.02%     |
| Methane        | 99.96%  | 0.04%     |
| Ethane         | 99.95%  | 0.05%     |
| Propane        | 99.96%  | 0.04%     |
| Isopentane     | 99.98%  | 0.02%     |
| n-Pentane      | 99.98%  | 0.02%     |

#### ABSORBER

NOTE: Because the Calculated Absorber Stages was below the minimum allowed, GRI-GLYCalc has set the number of Absorber Stages to 1.25 and has calculated a revised Dry Gas Dew Point.

Calculated Absorber Stages: 1.25  
 Calculated Dry Gas Dew Point: 2.54 lbs. H2O/MMSCF  
 Temperature: 68.0 deg. F  
 Pressure: 318.0 psig  
 Dry Gas Flow Rate: 200.0000 MMSCF/day  
 Glycol Losses with Dry Gas: 0.1734 lb/hr  
 Wet Gas Water Content: Saturated  
 Calculated Wet Gas Water Content: 53.68 lbs. H2O/MMSCF  
 Calculated Lean Glycol Recirc. Ratio: 5.63 gal/lb H2O

| Component      | Remaining<br>in Dry Gas | Absorbed<br>in Glycol |
|----------------|-------------------------|-----------------------|
| Water          | 4.72%                   | 95.28%                |
| Carbon Dioxide | 99.86%                  | 0.14%                 |
| Nitrogen       | 99.99%                  | 0.01%                 |
| Methane        | 99.99%                  | 0.01%                 |
| Ethane         | 99.97%                  | 0.03%                 |
| Propane        | 99.93%                  | 0.07%                 |
| Isopentane     | 99.80%                  | 0.20%                 |
| n-Pentane      | 99.74%                  | 0.26%                 |

#### FLASH TANK

Flash Control: Combustion device  
 Flash Control Efficiency: 95.00 %  
 Flash Temperature: 178.0 deg. F  
 Flash Pressure: 65.0 psig

| Component      | Left in<br>Glycol | Removed in<br>Flash Gas |
|----------------|-------------------|-------------------------|
| Water          | 99.97%            | 0.03%                   |
| Carbon Dioxide | 65.56%            | 34.44%                  |
| Nitrogen       | 17.94%            | 82.06%                  |
| Methane        | 18.34%            | 81.66%                  |
| Ethane         | 40.44%            | 59.56%                  |
| Propane        | 57.57%            | 42.43%                  |

|            |        |        |
|------------|--------|--------|
| Isopentane | 71.04% | 28.96% |
| n-Pentane  | 74.71% | 25.29% |

# REGENERATOR

No Stripping Gas used in regenerator.

| Component      | Remaining<br>in Glycol | Distilled<br>Overhead |
|----------------|------------------------|-----------------------|
| Water          | 44.20%                 | 55.80%                |
| Carbon Dioxide | 0.00%                  | 100.00%               |
| Nitrogen       | 0.00%                  | 100.00%               |
| Methane        | 0.00%                  | 100.00%               |
| Ethane         | 0.00%                  | 100.00%               |
| Propane        | 0.00%                  | 100.00%               |
| Isopentane     | 0.70%                  | 99.30%                |
| n-Pentane      | 0.67%                  | 99.33%                |

# STREAM REPORTS:

## WET GAS STREAM

Temperature: 68.00 deg. F  
Pressure: 332.70 psia  
Flow Rate: 8.34e+006 scfh

| Component        | Conc.<br>(vol%) | Loading<br>(lb/hr) |
|------------------|-----------------|--------------------|
| Water            | 1.13e-001       | 4.48e+002          |
| Carbon Dioxide   | 4.33e+000       | 4.19e+004          |
| Nitrogen         | 8.72e-002       | 5.37e+002          |
| Methane          | 9.51e+001       | 3.35e+005          |
| Ethane           | 2.99e-001       | 1.98e+003          |
| Propane          | 7.90e-002       | 7.66e+002          |
| Isopentane       | 9.99e-004       | 1.58e+001          |
| n-Pentane        | 9.99e-004       | 1.58e+001          |
| Total Components | 100.00          | 3.81e+005          |

## DRY GAS STREAM

Temperature: 68.00 deg. F  
Pressure: 332.70 psia  
Flow Rate: 8.33e+006 scfh

| Component      | Conc.<br>(vol%) | Loading<br>(lb/hr) |
|----------------|-----------------|--------------------|
| Water          | 5.35e-003       | 2.12e+001          |
| Carbon Dioxide | 4.33e+000       | 4.18e+004          |
| Nitrogen       | 8.73e-002       | 5.37e+002          |
| Methane        | 9.52e+001       | 3.35e+005          |
| Ethane         | 2.99e-001       | 1.98e+003          |
| Propane        | 7.91e-002       | 7.66e+002          |

|                  |           |           |
|------------------|-----------|-----------|
| Isopentane       | 9.98e-004 | 1.58e+001 |
| n-Pentane        | 9.97e-004 | 1.58e+001 |
| -----            |           |           |
| Total Components | 100.00    | 3.81e+005 |

## LEAN GLYCOL STREAM

-----  
 Temperature: 68.00 deg. F  
 Flow Rate: 4.00e+001 gpm

| Component        | Conc.<br>(wt%) | Loading<br>(lb/hr) |
|------------------|----------------|--------------------|
| -----            |                |                    |
| TEG              | 9.85e+001      | 2.22e+004          |
| Water            | 1.50e+000      | 3.38e+002          |
| Carbon Dioxide   | 2.64e-011      | 5.94e-009          |
| Nitrogen         | 1.82e-014      | 4.10e-012          |
| Methane          | 3.75e-018      | 8.45e-016          |
| Ethane           | 1.31e-009      | 2.95e-007          |
| Propane          | 9.65e-011      | 2.17e-008          |
| Isopentane       | 6.98e-007      | 1.57e-004          |
| n-Pentane        | 9.35e-007      | 2.11e-004          |
| -----            |                |                    |
| Total Components | 100.00         | 2.25e+004          |

## RICH GLYCOL STREAM

-----  
 Temperature: 68.00 deg. F  
 Pressure: 332.70 psia  
 Flow Rate: 4.10e+001 gpm  
 NOTE: Stream has more than one phase.

| Component        | Conc.<br>(wt%) | Loading<br>(lb/hr) |
|------------------|----------------|--------------------|
| -----            |                |                    |
| TEG              | 9.63e+001      | 2.22e+004          |
| Water            | 3.32e+000      | 7.65e+002          |
| Carbon Dioxide   | 2.58e-001      | 5.94e+001          |
| Nitrogen         | 1.78e-004      | 4.10e-002          |
| Methane          | 1.09e-001      | 2.52e+001          |
| Ethane           | 2.71e-003      | 6.24e-001          |
| Propane          | 2.32e-003      | 5.34e-001          |
| Isopentane       | 1.37e-004      | 3.14e-002          |
| n-Pentane        | 1.83e-004      | 4.21e-002          |
| -----            |                |                    |
| Total Components | 100.00         | 2.30e+004          |

## FLASH TANK OFF GAS STREAM

-----  
 Temperature: 178.00 deg. F  
 Pressure: 79.70 psia  
 Flow Rate: 6.75e+002 scfh

| Component      | Conc.<br>(vol%) | Loading<br>(lb/hr) |
|----------------|-----------------|--------------------|
| -----          |                 |                    |
| Water          | 7.75e-001       | 2.48e-001          |
| Carbon Dioxide | 2.61e+001       | 2.04e+001          |
| Nitrogen       | 6.76e-002       | 3.37e-002          |
| Methane        | 7.20e+001       | 2.05e+001          |
| Ethane         | 6.95e-001       | 3.72e-001          |

|            |           |           |
|------------|-----------|-----------|
| Propane    | 2.89e-001 | 2.27e-001 |
| Isopentane | 7.10e-003 | 9.10e-003 |
| n-Pentane  | 8.30e-003 | 1.06e-002 |

|                  |        |           |
|------------------|--------|-----------|
| Total Components | 100.00 | 4.19e+001 |
|------------------|--------|-----------|

## FLASH TANK GLYCOL STREAM

Temperature: 178.00 deg. F  
Flow Rate: 4.09e+001 gpm

| Component        | Conc.<br>(wt%) | Loading<br>(lb/hr) |
|------------------|----------------|--------------------|
| TEG              | 9.65e+001      | 2.22e+004          |
| Water            | 3.32e+000      | 7.64e+002          |
| Carbon Dioxide   | 1.69e-001      | 3.89e+001          |
| Nitrogen         | 3.20e-005      | 7.36e-003          |
| Methane          | 2.01e-002      | 4.61e+000          |
| Ethane           | 1.10e-003      | 2.52e-001          |
| Propane          | 1.34e-003      | 3.08e-001          |
| Isopentane       | 9.72e-005      | 2.23e-002          |
| n-Pentane        | 1.37e-004      | 3.15e-002          |
| Total Components | 100.00         | 2.30e+004          |

## FLASH GAS EMISSIONS

Flow Rate: 1.63e+003 scfh  
Control Method: Combustion Device  
Control Efficiency: 95.00

| Component        | Conc.<br>(vol%) | Loading<br>(lb/hr) |
|------------------|-----------------|--------------------|
| Water            | 5.84e+001       | 4.51e+001          |
| Carbon Dioxide   | 4.01e+001       | 7.57e+001          |
| Nitrogen         | 2.80e-002       | 3.37e-002          |
| Methane          | 1.49e+000       | 1.03e+000          |
| Ethane           | 1.44e-002       | 1.86e-002          |
| Propane          | 5.99e-003       | 1.13e-002          |
| Isopentane       | 1.47e-004       | 4.55e-004          |
| n-Pentane        | 1.72e-004       | 5.32e-004          |
| Total Components | 100.00          | 1.22e+002          |

## REGENERATOR OVERHEADS STREAM

Temperature: 212.00 deg. F  
Pressure: 14.70 psia  
Flow Rate: 9.44e+003 scfh

| Component      | Conc.<br>(vol%) | Loading<br>(lb/hr) |
|----------------|-----------------|--------------------|
| Water          | 9.52e+001       | 4.27e+002          |
| Carbon Dioxide | 3.56e+000       | 3.89e+001          |
| Nitrogen       | 1.06e-003       | 7.36e-003          |
| Methane        | 1.16e+000       | 4.61e+000          |
| Ethane         | 3.38e-002       | 2.52e-001          |
| Propane        | 2.80e-002       | 3.08e-001          |

|                  |           |           |
|------------------|-----------|-----------|
| Isopentane       | 1.24e-003 | 2.22e-002 |
| n-Pentane        | 1.74e-003 | 3.12e-002 |
| -----            |           |           |
| Total Components | 100.00    | 4.71e+002 |

## CONDENSER VENT GAS STREAM

-----

Temperature: 100.00 deg. F  
 Pressure: 14.70 psia  
 Flow Rate: 4.80e+002 scfh

| Component        | Conc.<br>(vol%) | Loading<br>(lb/hr) |
|------------------|-----------------|--------------------|
| -----            |                 |                    |
| Water            | 6.55e+000       | 1.49e+000          |
| Carbon Dioxide   | 6.94e+001       | 3.86e+001          |
| Nitrogen         | 2.08e-002       | 7.36e-003          |
| Methane          | 2.28e+001       | 4.61e+000          |
| Ethane           | 6.64e-001       | 2.52e-001          |
| Propane          | 5.52e-001       | 3.07e-001          |
| Isopentane       | 2.43e-002       | 2.22e-002          |
| n-Pentane        | 3.43e-002       | 3.12e-002          |
| -----            |                 |                    |
| Total Components | 100.00          | 4.53e+001          |

## CONDENSER PRODUCED WATER STREAM

-----

Temperature: 100.00 deg. F  
 Flow Rate: 8.50e-001 gpm

| Component        | Conc.<br>(wt%) | Loading<br>(lb/hr) | (ppm)    |
|------------------|----------------|--------------------|----------|
| -----            |                |                    |          |
| Water            | 9.99e+001      | 4.25e+002          | 999240.  |
| Carbon Dioxide   | 7.55e-002      | 3.21e-001          | 755.     |
| Nitrogen         | 3.27e-007      | 1.39e-006          | 0.       |
| Methane          | 4.15e-004      | 1.77e-003          | 4.       |
| Ethane           | 2.74e-005      | 1.17e-004          | 0.       |
| Propane          | 2.93e-005      | 1.25e-004          | 0.       |
| Isopentane       | 1.17e-006      | 4.97e-006          | 0.       |
| n-Pentane        | 1.80e-006      | 7.64e-006          | 0.       |
| -----            |                |                    |          |
| Total Components | 100.00         | 4.25e+002          | 1000000. |

## CONDENSER RECOVERED OIL STREAM

-----

Temperature: 100.00 deg. F

The calculated flow rate is less than 0.000001 #mol/hr.  
 The stream flow rate and composition are not reported.

| Process Streams     |             | 3                     |
|---------------------|-------------|-----------------------|
| <b>Composition</b>  |             | Status: <b>Solved</b> |
| Phase: <b>Total</b> | From Block: | MIX-100               |
|                     | To Block:   | --                    |
| Mole Fraction       | %           |                       |
| Nitrogen            | 0.0948533   |                       |
| Carbon Dioxide      | 4.45126     |                       |
| Methane             | 94.9234     |                       |
| Ethane              | 0.394642    |                       |
| Propane             | 0.112960    |                       |
| Isobutane           | 0.00619111  |                       |
| n-Butane            | 0.00775162  |                       |
| i-Pentane           | 0.00341718  |                       |
| n-Pentane           | 0.00276427  |                       |
| Neohexane           | 7.87202E-05 |                       |
| 2-3-Dimethylbutane  | 7.87202E-05 |                       |
| Cyclopentane        | 8.33508E-05 |                       |
| 2-Methylpentane     | 0.000546410 |                       |
| 3-Methylpentane     | 0.000199116 |                       |
| C6                  | 0.000601978 |                       |
| Methylcyclopentane  | 0.000435276 |                       |
| Benzene             | 4.16754E-05 |                       |
| Cyclohexane         | 0.000240791 |                       |
| 2-Methylhexane      | 6.94590E-05 |                       |
| 3-Methylhexane      | 7.87202E-05 |                       |
| Heptane             | 0.000282466 |                       |

# Source Analysis Last 5 Samples

May 1, 2025 9:00:00 AM



Source #: 94168

Name: BURNT MESA MULTI PAD CDP

Type: Gas Analysis  
Effective Date Rule: Use First of Month of Sample Date  
Effective Hour Rule: 8:00

|                                 |                     |                     |                     |                     |                     |
|---------------------------------|---------------------|---------------------|---------------------|---------------------|---------------------|
| Sample Date                     | 04/22/2025 10:19:00 | 03/26/2025 10:32:00 | 02/21/2025 13:26:00 | 01/14/2025 11:21:00 | 11/11/2024 10:20:00 |
| Effective Date                  | 04/01/2025 08:00:00 | 03/01/2025 08:00:00 | 02/01/2025 08:00:00 | 01/01/2025 08:00:00 | 11/01/2024 08:00:00 |
| End Date                        | 01/18/2038 21:14:07 | 03/01/2025 08:00:01 | 03/01/2025 08:00:00 | 01/01/2025 08:00:01 | 11/01/2024 08:00:01 |
| Last Update                     | 04/29/2025 06:00:22 | 03/29/2025 06:00:21 | 02/28/2025 06:00:22 | 01/17/2025 06:00:04 | 11/15/2024 06:00:17 |
| HV, Dry @ Base P, T (Btu/ft3)   | 970.88              | 982.02              | 983.29              | 984.89              | 988.92              |
| HV, Sat @ Base P, T (Btu/ft3)   | 953.94              | 964.89              | 966.14              | 967.70              | 971.67              |
| HV, Sat @ Sample P, T (Btu/ft3) | 966.99              | 978.92              | 980.89              | 982.00              | 985.88              |
| Gross Wobbe Index               | 1254.1              | 1281.7              | 1285.1              | 1287.2              | 1295.5              |
| Relative Density (REL)          | 0.5994              | 0.5870              | 0.5855              | 0.5854              | 0.5827              |

|                        |         |         |         |         |         |
|------------------------|---------|---------|---------|---------|---------|
| Mole %                 |         |         |         |         |         |
| Carbon Dioxide (CO2)   | 4.3338  | 3.0673  | 2.9621  | 2.9011  | 2.5872  |
| Nitrogen (N2)          | 0.0873  | 0.1814  | 0.1184  | 0.1102  | 0.0896  |
| Methane (C1)           | 95.1985 | 96.4776 | 96.6616 | 96.6683 | 96.9657 |
| Ethane (C2)            | 0.2993  | 0.2058  | 0.1987  | 0.2163  | 0.1984  |
| Propane (C3)           | 0.0791  | 0.0578  | 0.0592  | 0.1001  | 0.1561  |
| Isobutane (IC4)        | 0.0000  | 0.0000  | 0.0000  | 0.0000  | 0.0010  |
| n-Butane (NC4)         | 0.0000  | 0.0000  | 0.0000  | 0.0000  | 0.0010  |
| Isopentane (IC5)       | 0.0010  | 0.0010  | 0.0000  | 0.0010  | 0.0000  |
| n-Pentane (NC5)        | 0.0010  | 0.0010  | 0.0000  | 0.0010  | 0.0000  |
| Neopentane (neo)       |         |         |         |         |         |
| n-Hexane (C6)          | 0.0000  | 0.0081  | 0.0000  | 0.0020  | 0.0010  |
| n-Heptane (C7)         |         |         |         |         |         |
| n-Octane (C8)          |         |         |         |         |         |
| n-Nonane (C9)          |         |         |         |         |         |
| Decanes Plus (C10+)    |         |         |         |         |         |
| Argon (Ar)             |         |         |         |         |         |
| Carbon Monoxide (CO)   |         |         |         |         |         |
| Hydrogen (H2)          |         |         |         |         |         |
| Oxygen (O2)            |         |         |         |         |         |
| Helium (He)            |         |         |         |         |         |
| Water (H2O)            |         |         |         |         |         |
| Hydrogen Sulfide (H2S) |         |         |         |         |         |

|                              |        |        |        |        |        |
|------------------------------|--------|--------|--------|--------|--------|
| Sample ID                    | 27244  | 26180  | 24878  | 23207  | 21226  |
| Sample Type                  | Spot   | Spot   | Spot   | Spot   | Spot   |
| Sample Pressure Base (psi)   | 14.696 | 14.696 | 14.696 | 14.696 | 14.696 |
| Sample Temperature Base (°F) | 60.0   | 60.0   | 60.0   | 60.0   | 60.0   |
| Sample Pressure (psi)        | 318.0  | 381.0  | 413.0  | 387.0  | 140.0  |
| Sample Temperature (°F)      | 110.0  | 108.0  | 102.0  | 106.0  | 75.0   |
| Water Content (PPM)          |        |        |        |        |        |

\*\*\* End of Report \*\*\*

Oil and Gas  
 Production Equipment  
 J. Envertek, Inc.  
 4401 East Main Street  
 Farmington, NM 87401  
 505/326-1151  
 FAX 505/325-0317



VIA FACSIMILE  
 Fax No. (801) 534-7760  
 Page: 1

August 19, 1994

Mr. Leo Bauerle  
 Williams Field Services  
 Salt Lake City, UT

The following table shows the stack emissions at maximum firing conditions for the dehydrators noted:

| Dehydrator  | NO <sub>x</sub><br>#/Day | CO<br>#/Day | Fuel<br>\$/CEH | Total Stack<br>Gas \$/CEH | Stack<br>Ht. Ft | Stack Dia<br>Inches | Stack<br>Temp. F | Stack<br>Velocity FPM |
|-------------|--------------------------|-------------|----------------|---------------------------|-----------------|---------------------|------------------|-----------------------|
| J2P10M11109 | 0.86                     | 0.17        | 357            | 10010                     | 18'-8"          | 8                   | 600              | 5.1                   |
| J2P10M749   | 1.03                     | 0.21        | 429            | 12012                     | 19'-1"          | 10                  | 600              | 6.1                   |
| J2P12M11109 | 0.86                     | 0.17        | 357            | 10010                     | 18'-8"          | 8                   | 600              | 5.1                   |
| J2P12M749   | 1.03                     | 0.21        | 429            | 12012                     | 19'-1"          | 10                  | 600              | 6.1                   |
| J2P20M11109 | 1.03                     | 0.21        | 429            | 12012                     | 19'-1"          | 10                  | 600              | 6.1                   |

Please call me if you need additional information.

Sincerely,

Frosty Heath

FH/nb

5928 U.S. Highway 64  
Farmington, NM 87401

# InFab

INDUSTRIAL FABRICATION

Office: (505)632-2200  
Fax: (505)632-8070

July 22, 1998

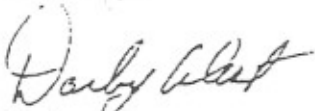
Mr. Bobby Myers  
Williams Field Services  
Environmental Affairs  
295 Chipeta Way  
P O Box 58900  
Salt Lake City, UT 84158-0900

The table shown below gives the stack emissions for our larger dehydrators:

| Unit Description | SO lb/day | NO <sub>x</sub> lb/Day | CO lb/Day | Fuel SCFH | Total Organic Comp. Lb/d | Stack Ht. Ft. | Stack Dia inches | Stack Temp °F | Stack Velocity |
|------------------|-----------|------------------------|-----------|-----------|--------------------------|---------------|------------------|---------------|----------------|
| 10 MM LP         | .01       | .27                    | .43       | 659       | .13                      | 10'           | 8                | 600           | 5.1            |
| 10 MM HP         | .01       | .27                    | .43       | 659       | .13                      | 10'           | 10               | 600           | 6.1            |
| 12 MM LP         | .02       | .49                    | .78       | 1208      | .25                      | 10'           | 8                | 600           | 5.1            |
| 12 MM HP         | .02       | .49                    | .78       | 1208      | .25                      | 10'           | 10               | 600           | 6.1            |
| 15 MM            | .02       | .54                    | .85       | 1318      | .25                      | 10'           | 8                | 600           | 5.1            |
| 20 MM LP         | .02       | .67                    | 1.07      | 1648      | .31                      | 10'           | 8                | 600           | 5.1            |
| 20 MM HP         | .02       | .67                    | 1.07      | 1648      | .31                      | 10'           | 12               | 600           | 6.1            |

If you need any additional information please call me.

Sincerely,



Darby West  
VP Engineering

# **1995 Protocol for Equipment Leak Emission Estimates**

**Emission Standards Division**

**U.S. ENVIRONMENTAL PROTECTION AGENCY  
Office of Air and Radiation  
Office of Air Quality Planning and Standards  
Research Triangle Park, North Carolina 27711**

**November 1995**

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

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

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

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

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

loading operation, resulting in high levels of vapor generation and loss. If the turbulence is great enough, liquid droplets will be entrained in the vented vapors.

A second method of loading is submerged loading. Two types are the submerged fill pipe method and the bottom loading method. In the submerged fill pipe method, the fill pipe extends almost to the bottom of the cargo tank. In the bottom loading method, a permanent fill pipe is attached to the cargo tank bottom. During most of submerged loading by both methods, the fill pipe opening is below the liquid surface level. Liquid turbulence is controlled significantly during submerged loading, resulting in much lower vapor generation than encountered during splash loading.

The recent loading history of a cargo carrier is just as important a factor in loading losses as the method of loading. If the carrier has carried a nonvolatile liquid such as fuel oil, or has just been cleaned, it will contain vapor-free air. If it has just carried gasoline and has not been vented, the air in the carrier tank will contain volatile organic vapors, which will be expelled during the loading operation along with newly generated vapors.

Cargo carriers are sometimes designated to transport only one product, and in such cases are practicing "dedicated service". Dedicated gasoline cargo tanks return to a loading terminal containing air fully or partially saturated with vapor from the previous load. Cargo tanks may also be "switch loaded" with various products, so that a nonvolatile product being loaded may expel the vapors remaining from a previous load of a volatile product such as gasoline. These circumstances vary with the type of cargo tank and with the ownership of the carrier, the petroleum liquids being transported, geographic location, and season of the year.

One control measure for vapors displaced during liquid loading is called "vapor balance service", in which the cargo tank retrieves the vapors displaced during product unloading at bulk plants or service stations and transports the vapors back to the loading terminal. Figure 5.2-5 shows a tank truck in vapor balance service filling a service station underground tank and taking on displaced gasoline vapors for return to the terminal. A cargo tank returning to a bulk terminal in vapor balance service normally is saturated with organic vapors, and the presence of these vapors at the start of submerged loading of the tanker truck results in greater loading losses than encountered during nonvapor balance, or "normal", service. Vapor balance service is usually not practiced with marine vessels, although some vessels practice emission control by means of vapor transfer within their own cargo tanks during ballasting operations, discussed below.

Emissions from loading petroleum liquid can be estimated (with a probable error of  $\pm 30$  percent)<sup>4</sup> using the following expression:

$$L_L = 12.46 \frac{SPM}{T} \quad (1)$$

where:

$L_L$  = loading loss, pounds per 1000 gallons (lb/10<sup>3</sup> gal) of liquid loaded

$S$  = a saturation factor (see Table 5.2-1)

$P$  = true vapor pressure of liquid loaded, pounds per square inch absolute (psia)  
(see Figure 7.1-5, Figure 7.1-6, and Table 7.1-2)

$M$  = molecular weight of vapors, pounds per pound-mole (lb/lb-mole) (see Table 7.1-2)

$T$  = temperature of bulk liquid loaded, °R (°F + 460)

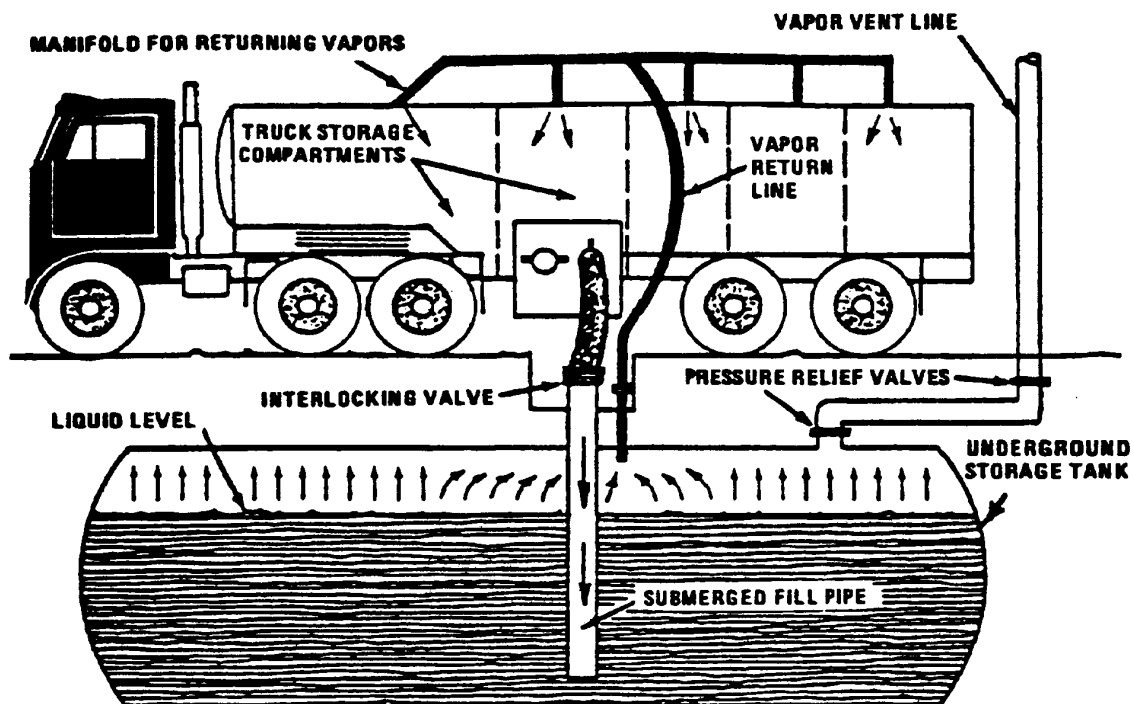


Figure 5.2-5. Tank truck unloading into a service station underground storage tank and practicing "vapor balance" form of emission control.

Table 5.2-1. SATURATION (S) FACTORS FOR CALCULATING PETROLEUM LIQUID LOADING LOSSES

| Cargo Carrier                  | Mode Of Operation                                  | S Factor |
|--------------------------------|----------------------------------------------------|----------|
| Tank trucks and rail tank cars | Submerged loading of a clean cargo tank            | 0.50     |
|                                | Submerged loading: dedicated normal service        | 0.60     |
|                                | Submerged loading: dedicated vapor balance service | 1.00     |
|                                | Splash loading of a clean cargo tank               | 1.45     |
|                                | Splash loading: dedicated normal service           | 1.45     |
|                                | Splash loading: dedicated vapor balance service    | 1.00     |
| Marine vessels <sup>a</sup>    | Submerged loading: ships                           | 0.2      |
|                                | Submerged loading: barges                          | 0.5      |

<sup>a</sup> For products other than gasoline and crude oil. For marine loading of gasoline, use factors from Table 5.2-2. For marine loading of crude oil, use Equations 2 and 3 and Table 5.2-3.

**Table A–1 to Subpart A of Part 98—Global Warming Potentials**

[100-Year Time Horizon]

| Name                                  | CAS No.     | Chemical formula                                                | Global warming potential (100 yr.) |
|---------------------------------------|-------------|-----------------------------------------------------------------|------------------------------------|
| Carbon dioxide                        | 124–38–9    | CO <sub>2</sub>                                                 | 1                                  |
| Methane                               | 74–82–8     | CH <sub>4</sub>                                                 | <sup>a</sup> 25                    |
| Nitrous oxide                         | 10024–97–2  | N <sub>2</sub> O                                                | <sup>a</sup> 298                   |
| HFC–23                                | 75–46–7     | CHF <sub>3</sub>                                                | <sup>a</sup> 14,800                |
| HFC–32                                | 75–10–5     | CH <sub>2</sub> F <sub>2</sub>                                  | <sup>a</sup> 675                   |
| HFC–41                                | 593–53–3    | CH <sub>3</sub> F                                               | <sup>a</sup> 92                    |
| HFC–125                               | 354–33–6    | C <sub>2</sub> HF <sub>5</sub>                                  | <sup>a</sup> 3,500                 |
| HFC–134                               | 359–35–3    | C <sub>2</sub> H <sub>2</sub> F <sub>4</sub>                    | <sup>a</sup> 1,100                 |
| HFC–134a                              | 811–97–2    | CH <sub>2</sub> FCF <sub>3</sub>                                | <sup>a</sup> 1,430                 |
| HFC–143                               | 430–66–0    | C <sub>2</sub> H <sub>3</sub> F <sub>3</sub>                    | <sup>a</sup> 353                   |
| HFC–143a                              | 420–46–2    | C <sub>2</sub> H <sub>3</sub> F <sub>3</sub>                    | <sup>a</sup> 4,470                 |
| HFC–152                               | 624–72–6    | CH <sub>2</sub> FCH <sub>2</sub> F                              | 53                                 |
| HFC–152a                              | 75–37–6     | CH <sub>3</sub> CHF <sub>2</sub>                                | <sup>a</sup> 124                   |
| HFC–161                               | 353–36–6    | CH <sub>3</sub> CH <sub>2</sub> F                               | 12                                 |
| HFC–227ea                             | 431–89–0    | C <sub>3</sub> HF <sub>7</sub>                                  | <sup>a</sup> 3,220                 |
| HFC–236cb                             | 677–56–5    | CH <sub>2</sub> FCF <sub>2</sub> CF <sub>3</sub>                | 1,340                              |
| HFC–236ea                             | 431–63–0    | CHF <sub>2</sub> CHFCF <sub>3</sub>                             | 1,370                              |
| HFC–236fa                             | 690–39–1    | C <sub>3</sub> H <sub>2</sub> F <sub>6</sub>                    | <sup>a</sup> 9,810                 |
| HFC–245ca                             | 679–86–7    | C <sub>3</sub> H <sub>3</sub> F <sub>5</sub>                    | <sup>a</sup> 693                   |
| HFC–245fa                             | 460–73–1    | CHF <sub>2</sub> CH <sub>2</sub> CF <sub>3</sub>                | 1,030                              |
| HFC–365mfc                            | 406–58–6    | CH <sub>3</sub> CF <sub>2</sub> CH <sub>2</sub> CF <sub>3</sub> | 794                                |
| HFC–43–10mee                          | 138495–42–8 | CF <sub>3</sub> CFHCFHCF <sub>2</sub> CF <sub>3</sub>           | <sup>a</sup> 1,640                 |
| Sulfur hexafluoride                   | 2551–62–4   | SF <sub>6</sub>                                                 | <sup>a</sup> 22,800                |
| Trifluoromethyl sulphur pentafluoride | 373–80–8    | SF <sub>5</sub> CF <sub>3</sub>                                 | 17,700                             |
| Nitrogen trifluoride                  | 7783–54–2   | NF <sub>3</sub>                                                 | 17,200                             |
| PFC–14 (Perfluoromethane)             | 75–73–0     | CF <sub>4</sub>                                                 | 7,390                              |
| PFC–116 (Perfluoroethane)             | 76–16–4     | C <sub>2</sub> F <sub>6</sub>                                   | <sup>a</sup> 12,200                |
| PFC–218 (Perfluoropropane)            | 76–19–7     | C <sub>3</sub> F <sub>8</sub>                                   | <sup>a</sup> 8,830                 |

| Name                           | CAS No.     | Chemical formula                                                                   | Global warming potential (100 yr.) |
|--------------------------------|-------------|------------------------------------------------------------------------------------|------------------------------------|
| Perfluorocyclopropane          | 931-91-9    | C-C <sub>3</sub> F <sub>6</sub>                                                    | 17,340                             |
| PFC-3-1-10 (Perfluorobutane)   | 355-25-9    | C <sub>4</sub> F <sub>10</sub>                                                     | <sup>a</sup> 8,860                 |
| Perfluorocyclobutane           | 115-25-3    | C-C <sub>4</sub> F <sub>8</sub>                                                    | <sup>a</sup> 10,300                |
| PFC-4-1-12 (Perfluoropentane)  | 678-26-2    | C <sub>5</sub> F <sub>12</sub>                                                     | <sup>a</sup> 9,160                 |
| PFC-5-1-14 (Perfluorohexane)   | 355-42-0    | C <sub>6</sub> F <sub>14</sub>                                                     | <sup>a</sup> 9,300                 |
| PFC-9-1-18                     | 306-94-5    | C <sub>10</sub> F <sub>18</sub>                                                    | 7,500                              |
| HCFE-235da2 (Isoflurane)       | 26675-46-7  | CHF <sub>2</sub> OCHClCF <sub>3</sub>                                              | 350                                |
| HFE-43-10pccc (H-Galden 1040x) | E1730133    | CHF <sub>2</sub> OCF <sub>2</sub> OC <sub>2</sub> F <sub>4</sub> OCHF <sub>2</sub> | 1,870                              |
| HFE-125                        | 3822-68-2   | CHF <sub>2</sub> OCF <sub>3</sub>                                                  | 14,900                             |
| HFE-134                        | 1691-17-4   | CHF <sub>2</sub> OCHF <sub>2</sub>                                                 | 6,320                              |
| HFE-143a                       | 421-14-7    | CH <sub>3</sub> OCF <sub>3</sub>                                                   | 756                                |
| HFE-227ea                      | 2356-62-9   | CF <sub>3</sub> CHFOCF <sub>3</sub>                                                | 1,540                              |
| HFE-236ca12 (HG-10)            | 78522-47-1  | CHF <sub>2</sub> OCF <sub>2</sub> OCHF <sub>2</sub>                                | 2,800                              |
| HFE-236ea2 (Desflurane)        | 57041-67-5  | CHF <sub>2</sub> OCHF <sub>2</sub> CF <sub>3</sub>                                 | 989                                |
| HFE-236fa                      | 20193-67-3  | CF <sub>3</sub> CH <sub>2</sub> OCF <sub>3</sub>                                   | 487                                |
| HFE-245cb2                     | 22410-44-2  | CH <sub>3</sub> OCF <sub>2</sub> CF <sub>3</sub>                                   | 708                                |
| HFE-245fa1                     | 84011-15-4  | CHF <sub>2</sub> CH <sub>2</sub> OCF <sub>3</sub>                                  | 286                                |
| HFE-245fa2                     | 1885-48-9   | CHF <sub>2</sub> OCH <sub>2</sub> CF <sub>3</sub>                                  | 659                                |
| HFE-254cb2                     | 425-88-7    | CH <sub>3</sub> OCF <sub>2</sub> CHF <sub>2</sub>                                  | 359                                |
| HFE-263fb2                     | 460-43-5    | CF <sub>3</sub> CH <sub>2</sub> OCH <sub>3</sub>                                   | 11                                 |
| HFE-329mcc2                    | 67490-36-2  | CF <sub>3</sub> CF <sub>2</sub> OCF <sub>2</sub> CHF <sub>2</sub>                  | 919                                |
| HFE-338mcf2                    | 156053-88-2 | CF <sub>3</sub> CF <sub>2</sub> OCH <sub>2</sub> CF <sub>3</sub>                   | 552                                |
| HFE-338pcc13 (HG-01)           | 188690-78-0 | CHF <sub>2</sub> OCF <sub>2</sub> CF <sub>2</sub> OCHF <sub>2</sub>                | 1,500                              |
| HFE-347mcc3                    | 28523-86-6  | CH <sub>3</sub> OCF <sub>2</sub> CF <sub>2</sub> CF <sub>3</sub>                   | 575                                |
| HFE-347mcf2                    | E1730135    | CF <sub>3</sub> CF <sub>2</sub> OCH <sub>2</sub> CHF <sub>2</sub>                  | 374                                |
| HFE-347pcf2                    | 406-78-0    | CHF <sub>2</sub> CF <sub>2</sub> OCH <sub>2</sub> CF <sub>3</sub>                  | 580                                |
| HFE-356mec3                    | 382-34-3    | CH <sub>3</sub> OCF <sub>2</sub> CHFCF <sub>3</sub>                                | 101                                |
| HFE-356pcc3                    | 160620-20-2 | CH <sub>3</sub> OCF <sub>2</sub> CF <sub>2</sub> CHF <sub>2</sub>                  | 110                                |
| HFE-356pcf2                    | E1730137    | CHF <sub>2</sub> CH <sub>2</sub> OCF <sub>2</sub> CHF <sub>2</sub>                 | 265                                |
| HFE-356pcf3                    | 35042-99-0  | CHF <sub>2</sub> OCH <sub>2</sub> CF <sub>2</sub> CHF <sub>2</sub>                 | 502                                |

| Name                                          | CAS No.                    | Chemical formula                                                                                   | Global warming potential (100 yr.) |
|-----------------------------------------------|----------------------------|----------------------------------------------------------------------------------------------------|------------------------------------|
| HFE-365mcf3                                   | 378-16-5                   | $\text{CF}_3\text{CF}_2\text{CH}_2\text{OCH}_3$                                                    | 11                                 |
| HFE-374pc2                                    | 512-51-6                   | $\text{CH}_3\text{CH}_2\text{OCF}_2\text{CHF}_2$                                                   | 557                                |
| HFE-449sl (HFE-7100)<br>Chemical blend        | 163702-07-6<br>163702-08-7 | $\text{C}_4\text{F}_9\text{OCH}_3$<br>$(\text{CF}_3)_2\text{CFCF}_2\text{OCH}_3$                   | 297                                |
| HFE-569sf2 (HFE-7200)<br>Chemical blend       | 163702-05-4<br>163702-06-5 | $\text{C}_4\text{F}_9\text{OC}_2\text{H}_5$<br>$(\text{CF}_3)_2\text{CFCF}_2\text{OC}_2\text{H}_5$ | 59                                 |
| Sevoflurane                                   | 28523-86-6                 | $\text{CH}_2\text{FOCH}(\text{CF}_3)_2$                                                            | 345                                |
| HFE-356mm1                                    | 13171-18-1                 | $(\text{CF}_3)_2\text{CHOCH}_3$                                                                    | 27                                 |
| HFE-338mmz1                                   | 26103-08-2                 | $\text{CHF}_2\text{OCH}(\text{CF}_3)_2$                                                            | 380                                |
| (Octafluorotetramethylene)hydroxymethyl group | NA                         | $\text{X}-(\text{CF}_2)_4\text{CH}(\text{OH})-\text{X}$                                            | 73                                 |
| HFE-347mmy1                                   | 22052-84-2                 | $\text{CH}_3\text{OCF}(\text{CF}_3)_2$                                                             | 343                                |
| Bis(trifluoromethyl)-methanol                 | 920-66-1                   | $(\text{CF}_3)_2\text{CHOH}$                                                                       | 195                                |
| 2,2,3,3,3-pentafluoropropanol                 | 422-05-9                   | $\text{CF}_3\text{CF}_2\text{CH}_2\text{OH}$                                                       | 42                                 |
| PFPME                                         | NA                         | $\text{CF}_3\text{OCF}(\text{CF}_3)\text{CF}_2\text{OCF}_2\text{O}$<br>$\text{CF}_3$               | 10,300                             |

<sup>a</sup> The GWP for this compound is different than the GWP in the version of Table A-1 to subpart A of part 98 published on October 30, 2009.

**Table C–1 to Subpart C of Part 98—Default CO<sub>2</sub> Emission Factors and High Heat Values for Various Types of Fuel**

Table C–1 to Subpart C—Default CO<sub>2</sub> Emission Factors and High Heat Values for Various Types of Fuel

| Fuel type                                    | Default high heat value | Default CO <sub>2</sub> emission factor |
|----------------------------------------------|-------------------------|-----------------------------------------|
| <b>Coal and coke</b>                         | <b>mmBtu/short ton</b>  | <b>kg CO<sub>2</sub>/mmBtu</b>          |
| Anthracite                                   | 25.09                   | 103.69                                  |
| Bituminous                                   | 24.93                   | 93.28                                   |
| Subbituminous                                | 17.25                   | 97.17                                   |
| Lignite                                      | 14.21                   | 97.72                                   |
| Coal Coke                                    | 24.80                   | 113.67                                  |
| Mixed (Commercial sector)                    | 21.39                   | 94.27                                   |
| Mixed (Industrial coking)                    | 26.28                   | 93.90                                   |
| Mixed (Industrial sector)                    | 22.35                   | 94.67                                   |
| Mixed (Electric Power sector)                | 19.73                   | 95.52                                   |
| <b>Natural gas</b>                           | <b>mmBtu/scf</b>        | <b>kg CO<sub>2</sub>/mmBtu</b>          |
| (Weighted U.S. Average)                      | $1.026 \times 10^{-3}$  | 53.06                                   |
| <b>Petroleum products</b>                    | <b>mmBtu/gallon</b>     | <b>kg CO<sub>2</sub>/mmBtu</b>          |
| Distillate Fuel Oil No. 1                    | 0.139                   | 73.25                                   |
| Distillate Fuel Oil No. 2                    | 0.138                   | 73.96                                   |
| Distillate Fuel Oil No. 4                    | 0.146                   | 75.04                                   |
| Residual Fuel Oil No. 5                      | 0.140                   | 72.93                                   |
| Residual Fuel Oil No. 6                      | 0.150                   | 75.10                                   |
| Used Oil                                     | 0.138                   | 74.00                                   |
| Kerosene                                     | 0.135                   | 75.20                                   |
| Liquefied petroleum gases (LPG) <sup>1</sup> | 0.092                   | 61.71                                   |
| Propane <sup>1</sup>                         | 0.091                   | 62.87                                   |
| Propylene <sup>2</sup>                       | 0.091                   | 67.77                                   |
| Ethane <sup>1</sup>                          | 0.068                   | 59.60                                   |
| Ethanol                                      | 0.084                   | 68.44                                   |
| Ethylene <sup>2</sup>                        | 0.058                   | 65.96                                   |
| Isobutane <sup>1</sup>                       | 0.099                   | 64.94                                   |
| Isobutylene <sup>1</sup>                     | 0.103                   | 68.86                                   |
| Butane <sup>1</sup>                          | 0.103                   | 64.77                                   |
| Butylene <sup>1</sup>                        | 0.105                   | 68.72                                   |
| Naphtha (<401 deg F)                         | 0.125                   | 68.02                                   |
| Natural Gasoline                             | 0.110                   | 66.83                                   |

| Fuel type                                        | Default high heat value | Default CO <sub>2</sub> emission factor |
|--------------------------------------------------|-------------------------|-----------------------------------------|
| Other Oil (>401 deg F)                           | 0.139                   | 76.22                                   |
| Pentanes Plus                                    | 0.110                   | 70.02                                   |
| Petrochemical Feedstocks                         | 0.125                   | 71.02                                   |
| Petroleum Coke                                   | 0.143                   | 102.41                                  |
| Special Naphtha                                  | 0.125                   | 72.34                                   |
| Unfinished Oils                                  | 0.139                   | 74.54                                   |
| Heavy Gas Oils                                   | 0.148                   | 74.92                                   |
| Lubricants                                       | 0.144                   | 74.27                                   |
| Motor Gasoline                                   | 0.125                   | 70.22                                   |
| Aviation Gasoline                                | 0.120                   | 69.25                                   |
| Kerosene-Type Jet Fuel                           | 0.135                   | 72.22                                   |
| Asphalt and Road Oil                             | 0.158                   | 75.36                                   |
| Crude Oil                                        | 0.138                   | 74.54                                   |
| <b>Other fuels-solid</b>                         | <b>mmBtu/short ton</b>  | <b>kg CO<sub>2</sub>/mmBtu</b>          |
| Municipal Solid Waste                            | 9.95 <sup>3</sup>       | 90.7                                    |
| Tires                                            | 28.00                   | 85.97                                   |
| Plastics                                         | 38.00                   | 75.00                                   |
| Petroleum Coke                                   | 30.00                   | 102.41                                  |
| <b>Other fuels—gaseous</b>                       | <b>mmBtu/scf</b>        | <b>kg CO<sub>2</sub>/mmBtu</b>          |
| Blast Furnace Gas                                | $0.092 \times 10^{-3}$  | 274.32                                  |
| Coke Oven Gas                                    | $0.599 \times 10^{-3}$  | 46.85                                   |
| Propane Gas                                      | $2.516 \times 10^{-3}$  | 61.46                                   |
| Fuel Gas <sup>4</sup>                            | $1.388 \times 10^{-3}$  | 59.00                                   |
| <b>Biomass fuels—solid</b>                       | <b>mmBtu/short ton</b>  | <b>kg CO<sub>2</sub>/mmBtu</b>          |
| Wood and Wood Residuals (dry basis) <sup>5</sup> | 17.48                   | 93.80                                   |
| Agricultural Byproducts                          | 8.25                    | 118.17                                  |
| Peat                                             | 8.00                    | 111.84                                  |
| Solid Byproducts                                 | 10.39                   | 105.51                                  |
| <b>Biomass fuels—gaseous</b>                     | <b>mmBtu/scf</b>        | <b>kg CO<sub>2</sub>/mmBtu</b>          |
| Landfill Gas                                     | $0.485 \times 10^{-3}$  | 52.07                                   |
| Other Biomass Gases                              | $0.655 \times 10^{-3}$  | 52.07                                   |
| <b>Biomass Fuels—Liquid</b>                      | <b>mmBtu/gallon</b>     | <b>kg CO<sub>2</sub>/mmBtu</b>          |
| Ethanol                                          | 0.084                   | 68.44                                   |
| Biodiesel (100%)                                 | 0.128                   | 73.84                                   |
| Rendered Animal Fat                              | 0.125                   | 71.06                                   |
| Vegetable Oil                                    | 0.120                   | 81.55                                   |

<sup>1</sup> The HHV for components of LPG determined at 60 °F and saturation pressure with the exception of ethylene.

<sup>2</sup> Ethylene HHV determined at 41 °F (5 °C) and saturation pressure.

<sup>3</sup> Use of this default HHV is allowed only for: (a) Units that combust MSW, do not generate steam, and are allowed to use Tier 1; (b) units that derive no more than 10 percent of their annual heat input from MSW and/or tires; and (c) small batch incinerators that combust no more than 1,000 tons of MSW per year.

<sup>4</sup> Reporters subject to subpart X of this part that are complying with § 98.243(d) or subpart Y of this part may only use the default HHV and the default CO<sub>2</sub> emission factor for fuel gas combustion under the conditions prescribed in § 98.243(d)(2)(i) and (d)(2)(ii) and § 98.252(a)(1) and (a)(2), respectively. Otherwise, reporters subject to subpart X or subpart Y shall use either Tier 3 (Equation C-5) or Tier 4.

<sup>5</sup> Use the following formula to calculate a wet basis HHV for use in Equation C-1:

$$HHV_w = ((100 - M)/100) * HHV_d$$

where

HHV<sub>w</sub> = wet basis HHV,

M = moisture content (percent) and

HHV<sub>d</sub> = dry basis HHV from Table C-1.

[74 FR 56374, Oct. 30, 2009, as amended at 75 FR 79153, Dec. 17, 2010; 78 FR 71950, Nov. 29, 2013]



# Section 8

## Map(s)

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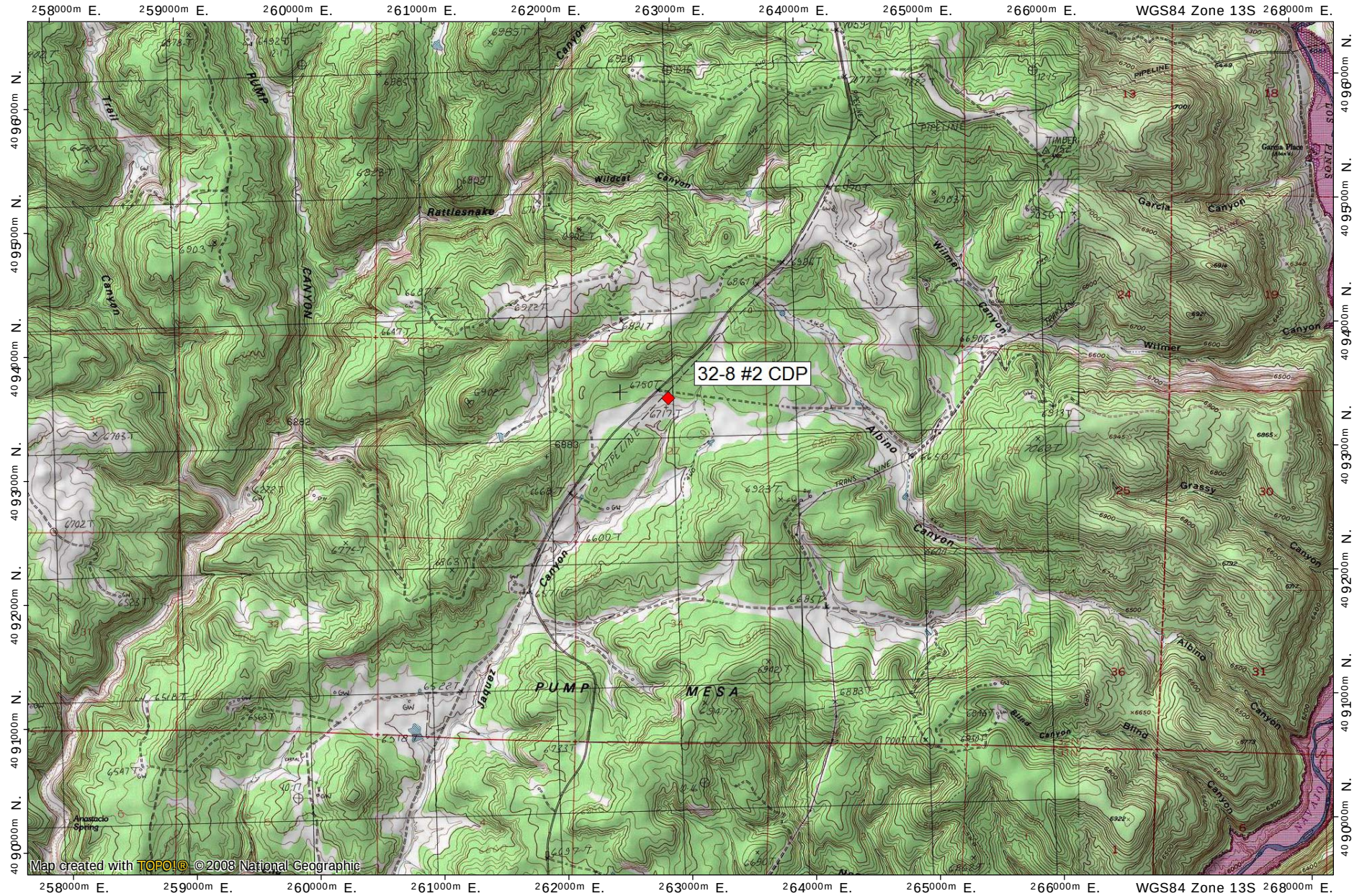
A map such as a 7.5 minute topographic quadrangle showing the exact location of the source. The map shall also include the following:

|                                                        |                                                    |
|--------------------------------------------------------|----------------------------------------------------|
| 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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See following page for site map.

# HARVEST FOUR CORNERS, LLC - 32-8 #2 CENTRAL DELIVERY POINT (CDP) - San Juan Co., NM T 32 N, R 08 W, Sec. 27



0.0 0.5 1.0 miles  
0.0 0.5 1.0 1.5 km

TN  
MN  
9 1/2°  
05/19/16



# 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.

---

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.
-

**Table 1** identifies the landowners within 100 feet of the property on which the 32-8 #2 Central Delivery Point is located, that received public notice letters of the proposed permit modification. Landowner information was obtained from the County Assessor's Office Geographical Information Systems (GIS) website at

<https://webmaps.sjcounty.net/portal/apps/webappviewer/index.html?id=e970ec2c29e74b37b8440dfe364c3dbf>. Please see the attached maps and property owner listing.

**Table 1**

| <b>Landowner(s) Receiving Public Notice Letters Within 100 Feet of the Property on Which the 32-8 #2 CDP Compressor Station is Located</b> |                                 |
|--------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------|
| Roger and Jennifer Sefzik                                                                                                                  | Thomas L. and Linda L. Jenkins  |
| NM Dept. of Transportation, Region 5                                                                                                       | Bureau of Land Management (BLM) |

20.2.72.203.B(2) NMAC requires public notice be provided by certified mail to all municipalities and counties in which the facility is located, and to municipalities, counties and Indian Tribes within a 10-mile radius of the property on which the facility is located.

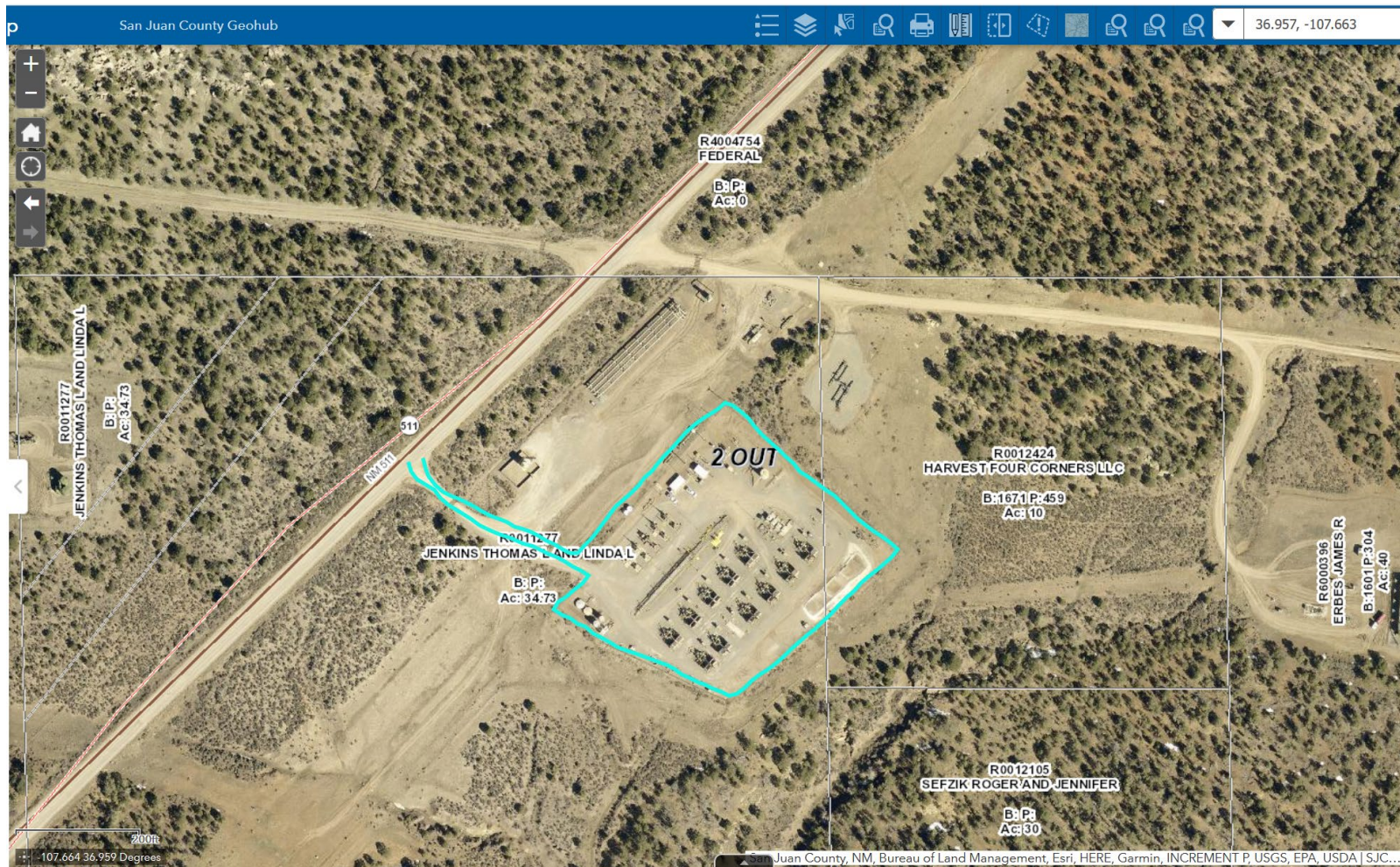
**Table 2** identifies the counties, municipalities and tribes located within ten miles of the 32-8 #2 Central Delivery Point that received public notice letters.

**Table 2**

| <b>Municipalities, Counties and Tribes Within 10 Miles of the 32-8 #2 CDP Compressor Station Receiving Public Notice Letters</b> |                                 |
|----------------------------------------------------------------------------------------------------------------------------------|---------------------------------|
| <b>Municipalities</b>                                                                                                            | <b>Addressed to</b>             |
| None                                                                                                                             | --                              |
| <b>Counties</b>                                                                                                                  | <b>Addressed to</b>             |
| San Juan County                                                                                                                  | County Clerk                    |
| Rio Arriba County                                                                                                                | County Clerk                    |
| La Plata County                                                                                                                  | County Clerk                    |
| <b>Tribes</b>                                                                                                                    | <b>Addressed to</b>             |
| Southern Ute Tribe                                                                                                               | Environmental Programs Division |

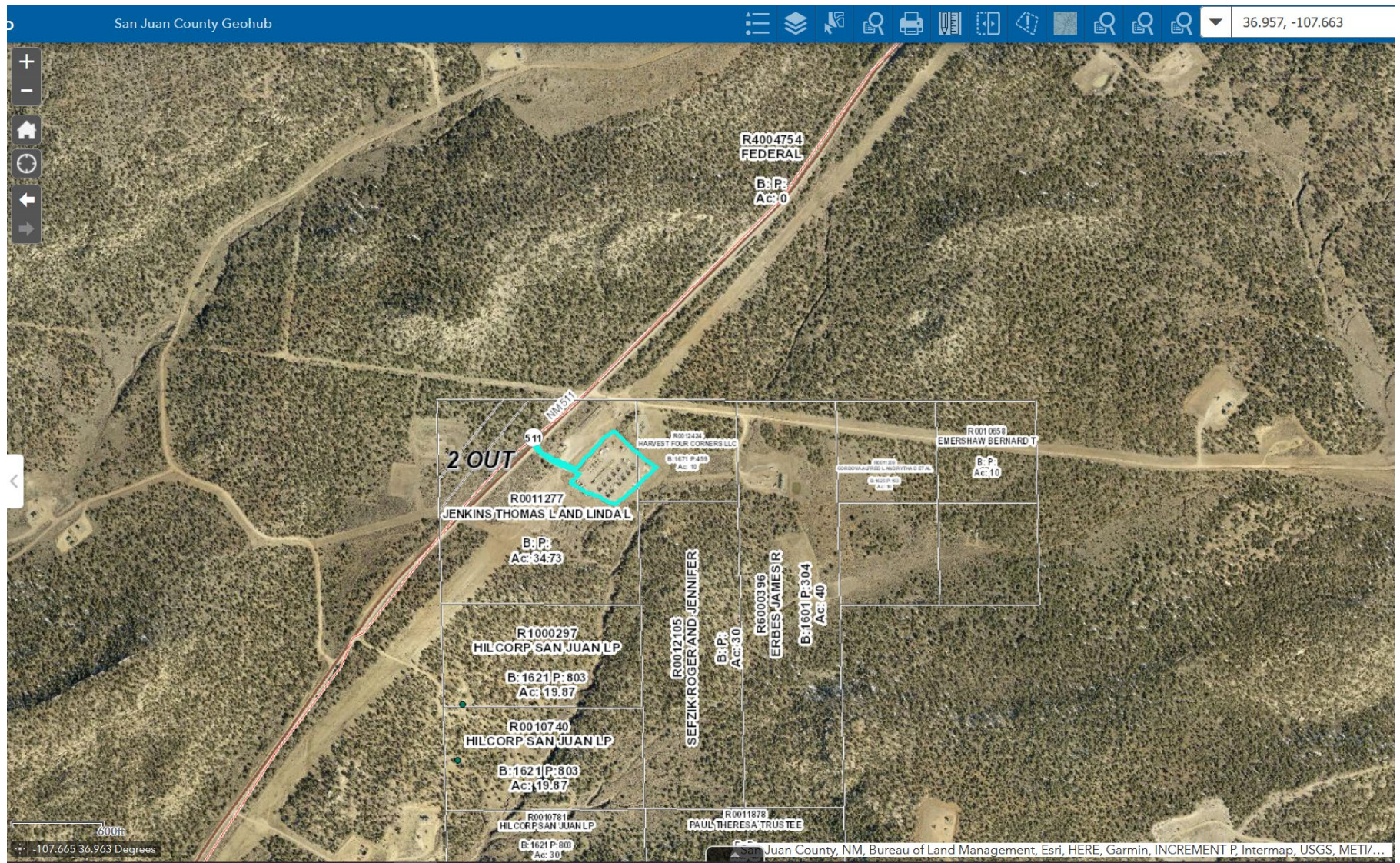
### Landscape aerial of fenceline/landowners (close in)

32-8 #2 CDP Compressor Station location in San Juan County, T-32N, R-08W, Section 27. The facility fenceline is outlined in blue, as is the driveway from the highway to the gate. The San Juan County online GIS distance measurement tool indicates that the driveway is 343 feet long. Public notice is provided to parcel owners within 100 feet of the facility fenceline.



## landscape aerial of location – zoomed out

32-8 #2 CDP Compressor Station location in San Juan County, T-32N, R-08W, Section 27.



### **32-8 #2 CDP - Neighboring Parcels within 100 feet**

#### **Coordinate Position**

Geographic: 36° 57' 24.9" N, 107° 39' 51.3" W

#### **Parcels**

Account No: R0011277

Parcel Address: NM 511, NAVAJO\_DAM, 87419

Owner: JENKINS THOMAS L AND LINDA L

Address: 1376 E QUINN RD

City, State, Zip: PEARCE, AZ 85625

Acres: 34.73

Parcel Number: 2045187312312

Legal Description: SE NW 273208 BK.854 PG.529 LESS 4AC TO HWY IN BK.638 PG.310

#### **Coordinate Position**

Geographic: 36° 57' 21.9" N, 107° 39' 41.5" W

#### **Parcels**

Account No: R0012105

Parcel Address: NM 511, NAVAJO\_DAM, 87419

Owner: SEFZIK ROGER AND JENNIFER

Address: P.O. Box 433

City, State, Zip: CUSTER, WA 98240

Acres: 30

Parcel Number: 2045187229296

Legal Description: SW SW NE 273208 W1/2NW SE 273208 30 ACRES B.1311 P.84

ShapeArea: 1287845.92680022

# NOTICE OF AIR QUALITY PERMIT APPLICATION

Harvest Four Corners, LLC announces its application submittal to the New Mexico Environment Department for an air quality permit for the modification of its compressor station. The date of application submittal to the Air Quality Bureau is September 3, 2025.

The exact location for the facility, known as 32-8#2 Central Delivery Point, is at latitude 36.95694 and longitude -107.66305. The approximate location of this facility is 17.4 miles east of Aztec in San Juan County.

The proposed revision consists of updating five (5) compressor engines (Units 7-8 and 17-19) to Waukesha 7044GSI natural gas-fired compressors and the addition of one (1) triethylene glycol dehydrator (Unit 22) and associated reboilers.

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)                             | 1.72            | 7.52          |
| PM <sub>10</sub>                                    | 1.72            | 7.52          |
| PM <sub>2.5</sub>                                   | 1.72            | 7.52          |
| Sulfur Dioxide (SO <sub>2</sub> )                   | 0.1             | 0.46          |
| Nitrogen Oxides (NO <sub>x</sub> )                  | 27.20           | 119.15        |
| Carbon Monoxide (CO)                                | 25.76           | 112.83        |
| Volatile Organic Compounds (VOC)                    | 7.90            | 36.01         |
| Total sum of all Hazardous Air Pollutants (HAPs)    | 0.81            | 3.54          |
| Toxic Air Pollutant (TAP)                           | n/a             | n/a           |
| Green House Gas Emission as Total CO <sub>2</sub> e | n/a             | 129,414.97    |

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: Harvest Four Corners, LLC, 1755 Arroyo Drive, Bloomfield, NM 87413.

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.

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## Legal notices Tri-City Record Legal Ad and Display Ad needed

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**From** Stephanie Willis <Stephanie.Willis@altamira-us.com>  
**Date** Fri 10/3/2025 12:44 PM  
**To** Odette Zenizo <odette@durangoherald.com>  
**Cc** Laura Worthen-Lodes <Laura.Worthen-Lodes@Altamira-US.com>

 1 attachment (89 KB)  
A-1033-9-Newspaper-Ad.doc;

Ms. Zenizo,

Attached is a notice that needs to be run in the first available publication. The notice needs to appear one time in the legal section and one time as a display ad. If you have any question, please let me know.

Please email me a proof, an invoice, and I will provide payment information.

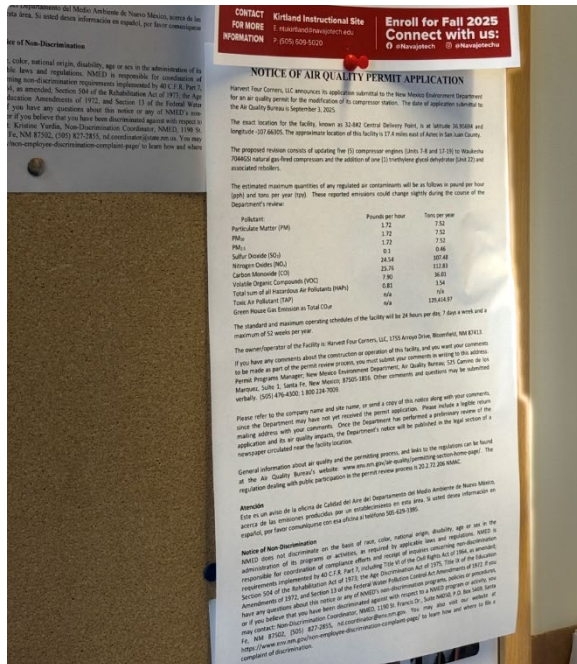
We will need an affidavit of proof of publication emailed after it is published.

Thanks,

**Stephanie Willis, PhD**

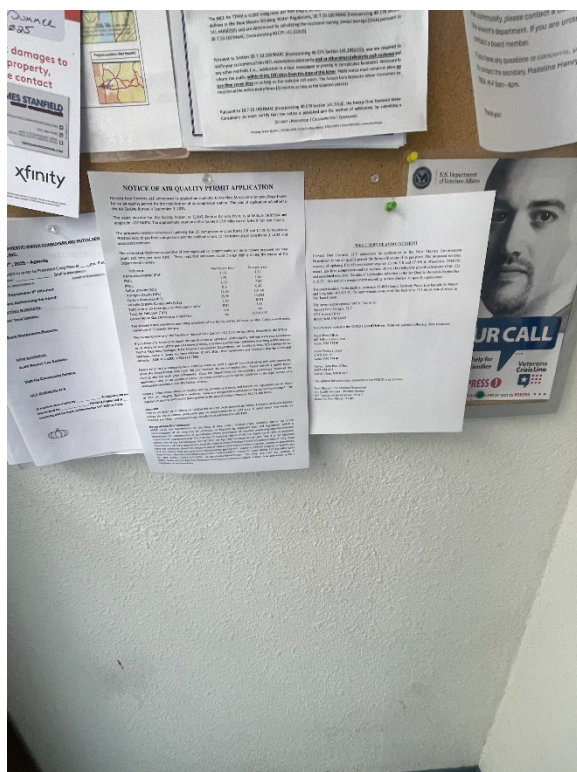
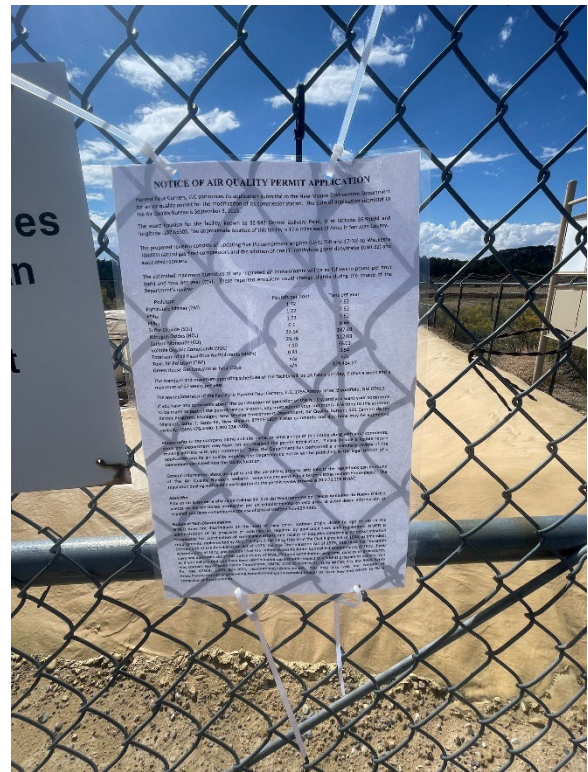
**Project Manager** | C 214-293-7374 | [altamira-us.com](mailto:Stephanie.Willis@altamira-us.com)  
4950 N O'Connor Rd., Suite 104  
Irving, TX 75062





32-8-2 Aztec Post Office Notice Posting

Friday • Oct 3, 2025 • 11:58 AM



32-8-2 Aztec Public Library Notice Posting

Friday • Oct 3, 2025 • 12:11 PM

## General Posting of Notices – Certification

I, Jennifer Nygren, the undersigned, certify that on **October 3, 2025**, posted a true and correct copy of the attached Public Notice in the following publicly accessible and conspicuous places in, or near, **Aztec, San Juan** County, state of New Mexico on the following dates:

1. Harvest Four Corners, LLC  
32-8#2 Central Delivery Point  
Date: September 2, 2025
2. Aztec Post Office  
601 S Rio Grande Ave  
Aztec, NM 87410  
Date: September 2, 2025
3. Aztec Public Library  
319 S Ash St.  
Aztec, NM 87410  
Date: September 2, 2025
4. Navajo Dam Post Office  
1787 NM-173  
Navajo Dam, NM 87419  
Date: September 2, 2025

Signed this 3 day of October, 2025.

**Jennifer  
Nygren**

Digitally signed by Jennifer Nygren  
DN: cn=Jennifer Nygren, c=US,  
o=Harvest Midstream, ou=EHS,  
email=jdeal@harvestmidstream.com  
Date: 2025.10.03 11:37:20 -06'00'

10/03/2025

Signature

Date

Jennifer Nygren

Printed Name

Environmental  
Specialist

Title

### PUBLIC SERVICE ANNOUNCEMENT

Harvest Four Corners, LLC announces its application to the New Mexico Environment Department for an air quality permit for the modification of its gas plant. The proposed revision consists of updating five (5) compressor engines (Units 7-8 and 17-19) to Waukesha 7044GSI natural gas-fired compressors and the addition of one (1) triethylene glycol dehydrator (Unit 22) and associated reboilers. The date of application submittal to the Air Quality Bureau is September 3, 2025. This notice is a requirement according to New Mexico air quality regulations.

The exact location for the facility, known as 32-8#2 Central Delivery Point, is at latitude 36.95694 and longitude -107.66305. The approximate location of this facility is 17.4 miles east of Aztec in San Juan County.

The owner and/or operator of the Facility is:

Harvest Four Corners, LLC  
1755 Arroyo Drive  
Bloomfield, NM 87413

Notices were posted at the 32-8#2 Central Delivery Point site and the following three locations:

Aztec Post Office  
601 S Rio Grande Ave  
Aztec, NM 87410

Aztec Public Library  
319 S Ash St.  
Aztec, NM 87410

Navajo Dam Post Office  
1787 NM-173  
Navajo Dam, NM 87419

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, Laura Worthen Lodes, the undersigned, certify that on **October 3, 2025**, submitted a public service announcement to **KENN 1390 AM Radio** that serves the City\Town\Village of **Aztec and the surrounding areas, San Juan** County, New Mexico, in which the source is or is proposed to be located and that **KENN 1390 AM Radio** did not respond.

Signed this 3rd day of October, 2025,



\_\_\_\_\_  
Signature

10/3/2025  
Date

Laura Worthen Lodes  
Printed Name

Consultant  
Title {APPLICANT OR RELATIONSHIP TO APPLICANT}

**From:** [Stephanie Willis](#)  
**To:** [LBurch@americangeneralmedia.com](mailto:LBurch@americangeneralmedia.com)  
**Cc:** [Laura Worthen-Lodes](#)  
**Subject:** Request for Public Service Announcement  
**Date:** Friday, October 3, 2025 12:52:40 PM  
**Attachments:** [A-1033-9-PSA.docx](#)  
[Outlook-A picture .png](#)

---

Mr. Burch,

Harvest Four Corners is submitting an air quality permit application to the New Mexico Air Quality Bureau to revise their permit for their 32-8#2 Central Delivery Point.

On behalf of Harvest, I am requesting a Public Service Announcement for the project in accordance with New Mexico air quality regulation NMAC 20.2.72.203.B(5).

Please provide proof of performance to me at this email address. The PSA is attached.

Please let me know if you have any questions.

Thanks,

**Stephanie Willis, PhD**

**Project Manager** | C 214-293-7374 | [altamira-us.com](http://altamira-us.com)  
4950 N O'Connor Rd., Suite 104  
Irving, TX 75062



# Property Record Card

San Juan County Assessor

**HARVEST FOUR  
CORNERS LLC**

1111 TRAVIS ST  
HOUSTON, TX 77002

**Account: R0011277**

Tax Area: 2OUTNR - District 2OUT  
Non-Residential

Acres: 34.730

**Parcel: 2045187312312**

Situs Address:

NM 511

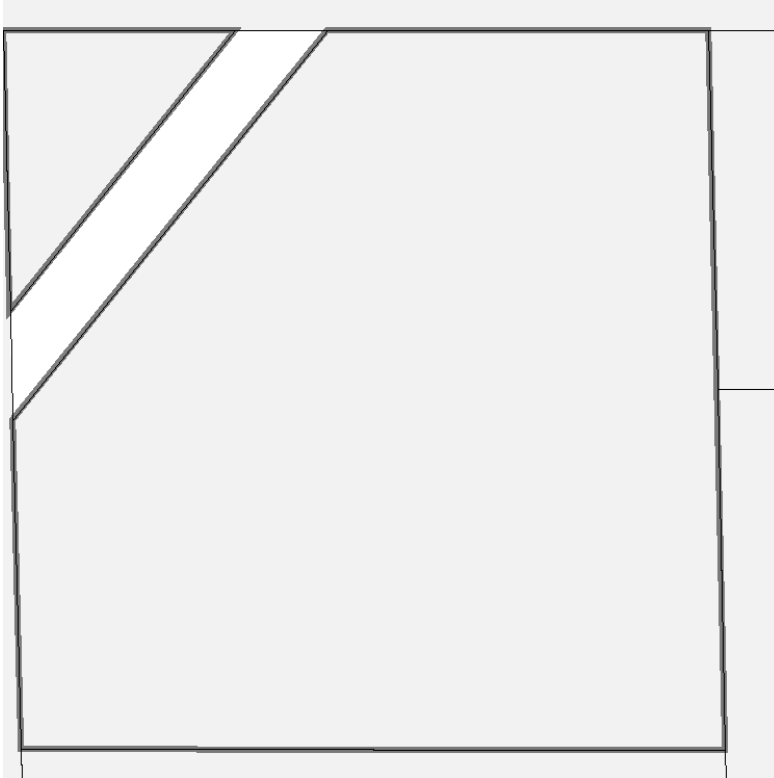
NAVAJO\_DAM, 87419

## Value Summary

| Value By:    | Market          | Override        |
|--------------|-----------------|-----------------|
| Land (1)     | \$24,311        | N/A             |
| <b>Total</b> | <b>\$24,311</b> | <b>\$24,311</b> |

## Legal Description

SE/NW OF SEC 27 32 08. BK.1715 PG.1071 LESS 4 AC TO HWY IN  
BK.638 PG.310



## Land Occurrence 1

|               |                             |                 |                                     |
|---------------|-----------------------------|-----------------|-------------------------------------|
| Property Code | 0200 - NON-RESIDENTIAL LAND | Land Code       | 25320A - 2OUT MIDDLE MESA M & B - A |
| Frontage      | 0                           | Measure         | A - Acre                            |
| Street Code   | 2 - Dirt                    | Topography Code | 3 - Rolling                         |

| SubArea | ACTUAL       | AREA_UNITS  | EFFECTIVE   | FOOTPRINT   | HEATED      |
|---------|--------------|-------------|-------------|-------------|-------------|
| Acres   | 34.73        | 34.73       | 34.73       | 34.73       | 34.73       |
| Total   | 34.73        | 34.73       | 34.73       | 34.73       | 34.73       |
|         | <b>Value</b> | <b>Rate</b> | <b>Rate</b> | <b>Rate</b> | <b>Rate</b> |
|         | \$24,311     | 700.00      | 700.00      | 700.00      | 700.00      |

## Abstract Summary

| Code         | Classification       | Actual Value | Value           | Taxable Value  | Actual Value Override | Taxable Override |
|--------------|----------------------|--------------|-----------------|----------------|-----------------------|------------------|
| 0200         | NON-RESIDENTIAL LAND |              | \$24,311        | \$8,104        | NA                    | NA               |
| <b>Total</b> |                      |              | <b>\$24,311</b> | <b>\$8,104</b> | <b>NA</b>             | <b>NA</b>        |

# Property Record Card

San Juan County Assessor

**HARVEST FOUR  
CORNERS LLC**

1111 TRAVIS ST  
HOUSTON, TX 77002

**Account: R0012424**

Tax Area: 2OUTNR - District 2OUT  
Non-Residential

Acres: 10.000

**Parcel: 2045187229364**

Situs Address:

NM 511

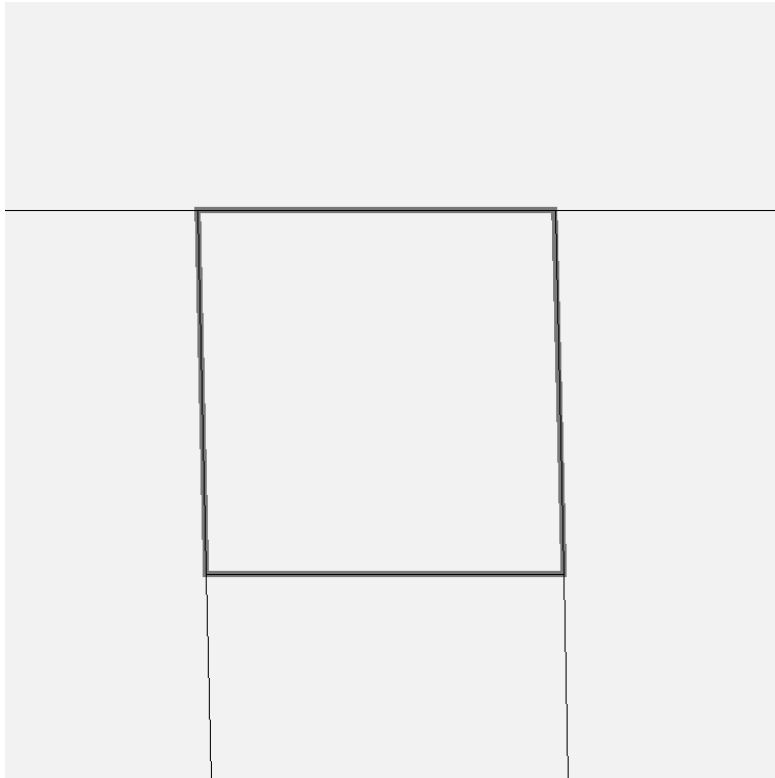
NAVAJO\_DAM, 87419

## Value Summary

| Value By:    | Market          | Override        |
|--------------|-----------------|-----------------|
| Land (1)     | \$16,000        | N/A             |
| <b>Total</b> | <b>\$16,000</b> | <b>\$16,000</b> |

## Legal Description

NW SW NE OF SEC 27 32 8. BK.1671 PG.459



## Land Occurrence 1

|               |                             |                 |                                     |
|---------------|-----------------------------|-----------------|-------------------------------------|
| Property Code | 0200 - NON-RESIDENTIAL LAND | Land Code       | 25320A - 2OUT MIDDLE MESA M & B - A |
| Frontage      | 0                           | Measure         | A - Acre                            |
| Street Code   | 3 - Paved                   | Topography Code | 3 - Rolling                         |

| SubArea | ACTUAL       | AREA_UNITS  | EFFECTIVE   | FOOTPRINT   | HEATED      |
|---------|--------------|-------------|-------------|-------------|-------------|
| Acres   | 10           | 10          | 10          | 10          | 10          |
| Total   | 10.00        | 10.00       | 10.00       | 10.00       | 10.00       |
|         | <b>Value</b> | <b>Rate</b> | <b>Rate</b> | <b>Rate</b> | <b>Rate</b> |
|         | \$16,000     | 1,600.00    | 1,600.00    | 1,600.00    | 1,600.00    |

## Abstract Summary

| Code         | Classification       | Actual Value | Value           | Taxable Value  | Actual Value Override | Taxable Override |
|--------------|----------------------|--------------|-----------------|----------------|-----------------------|------------------|
| 0200         | NON-RESIDENTIAL LAND |              | \$16,000        | \$5,333        | NA                    | NA               |
| <b>Total</b> |                      |              | <b>\$16,000</b> | <b>\$5,333</b> | <b>NA</b>             | <b>NA</b>        |



PO Box 61229  
Houston, TX 77208

1111 Travis Street  
Houston, TX 77002  
Phone: 713/209-2400  
Fax: 713/209-2478  
harvestmidstream.com

October 3, 2025

CERTIFIED MAIL 9589 0710 5270 2048 0837 83  
RETURN RECEIPT REQUESTED

Bureau of Land Management  
6251 College Blvd, Suite A  
Farmington, NM 87402

Dear Madam/Sir,

According to New Mexico Environment Department (NMED) air quality regulations, Harvest Four Corners, LLC must announce its intent to submit an application to revise the air quality permit for its 32-8#2 CDP Compressor Station. The application was submitted to the Air Quality Bureau during the week of September 2, 2025.

The exact location of the facility, known as the 32-8#2 Central Delivery Point, is latitude 36 deg, 57 min, 25 sec and longitude -107 deg, 39 min, 47 sec. The approximate location of this facility is approximately 17.4 miles east of Aztec, New Mexico (from the intersection of Highway 550 and Highway 173, go east on Highway 173 and drive 18 miles to Highway 511 (Sportsman' Inn), turn left on Highway 511 and drive 18.6 miles (crossing the dam) to mile marker 26.6, site is on the right.).

The proposed revision consists of updating five (5) compressor engines (Units 7-8 and 17-19) to Waukesha 7044GSI natural gas-fired compressors and the addition of one (1) triethylene glycol dehydrator (Unit 22) and associated reboilers.

The station's estimated maximum quantities of any regulated air contaminants will be as follows in pounds per hour and tons per year and may change slightly during the course of the Department's review:

|                                                               | Pounds Per Hour | Tons Per Year |
|---------------------------------------------------------------|-----------------|---------------|
| Nitrogen Oxides (NO <sub>x</sub> )                            | 27.20           | 119.15        |
| Carbon Monoxide (CO)                                          | 25.76           | 112.83        |
| Volatile Organic Compounds (VOCs)                             | 7.90            | 36.01         |
| Particulate Matter Less Than 10 Microns (PM <sub>10</sub> )   | 1.72            | 7.52          |
| Particulate Matter Less Than 2.5 Microns (PM <sub>2.5</sub> ) | 1.72            | 7.52          |
| Total Sum of all Hazardous Air Pollutants (HAPs)              | 0.81            | 3.54          |
| Green House Gas Emissions as Total CO <sub>2</sub> e          | N/A             | 129,414.97    |

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

If you have any comments about the construction or operation of this facility, and 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; 505-476-4300; 1-800-224-7009; [https://www.env.nm.gov/aqb/permit/aqb\\_draft\\_permits.html](https://www.env.nm.gov/aqb/permit/aqb_draft_permits.html). Other comments or questions may be submitted verbally.

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.

General information about air quality and the permitting process can be found at the Air Quality Bureau's web site. The regulation dealing with public participation in the permit review process is 20.2.72.206 NMAC. This regulation can be found in the "Permits" section of this web site.

#### **Atencion**

Este es un aviso de la Agencia de Calidad de Aire del Departamento de Medio Ambiente de Nuevo México, acerca de las emisiones producidas por un establecimiento en esta área. Si usted desea información en español, por favor de comunicarse con la oficina de Calidad de Aire al teléfono 505-476-5557.

Sincerely,

*Jennifer Nygren*

Jennifer Nygren  
Environmental Specialist  
Harvest Four Corners, LLC  
1755 Arroyo Drive  
Bloomfield, NM 87413

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PO Box 61229  
Houston, TX 77208

1111 Travis Street  
Houston, TX 77002  
Phone: 713/209-2400  
Fax: 713/209-2478  
harvestmidstream.com

October 3, 2025

CERTIFIED MAIL 9589 0710 5270 2048 0837 76  
RETURN RECEIPT REQUESTED

Thomas L. and Linda L. Jenkins  
1376 E. Quinn Road  
Pearce, AZ 85625

Dear Madam/Sir,

According to New Mexico Environment Department (NMED) air quality regulations, Harvest Four Corners, LLC must announce its intent to submit an application to revise the air quality permit for its 32-8#2 CDP Compressor Station. The application was submitted to the Air Quality Bureau during the week of September 2, 2025.

The exact location of the facility, known as the 32-8#2 Central Delivery Point, is latitude 36 deg, 57 min, 25 sec and longitude -107 deg, 39 min, 47 sec. The approximate location of this facility is approximately 17.4 miles east of Aztec, New Mexico (from the intersection of Highway 550 and Highway 173, go east on Highway 173 and drive 18 miles to Highway 511 (Sportsman' Inn), turn left on Highway 511 and drive 18.6 miles (crossing the dam) to mile marker 26.6, site is on the right.).

The proposed revision consists of updating five (5) compressor engines (Units 7-8 and 17-19) to Waukesha 7044GSI natural gas-fired compressors and the addition of one (1) triethylene glycol dehydrator (Unit 22) and associated reboilers.

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| Volatile Organic Compounds (VOCs)                             | 7.90            | 36.01         |
| Particulate Matter Less Than 10 Microns (PM <sub>10</sub> )   | 1.72            | 7.52          |
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| Total Sum of all Hazardous Air Pollutants (HAPs)              | 0.81            | 3.54          |
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The standard and maximum operating schedules for the station will be 24 hours per day, 7 days per week, and a maximum of 52 weeks per year.

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address: Permit Programs Manager; New Mexico Environment Department; Air Quality Bureau; 525 Camino de los Marquez, Suite 1; Santa Fe, New Mexico, 87505-1816; 505-476-4300; 1-800-224-7009; [https://www.env.nm.gov/aqb/permit/aqb\\_draft\\_permits.html](https://www.env.nm.gov/aqb/permit/aqb_draft_permits.html). Other comments or questions may be submitted verbally.

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Sincerely,

*Jennifer Nygren*

Jennifer Nygren  
Environmental Specialist  
Harvest Four Corners, LLC  
1755 Arroyo Drive  
Bloomfield, NM 87413

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PO Box 61229  
Houston, TX 77208

1111 Travis Street  
Houston, TX 77002  
Phone: 713/209-2400  
Fax: 713/209-2478  
harvestmidstream.com

October 3, 2025

CERTIFIED MAIL 958 0710 5270 2048 0837 69

RETURN RECEIPT REQUESTED

County Clerk, La Plata County  
679 Turner Drive, Suite C  
Durango CO, 81303

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Sincerely,

*Jennifer Nygren*

Jennifer Nygren  
Environmental Specialist  
Harvest Four Corners, LLC  
1755 Arroyo Drive  
Bloomfield, NM 87413

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

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PO Box 61229  
Houston, TX 77208

1111 Travis Street  
Houston, TX 77002  
Phone: 713/209-2400  
Fax: 713/209-2478  
harvestmidstream.com

October 3, 2025

CERTIFIED MAIL 9589 0710 5270 2048 0837 52  
RETURN RECEIPT REQUESTED

Rio Arriba County Clerk  
P.O. Box 158  
Tierra Amarilla, New Mexico 87575

Dear Madam/Sir,

According to New Mexico Environment Department (NMED) air quality regulations, Harvest Four Corners, LLC must announce its intent to submit an application to revise the air quality permit for its 32-8#2 CDP Compressor Station. The application was submitted to the Air Quality Bureau during the week of September 2, 2025.

The exact location of the facility, known as the 32-8#2 Central Delivery Point, is latitude 36 deg, 57 min, 25 sec and longitude -107 deg, 39 min, 47 sec. The approximate location of this facility is approximately 17.4 miles east of Aztec, New Mexico (from the intersection of Highway 550 and Highway 173, go east on Highway 173 and drive 18 miles to Highway 511 (Sportsman' Inn), turn left on Highway 511 and drive 18.6 miles (crossing the dam) to mile marker 26.6, site is on the right.).

The proposed revision consists of updating five (5) compressor engines (Units 7-8 and 17-19) to Waukesha 7044GSI natural gas-fired compressors and the addition of one (1) triethylene glycol dehydrator (Unit 22) and associated reboilers.

The station's estimated maximum quantities of any regulated air contaminants will be as follows in pounds per hour and tons per year and may change slightly during the course of the Department's review:

|                                                               | Pounds Per Hour | Tons Per Year |
|---------------------------------------------------------------|-----------------|---------------|
| Nitrogen Oxides (NO <sub>x</sub> )                            | 27.20           | 119.15        |
| Carbon Monoxide (CO)                                          | 25.76           | 112.83        |
| Volatile Organic Compounds (VOCs)                             | 7.90            | 36.01         |
| Particulate Matter Less Than 10 Microns (PM <sub>10</sub> )   | 1.72            | 7.52          |
| Particulate Matter Less Than 2.5 Microns (PM <sub>2.5</sub> ) | 1.72            | 7.52          |
| Total Sum of all Hazardous Air Pollutants (HAPs)              | 0.81            | 3.54          |
| Green House Gas Emissions as Total CO <sub>2</sub> e          | N/A             | 129,414.97    |

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

If you have any comments about the construction or operation of this facility, and 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; 505-476-4300; 1-800-224-7009; [https://www.env.nm.gov/aqb/permit/aqb\\_draft\\_permits.html](https://www.env.nm.gov/aqb/permit/aqb_draft_permits.html). Other comments or questions may be submitted verbally.

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Sincerely,

*Jennifer Nygren*

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harvestmidstream.com

October 3, 2025

CERTIFIED MAIL 9589 0710 5270 2048 0837 45  
RETURN RECEIPT REQUESTED

San Juan County Clerk  
P.O. Box 550  
Aztec, New Mexico 87410

Dear Madam/Sir,

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address: Permit Programs Manager; New Mexico Environment Department; Air Quality Bureau; 525 Camino de los Marquez, Suite 1; Santa Fe, New Mexico, 87505-1816; 505-476-4300; 1-800-224-7009; [https://www.env.nm.gov/aqb/permit/aqb\\_draft\\_permits.html](https://www.env.nm.gov/aqb/permit/aqb_draft_permits.html). Other comments or questions may be submitted verbally.

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Sincerely,

*Jennifer Nygren*

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harvestmidstream.com

October 3, 2025

CERTIFIED MAIL 9589 0710 5270 2048 0837 38  
RETURN RECEIPT REQUESTED

Environmental Programs Division  
Southern Ute Tribe  
P.O. Box 737  
Ignacio, CO 81137

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Aztec, NM 87410

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Thomas L. and Linda L. Jenkins  
Street and Apt. No., or PO Box No.  
1376 E. Quinn Road  
City, State, ZIP+4®  
Peculiar, MO 65625

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679 Turner Drive, Suite C  
City, State, ZIP+4®  
Durango, CO 81303

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Street and Apt. No., or PO Box No.  
Southern Ute Tribe, P.O. Box 737  
City, State, ZIP+4®  
1904010, CO 81137

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Postage

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Total Postage and Fees

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Sent To

Bureau of Land Management  
Street and Apt. No., or PO Box No.  
6251 College Blvd, Ste A  
City, State, ZIP+4®  
Farmington, NH 07401

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



# Section 10

## Written Description of the Routine Operations of the Facility

---

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

---

The 32-8#2 CDP is a production field facility that receives natural gas collected from production gathering fields via pipeline. The facility compresses the gas using compressors driven by the natural gas-fired reciprocating internal combustion engines. The natural gas stream is then routed to the TEG dehydrators, which further dehydrate the gas stream.

Storage tanks are used to store lube oil and used oil, TEG, produced water, waste water and antifreeze. Waste products are hauled off-site as required.

There are no process bottlenecks that limit production.

Other emission sources include startups, shutdowns and routine maintenance (SSM) from the compressors and piping (Unit SSM), and fugitive emissions from process piping (valves, flanges, seals, etc.).

The facility will operate up to 24 hours per day, seven days per week, 52 weeks per year, 8,760 hours per year.



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

- a. NO<sub>x</sub>: -28.46 TPY
- b. CO: +35.14 TPY
- c. VOC: -128.61 TPY
- d. SO<sub>x</sub>: +0.06 TPY
- e. PM: +0.97 TPY
- f. PM<sub>10</sub>: +0.97 TPY
- g. PM<sub>2.5</sub>: +0.97 TPY
- h. Fluorides: 0.0 TPY
- i. Lead: 0.0 TPY
- j. Sulfur compounds (listed in Table 2): 0.0 TPY
- k. GHG: -62,244.38 TPY



# 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:<br>(You may delete instructions or statements that do not apply in the justification column to shorten the document.)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|-------------------------------------------|----------------------------------------------------------|--------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 20.2.1 NMAC                               | General Provisions                                       | Yes                      | Facility                                                                                                                                                                                                                                                                                                 | General Provisions apply to Notice of Intent, Construction, and Title V permit applications.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| 20.2.3 NMAC                               | Ambient Air Quality Standards NMAAQS                     | Yes                      | Facility                                                                                                                                                                                                                                                                                                 | 20.2.3 NMAC is a State Implementation Plan (SIP) approved regulation that limits the maximum allowable concentration of, Sulfur Compounds, Carbon Monoxide and Nitrogen Dioxide.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| 20.2.7 NMAC                               | Excess Emissions                                         | Yes                      | Facility                                                                                                                                                                                                                                                                                                 | This regulation is applicable because it prohibits excess emissions unless proper notification procedures are followed.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| 20.2.23 NMAC                              | Fugitive Dust Control                                    | No                       | Facility                                                                                                                                                                                                                                                                                                 | This regulation is not applicable because the facility does not operate fugitive dust sources in areas requiring a mitigation plan in accordance with 40 CFR Part 51.930                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| 20.2.33 NMAC                              | Gas Burning Equipment - Nitrogen Dioxide                 | No                       | N/A                                                                                                                                                                                                                                                                                                      | This regulation is not applicable because the facility is not equipped with external gas burning equipment which have heat input rates exceeding the trigger level (one million MMBtu/year) established by the regulation (see 20.2.33.108 NMAC).                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| 20.2.34 NMAC                              | Oil Burning Equipment: NO <sub>2</sub>                   | No                       | N/A                                                                                                                                                                                                                                                                                                      | This regulation is not applicable because the facility does not burn oil (see 20.2.34.6 NMAC).                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| 20.2.35 NMAC                              | Natural Gas Processing Plant – Sulfur                    | No                       | N/A                                                                                                                                                                                                                                                                                                      | This regulation is not applicable because the facility is not a natural gas processing plant (see 20.2.35.6 NMAC).                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| 20.2.37 and 20.2.36 NMAC                  | Petroleum Processing Facilities and Petroleum Refineries | N/A                      | N/A                                                                                                                                                                                                                                                                                                      | These regulations were repealed by the Environmental Improvement Board.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| 20.2.38 NMAC                              | Hydrocarbon Storage Facility                             | No                       | N/A                                                                                                                                                                                                                                                                                                      | This regulation is not applicable because the facility does not store hydrocarbons containing hydrogen sulfide, nor is there a tank battery storing hydrocarbon liquids with a capacity greater than or equal to 65,000 gallons (see 20.2.38.112 NMAC).                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| 20.2.39 NMAC                              | Sulfur Recovery Plant - Sulfur                           | No                       | N/A                                                                                                                                                                                                                                                                                                      | This regulation could apply to sulfur recovery plants that are not part of petroleum or natural gas processing facilities.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| 20.2.50 NMAC                              | Oil and Gas Sector – Ozone Precursor Pollutants          | Yes                      | Sec 113<br>RICE 1-9, 17-19<br>Sec 114<br>RICE 1-9, 17-19<br>Compressor Seals<br>Sec 115<br>N/A<br>Sec 116<br>Fugitive Leaks (F1)<br>Sec 117<br>Truck Loading (L1)<br>Sec 118<br>Dehydrators (10a-16a, 20a-22a)<br>Sec 119<br>N/A<br>Sec 120<br>N/A<br>Sec 121<br>N/A<br>Sec 122<br>N/A<br>Sec 123<br>N/A | This regulation is applicable as it establishes emission standards for volatile organic compounds (VOC) and oxides of nitrogen (NO <sub>x</sub> ) for oil and gas production, processing, compression, and transmission sources.<br><br>113-This facility has 12 reciprocating compressors listed on Table 2-A. Thus, this facility is subject to this regulation. The owner will comply with this subpart as stated in 20.2.50.113.B.<br><br>114-This facility has 12 reciprocating compressors listed on Table 2-A. Thus, this facility is subject to this regulation. The owner will comply with this subpart as stated in 20.2.50.114.B(4).<br><br>115-There are no control devices and closed vent systems at this facility; therefore, they are not subject to the requirements of this regulation.<br><br>116-This facility will have equipment leaks and fugitive emissions. Thus, it will comply with this regulation.<br><br>117-This facility is a compressor station. Thus, it is subject to this regulation.<br><br>118-There are ten glycol dehydrators (Units 10a-16a, 20a-22a) associated with the compressor station that are subject to this regulation.<br><br>119- The heaters at the facility do not have a maximum capacity greater than 20 MMBtu/hr; therefore, this facility is not subject to this regulation. |

| <a href="#">State Regulation Citation</a> | Title                                                   | Applies?<br>Enter Yes or No | Unit(s) or Facility                                                  | Justification:<br>(You may delete instructions or statements that do not apply in the justification column to shorten the document.)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|-------------------------------------------|---------------------------------------------------------|-----------------------------|----------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                           |                                                         |                             | Sec 124<br>N/A<br>Sec 125<br>N/A<br>Sec 126<br>N/A<br>Sec 127<br>N/A | 120-This facility will not truck out more than 13 times a year and is therefore not subject to this regulation.<br><br>121-There are no individual pipeline pig launcher and receiver operations with a PTE equal to or greater than one tpy VOC located within the property boundary. This regulation does not apply.<br><br>122-This facility all controllers and pumps will operate on air and are therefore not subject to this regulation.<br><br>123-The storage vessels have a PTE less than 2 tpy maximum allowable VOC emissions. Thus, are not subject to this subpart.<br><br>124-There are no well workovers at this facility; therefore, this regulation does not apply.<br><br>125-The facility does not qualify as a small business facility; therefore, this subpart does not apply.<br><br>126-This facility does not contain a produced water management unit.<br><br>127-There are no wells undergoing recompletion or new wells being completed at this facility; therefore, this subpart does not apply. |
| 20.2.61.109 NMAC                          | Smoke & Visible Emissions                               | Yes                         | 1-9<br>10b-16b<br>& 17-19                                            | This regulation is applicable because the facility is equipped with stationary combustion sources. Emissions from these combustion sources are limited to less than 20% opacity (see 20.2.61.109 NMAC). The regulation is not applicable to Title V insignificant heaters (see 20.2.61.111.D NMAC).                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| 20.2.70 NMAC                              | Operating Permits                                       | Yes                         | Facility                                                             | This regulation is applicable because the facility is a major source of NOx, CO and VOC emissions (see 20.2.70.200 NMAC).                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| 20.2.71 NMAC                              | Operating Permit Fees                                   | Yes                         | Facility                                                             | This regulation is applicable because the facility is subject to 20.2.70 NMAC (see 20.2.71.6 NMAC)..                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| 20.2.72 NMAC                              | Construction Permits                                    | Yes                         | Facility                                                             | This regulation is applicable because the facility has potential emission rates (PER) greater than 10 pph or 25 tpy for pollutants subject to a state or federal ambient air quality standards (does not include VOCs or HAPs).                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| 20.2.73 NMAC                              | NOI & Emissions Inventory Requirements                  | Yes                         | Facility                                                             | The Notice of Intent portion of this regulation is not applicable because the facility is subject to 20.2.72 NMAC.<br>The emissions inventory portion of this regulation is applicable since the facility is a Title V major source (see 20.2.73.300.B(1) & (2)).                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| 20.2.74 NMAC                              | Permits – Prevention of Significant Deterioration (PSD) | No                          | Facility                                                             | This regulation is not applicable because the facility is not a PSD major source.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| 20.2.75 NMAC                              | Construction Permit Fees                                | Yes                         | Facility                                                             | This regulation is applicable because the facility is subject to 20.2.72 NMAC and it establishes the fee schedule associated with the filing of construction permits (see 20.2.75.6 NMAC).                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| 20.2.77 NMAC                              | New Source Performance                                  | Yes                         | 3-6 & 9<br>8 & 19                                                    | This regulation is applicable because it adopts by reference the federal NSPS codified in 40 CFR 60 (see 20.2.77.6 NMAC). The facility is subject to 40 CFR 60.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |

| <u><a href="#">State Regulation Citation</a></u> | Title                                        | Applies?<br>Enter Yes or No | Unit(s) or Facility        | Justification:<br>(You may delete instructions or statements that do not apply in the justification column to shorten the document.)                                                                             |
|--------------------------------------------------|----------------------------------------------|-----------------------------|----------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 20.2.78 NMAC                                     | Emission Standards for HAPS                  | No                          | Units Subject to 40 CFR 61 | This regulation is not applicable because it incorporates by reference the NESHAPs codified under 40 CFR 61 (see 20.2.78.6 NMAC). The facility is not subject to 40 CFR 61.                                      |
| 20.2.79 NMAC                                     | Permits – Nonattainment Areas                | No                          | Facility                   | This regulation is not applicable because the facility is neither located in nor has a significant impact on a nonattainment area (see 20.2.79.6 NMAC).                                                          |
| 20.2.80 NMAC                                     | Stack Heights                                | Yes                         | Facility                   | This regulation is applicable because it establishes guidelines for the selection of an appropriate stack height for the purpose of atmospheric dispersion modeling (see 20.2.80.6 NMAC).                        |
| 20.2.82 NMAC                                     | MACT Standards for source categories of HAPS | Yes                         | 10a-16a                    | This regulation is applicable because it adopts by reference the federal MACT Standards for source categories codified in 40 CFR 63 (see 20.2.82.6 NMAC). The facility is subject to 40 CFR 63, Subparts A & HH. |

### Federal Regulation Applicability Checklist

| <u><a href="#">Federal Regulation Citation</a></u> | Title                                                                         | Applies?<br>Enter Yes or No | Unit(s) or Facility | Justification:                                                                                                                                                                                                                                                                   |
|----------------------------------------------------|-------------------------------------------------------------------------------|-----------------------------|---------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 40 CFR 50                                          | NAAQS                                                                         | Yes                         | Facility            | This regulation is applicable because it applies to all sources in the state of New Mexico.                                                                                                                                                                                      |
| NSPS 40 CFR 60, Subpart A                          | General Provisions                                                            | Yes                         | 3-6 & 9<br>8 & 19   | Applies if any other Subpart in 40 CFR 60 applies.                                                                                                                                                                                                                               |
| NSPS 40 CFR 60.40a, Subpart Da                     | Subpart Da, Performance Standards for Electric Utility Steam Generating Units | No                          | N/A                 | This regulation is applicable because the new Waukesha 7044GSI engines (Units 3-6 and 9) will be subject to NSPS JJJJ. Additionally, NSPS OOOOa will apply due to an increase in horsepower at the site. If Units 8 and/or 19 are installed, they may be subject to the subpart. |
| NSPS 40 CFR 60.40b Subpart Db                      | Electric Utility Steam Generating Units                                       | No                          | N/A                 | This regulation is not applicable because there are no steam generating units at the facility.                                                                                                                                                                                   |

| <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>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
|-------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------|----------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 40 CFR 60.40c, Subpart Dc                 | Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units                                                                                                                         | No                              | N/A                        | This regulation is not applicable because there are no steam generating units at the facility.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| 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                        | This regulation is not applicable because the storage tanks at the facility have capacities less than the minimum applicability threshold capacity of 40,000 gallons (see §60.110a(a)).                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| 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                        | This regulation is not applicable because all storage tanks at the facility have capacities less than the minimum applicability threshold capacity of 75 cubic meters (19,812 gallons) or they have a capacity between 75 and 151 cubic meters (40,000 gallons) and store a liquid with a maximum true vapor pressure less than 15.0 kPa (2.2 psi) (see §60.110b(a) & §60.110b(b)).                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| NSPS 40 CFR 60.330 Subpart GG             | <b>Stationary Gas Turbines</b>                                                                                                                                                                                        | No                              | N/A                        | This regulation is not applicable because the facility does not have gas turbines.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| NSPS 40 CFR 60, Subpart KKK               | Leaks of VOC from <b>Onshore Gas Plants</b>                                                                                                                                                                           | No                              | N/A                        | This regulation is not applicable because the facility is not an onshore natural gas processing plant as defined by the subpart (see §60.630(a)(1)). Natural gas processing plant (gas plant) means any processing site engaged in the extraction of natural gas liquids from field gas, fractionation of mixed natural gas liquids to natural gas products, or both (see §60.631).                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| NSPS 40 CFR Part 60 Subpart LLL           | Standards of Performance for <b>Onshore Natural Gas Processing: SO<sub>2</sub> Emissions</b>                                                                                                                          | No                              | N/A                        | This regulation is not applicable because the facility is not a natural gas processing plant as defined by the subpart. It is not equipped with a sweetening unit (see §60.640(a)).                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| 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                              | No                              | N/A                        | This regulation is not applicable because the facility is not equipped with “affected” sources that commenced construction, modification or reconstruction after August 23, 2011 and on or before September 18, 2015: gas wells, centrifugal or reciprocating compressors, pneumatic controllers, and storage vessels (see §60.5365).<br>Note that the facility is not a natural gas processing plant as defined by the subpart (see §60.5430).<br>Commenced construction means a continuous program of fabrication, erection or installation (see §60.2).<br>Modification means any physical change in or change in the method of operation of an existing facility which increases emissions or results in new emissions (see §60.2). The following, by themselves, are not modifications: routine maintenance, repair or replacement, production increase without capital expenditure, increase in hours of operation, addition of emission controls, or the |

| <a href="#">Federal Regulation Citation</a> | Title                                                                                                                                                              | Applies?<br>Enter Yes or No | Unit(s) or Facility                                     | Justification:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
|---------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|---------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                             | and before September 18, 2015                                                                                                                                      |                             |                                                         | relocation or change in ownership of an existing facility (see §60.14). Reconstruction means the replacement of components of an existing facility such that the fixed capital cost of the new components exceeds 50 % of the fixed capital cost required to construct a comparable entirely new facility. Fixed capital cost means the capital needed to provide all the depreciable components (see §60.15).                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| NSPS<br>40 CFR Part<br>60 Subpart<br>OOOOa  | Standards of Performance for Crude Oil and Natural Gas Facilities for which Construction, Modification or Reconstruction Commenced <b>After</b> September 18, 2015 | Yes                         | Reciprocating compressors, Fugitive emission components | This regulation is applicable because the facility is equipped with “affected” sources that commenced construction, modification or reconstruction after September 18, 2015: gas wells, centrifugal or reciprocating compressors, pneumatic controllers, storage vessels, sweetening units, pneumatic pumps, and equipment leaks (see §60.5365a). In particular, this regulation applies to fugitive emissions components at the facility due to the increase in horsepower associated with the project. Fugitive components monitoring is required if a compressor station is modified. For the purpose of fugitive components monitoring as required by this subpart, modification of a compressor station is the addition of a compressor or replacement of a compressor with a larger unit (greater total horsepower) (see §60.5365a(j)). Furthermore, the compressors driven by the Waukesha 7044GSI engines will be subject to the rule including periodic rod packing replacements. Note that the facility is not a natural gas processing plant as defined by the subpart (see §60.5430a). See the definitions of construction, modification, and reconstruction referenced in Subpart OOOO above. |
| NSPS<br>40 CFR Part<br>60 Subpart<br>OOOOb  | Standards of Performance for Crude Oil and Natural Gas Facilities for which Construction, Modification or Reconstruction Commenced <b>After</b> December 6, 2022   | No                          | N/A                                                     | Facility was constructed before the December 6, 2022 applicability date and the addition of the glycol dehydration units do not constitute a modification under the regulation..                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| NSPS 40<br>CFR 60<br>Subpart IIII           | Standards of performance for Stationary Compression Ignition Internal Combustion Engines                                                                           | No                          | N/A                                                     | This regulation is not applicable because the facility is not equipped with stationary compression ignition (CI) internal combustion engines (ICE) that commenced construction after July 11, 2005 and were manufactured after April 1, 2006 (see §60.4200(a)(2)(i)).<br><br>For the purpose of this subpart, construction commences on the date the engine is ordered by the owner or operator (see §60.4200(a)).                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| NSPS<br>40 CFR Part<br>60 Subpart<br>JJJJ   | Standards of Performance for Stationary Spark Ignition Internal Combustion Engines                                                                                 | Yes                         | 3-6 & 9<br>8 & 19                                       | This regulation is applicable because the facility is equipped with spark ignition (SI) internal combustion engines (ICE) constructed, modified, or reconstructed after June 12, 2006.<br><br>Units 1-2, 7 & 17-18 were constructed prior to the applicability date and have not been modified or reconstructed. Units 3-6 and 9 will be constructed after the applicability date and will be subject to NSPS JJJJ.<br><br>If Units 8 and/or 19 are installed, the subpart may become applicable. See the definitions of construction, modification, and reconstruction referenced in Subpart OOOO below.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| NSPS 40<br>CFR 60<br>Subpart<br>TTTT        | Standards of Performance for Greenhouse Gas Emissions for Electric Generating Units                                                                                | No                          | N/A                                                     | This regulation is not applicable because there are no electric generating units at the facility.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| NSPS 40<br>CFR 60                           | Emissions Guidelines for Greenhouse Gas                                                                                                                            | No                          | N/A                                                     | This regulation is not applicable because there are no electric generating units at the facility.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |

| <b><u>Federal Regulation Citation</u></b>     | <b>Title</b>                                                                                                  | <b>Applies?<br/>Enter Yes or No</b> | <b>Unit(s) or Facility</b> | <b>Justification:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
|-----------------------------------------------|---------------------------------------------------------------------------------------------------------------|-------------------------------------|----------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Subpart UUUU                                  | Emissions and Compliance Times for Electric Utility Generating Units                                          |                                     |                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| NSPS 40 CFR 60, Subparts WWW, XXX, Cc, and Cf | Standards of performance for Municipal Solid Waste (MSW) Landfills                                            | No                                  | N/A                        | These regulations are not applicable as the facility is not a municipal solid waste landfill.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| NESHAP 40 CFR 61 Subpart A                    | General Provisions                                                                                            | No                                  | N/A                        | This regulation is not applicable because no other 40 CFR Part 61 subparts apply (see §61.01(c)).                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| NESHAP 40 CFR 61 Subpart E                    | National Emission Standards for <b>Mercury</b>                                                                | No                                  | N/A                        | The provisions of this subpart are applicable to those stationary sources which process mercury ore to recover mercury, use mercury chlor-alkali cells to produce chlorine gas and alkali metal hydroxide, and incinerate or dry wastewater treatment plant sludge                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| NESHAP 40 CFR 61 Subpart V                    | National Emission Standards for <b>Equipment Leaks</b> (Fugitive Emission Sources)                            | No                                  | N/A                        | This regulation is not applicable because there are no sources at the facility that operate in volatile hazardous air pollutant (VHAP) service.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| MACT 40 CFR 63, Subpart A                     | General Provisions                                                                                            | Yes                                 | 10a-16a, 20a-22a           | This regulation applies because 40 CFR 63 subpart HH is applicable.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| MACT 40 CFR 63.760 Subpart HH                 | <b>Oil and Natural Gas Production Facilities</b>                                                              | Yes                                 | <b>10a-16a, 20a-22a</b>    | <p>This regulation is applicable because the facility is equipped with affected equipment.</p> <p>The facility is an area HAP source as defined by the subpart. Note that since it is a production field facility (located prior to the point of custody transfer), only HAP emissions from glycol dehydration units and storage vessels are aggregated for a major source determination. Storage vessels include crude oil tanks, condensate tanks, intermediate hydrocarbon liquid tanks, and produced water tanks (see §63.761).</p> <p>At area HAP facilities, the regulation is only applicable to dehydrators (see §63.760(b)(2)).</p> <p>The TEG dehydrators are located in an area that is not within an UA plus offset and UC boundary (as defined in §63.761).</p> <p>Under §63.764(e)(1)(ii), the owner or operator of an affected area source [TEG dehydrator] with actual average benzene emissions from the process vent to the atmosphere of less than 0.90 megagrams per year (~1 tpy) is exempt from the operational, recordkeeping and notification requirements in §63.764(d), provided that documentation of the exemption determination is maintained as required in §63.774(d)(1).</p> |
| MACT 40 CFR 63 Subpart HHH                    | National Emission Standards for Hazardous Air Pollutants From Natural Gas Transmission and Storage Facilities | No                                  | N/A                        | <p>This regulation is not applicable because the facility is not a natural gas transmission and storage facility as defined by the subpart.</p> <p>A compressor station that transports natural gas prior to the point of custody transfer or to a natural gas processing plant (if present) are not considered a part of the natural gas transmission and storage source category (see §63.1270(a)).</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |

| <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 DDDDD              | National Emission Standards for Hazardous Air Pollutants for Major Industrial, Commercial, and Institutional Boilers & Process Heaters  | No                              | N/A                        | This regulation is not applicable because the facility is an area HAP source as defined by the subpart (see §63.7480) and is not equipped with boilers and process heaters.<br>For natural gas production facilities, only the HAP emissions from dehydrators and storage vessels with the potential for flash emissions are aggregated for a major source determination (see §63.7575).                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| MACT 40 CFR 63 Subpart UUUUU              | National Emission Standards for Hazardous Air Pollutants Coal & Oil Fire Electric Utility Steam Generating Unit                         | No                              | N/A                        | This regulation is not applicable because there are no coal- or oil-fired electric utility steam generating units (EGUs) at the facility.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| MACT 40 CFR 63 Subpart ZZZZ               | National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines ( <b>RICE MACT</b> ) | Yes                             | Facility                   | This regulation is applicable because the facility is equipped with affected reciprocating engines.<br>The station is a minor HAP source as defined by the subpart. For production field facilities, only HAP emissions from engines, turbines, dehydrators, and storage vessels with the potential for flash emissions are aggregated for the HAP major source determination (see §63.6675).<br>Units 1-2 are 4-stroke, lean burn (4SLB) spark ignition (SI) RICE with a site rating of more than 500 hp and were constructed prior to December 19, 2002. Under §63.6603(a), existing 4SLB stationary RICE with site rating of more than 500 hp located at area HAP sources are subject to work practice standards. If Units 8 & 19 are installed, they may also be subject to work practice standards.<br>Units 3-9 and 17-19 are 4-stroke rich burn (4SRB) spark ignition RICE and constructed after June 12, 2006. Under §63.6590(c), new or reconstructed stationary RICE located at an area source must meet the requirements of NSPS JJJJ. |
| 40 CFR 64                                 | <b>Compliance Assurance Monitoring</b>                                                                                                  | Yes                             | 3-6 & 9                    | This regulation is applicable because the Waukesha 7044GSI engines have precontrolled emissions equal to or exceeding the major source threshold (100 tons per year). (see §64.2(a)). Note, however, that because the Waukesha 7044GSI engines are subject to NSPS Subpart JJJJ, they are exempt from CAM requirements (see §64.2(b)(1)(i)).                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| 40 CFR 68                                 | <b>Chemical Accident Prevention</b>                                                                                                     | No                              | N/A                        | This regulation is not applicable because the facility does not store any of the identified toxic and flammable substances in quantities exceeding the applicability thresholds (see §68.10(a), §68.115(a), and §68.130 Tables 1-4).                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| Title IV – Acid Rain<br>40 CFR 72         | <b>Acid Rain</b>                                                                                                                        | No                              | N/A                        | This regulation is not applicable because the facility does not generate commercial electric power or electric power for sale.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |

| <b><u>Federal Regulation Citation</u></b> | <b>Title</b>                                                | <b>Applies?<br/>Enter Yes or No</b> | <b>Unit(s)<br/>or<br/>Facility</b> | <b>Justification:</b>                                                                                                                                                                                                                                                                                                                                                |
|-------------------------------------------|-------------------------------------------------------------|-------------------------------------|------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Title IV –<br>Acid Rain<br>40 CFR 73      | <b>Sulfur Dioxide Allowance Emissions</b>                   | No                                  | N/A                                | This regulation is not applicable because the facility does not generate commercial electric power or electric power for sale.                                                                                                                                                                                                                                       |
| Title IV-Acid<br>Rain 40 CFR 75           | <b>Continuous Emissions Monitoring</b>                      | No                                  | N/A                                | This regulation is not applicable because the facility does not generate commercial electric power or electric power for sale.                                                                                                                                                                                                                                       |
| Title IV –<br>Acid Rain<br>40 CFR 76      | <b>Acid Rain Nitrogen Oxides Emission Reduction Program</b> | No                                  | N/A                                | This regulation is not applicable because the facility does not produce, transform, destroy, import, or export ozone-depleting substances (see §82.1(b)); does not service motor vehicle air conditioning units (see §82.30(b)); and does not sell, distribute, or offer for sale or distribution any product that contains ozone-depleting substances (see §82.64). |
| Title VI –<br>40 CFR 82                   | <b>Protection of Stratospheric Ozone</b>                    | No                                  | N/A                                | This regulation is not applicable because the facility does not produce, transform, destroy, import, or export ozone-depleting substances (see §82.1(b)); does not service motor vehicle air conditioning units (see §82.30(b)); and does not sell, distribute, or offer for sale or distribution any product that contains ozone-depleting substances (see §82.64). |



# Section 14

## Operational Plan to Mitigate Emissions

(Submitting under 20.2.70, 20.2.72, 20.2.74 NMAC)

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- ☒ **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.
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# 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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Not applicable, as there are no alternative operating scenarios at this facility.



# 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.

August 22, 2025

Mr. Sufi Mustafa  
New Mexico Environment Department  
Air Quality Bureau  
525 Camino de los Marquez, Suite 1  
Santa Fe, New Mexico 87505-1816

**RE: Air Dispersion Modeling Protocol for Gas Plant  
Harvest Four Corners LLC  
32-8#2 Central Delivery Point (CDP) Compressor Station**

Dear Mr. Mustafa:

Harvest Four Corners LLC (Harvest) is preparing a construction permit application to modify operations at the 32-8#2 CDP Compressor Station. This protocol outlines the proposed air dispersion modeling techniques that will be used to assess impacts surrounding the facility. The facility is currently seeking permitting for the following equipment: two (2) natural gas-fired compressor engines.

**Introduction**

Harvest owns and operates the 32-8#2 CDP Compressor Station (Facility), which is located in San Juan County, NM. The Facility is a Compressor Station. Harvest seeks to add one (1) 100-bbl glycol storage tank, one (1) 165-bbl wastewater storage tank, and various support equipment and operations.

The modification results in the need for a construction permit and modeling has not been conducted for these new sources to demonstrate compliance with ambient air quality standards. Harvest seeks to demonstrate compliance with the New Mexico Ambient Air Quality Standards (NMAAQs), the National Ambient Air Quality Standards (NAAQS), as well as the PSD Class II Standards as applicable for CO, PM<sub>2.5</sub>, PM<sub>10</sub>, SO<sub>2</sub>, H<sub>2</sub>S, and NO<sub>2</sub> standards. The facility is located in the Air Quality Control Region 014 where the PSD minor source baseline data has been triggered for NO<sub>2</sub>, SO<sub>2</sub>, and PM<sub>10</sub>.

**Facility Description**

32-8#2 CDP Compressor Station is equipped to process and compress natural gas. Upon permit approval, the following sources will be permitted to operate at the facility:

- Twelve (12) Compressor Engines
- Nine (9) TEG Dehydrators
- One (1) 100-bbl Glycol Storage Tank
- One (1) 165-bbl Wastewater Storage Tank
- Facility fugitives
- SSM Emissions

### Facility Identification and Location

32-8#2 CDP Compressor Station (Facility is located in San Juan County, New Mexico. The UTM Coordinates of the facility are approximately 262,968 meters East and 4,093,429 meters North with NAD83 datum at an elevation of approximately 6,728 feet above mean sea level.

### Standards

Table 1 identifies the applicable significant impact levels (SIL) and NAAQS NMAAQS:

Table 1  
SIL, NAAQS and NMAAQS

| Pollutant         | Averaging Period | SIL ( $\mu\text{g}/\text{m}^3$ ) | NAAQS ( $\mu\text{g}/\text{m}^3$ ) | PSD Increment ( $\mu\text{g}/\text{m}^3$ ) | NMAAQS ( $\mu\text{g}/\text{m}^3$ ) |
|-------------------|------------------|----------------------------------|------------------------------------|--------------------------------------------|-------------------------------------|
| NO <sub>2</sub>   | 1-Hour           | 7.52                             | 188.03                             | --                                         | --                                  |
| NO <sub>2</sub>   | 24-Hour          | 5.0                              | --                                 | --                                         | 188.03                              |
| NO <sub>2</sub>   | Annual           | 0.1                              | 99.66                              | 25                                         | 94.02                               |
| CO                | 1-Hour           | 500                              | 10,303.6                           | --                                         | 9,960.1                             |
| CO                | 8-Hour           | 2,000                            | 40,069.6                           | --                                         | 14,997.5                            |
| H <sub>2</sub> S  | 1/2-Hour         | 5                                | --                                 | --                                         | 139.3                               |
| PM <sub>2.5</sub> | 24-Hour          | 1.2                              | 35                                 | 9                                          | --                                  |
| PM <sub>2.5</sub> | Annual           | 0.13                             | 9                                  | 4                                          | --                                  |
| PM <sub>10</sub>  | 24-Hour          | 5.0                              | 150                                | 30                                         | --                                  |
| PM <sub>10</sub>  | Annual           | 1.0                              | --                                 | 17                                         | --                                  |
| SO <sub>2</sub>   | Annual           | 1.0                              | --                                 | 20                                         | 52.4                                |
| SO <sub>2</sub>   | 24-Hour          | 5.0                              | --                                 | 91                                         | 261.9                               |
| SO <sub>2</sub>   | 3-Hour           | 25.0                             | 1309.3                             | 512                                        | --                                  |
| SO <sub>2</sub>   | 1-Hour           | 7.8                              | 196.4                              | --                                         | --                                  |

1. The high-eighth-high daily maximum 1-hour NO<sub>2</sub> concentration will be used to evaluate compliance with the NAAQS.
2. PM<sub>10</sub> and PM<sub>2.5</sub> list the Class II PSD Increment in lieu of the NMAAQS.

### Model Input Options

The modeling will be conducted utilizing the AERMOD dispersion model, version 24142, for this analysis. Default modeling inputs will be used for CO, PM<sub>2.5</sub>, PM<sub>10</sub>, SO<sub>2</sub>, and H<sub>2</sub>S.

Terrain will be incorporated into the modeling analysis. As the site is located in a rural area, rural dispersion coefficients will be implemented via the use of the RURAL keyword. A building downwash analysis using the latest version of BPIP will be conducted and incorporated into the modeling analysis to account for potential effluent downwash due to the engine structures, cooling fans, tanks and buildings.

### Receptor Grid Description

For each pollutant, the radius of significant impact around the facility is established using a Cartesian grid. A 50-meter grid spacing is used for the facility boundary receptors. A 100-meter spacing is extended out to 1-km from the facility boundary in each direction for a very fine grid resolution. Receptors for a fine grid resolution are placed with 250-meter spacing to a distance of 2.5-km from the facility boundary. For intermediate and rough grid resolutions, 500-meter spacing and 1000-meter spacing are extended to 5-km and 10-km beyond the facility boundary, respectively. The elevations of facility sources, receptors and surrounding sources will be determined using the same method and most recent 7.5-minute DEM data currently available.

### Meteorological Data

Modeling will be conducted utilizing the Bloomfield, New Mexico met data set available on the NMED website.. Therefore, this data is nearby and representative of the meteorological conditions at the facility.

### Radius of Impact (ROI) Analysis and Cumulative Impact Analysis (CIA)

A significant impact analysis for each pollutant's emissions from the facility sources will be conducted. If an air pollutant discharged by the facility results in an ambient impact greater than the significance levels mentioned in the NMED/AQB modeling guideline, the maximum extent of the significant impact area will be determined (as measured from the center of the facility to the furthest extent of the significant impact). The maximum extent will become a Radius of Impact (ROI). The area within the ROI then becomes the modeling domain for the CIA.

### Neighboring Sources

Cumulative impacts to demonstrate compliance with the CO, PM<sub>2.5</sub>, PM<sub>10</sub>, and SO<sub>2</sub>, NAAQS may be calculated as facility impacts plus background concentrations or may be calculated as facility impacts plus neighboring source impacts. Therefore, neighboring sources may be used to evaluate compliance. For NAAQS modeling, neighboring sources include all sources within 25 kilometers of the facility and all sources between 25 and 50 kilometers from the facility that are permitted to emit 1,000 pounds per hour or more were used, neighboring sources will be obtained from the NMAQB.

### Background Concentrations

Where impacts exceed the SIL, cumulative impacts for comparison with the NAAQS may be calculated as station impacts plus background concentrations as identified in the NMAQB modeling guidelines for pollutants other than SO<sub>2</sub>. If this method is utilized, background concentrations will be obtained from the modeling guidelines. Table 2 below identifies the applicable background concentrations that will be used.

**Table 2**  
Background Concentrations

| Pollutant         | Averaging Period | Background (µg/m <sup>3</sup> ) | Source ID |
|-------------------|------------------|---------------------------------|-----------|
| CO                | 1-Hour           | 2148                            | 350010023 |
| CO                | 8-Hour           | 1265                            | 350010023 |
| PM <sub>2.5</sub> | 24-Hour          | 11.77                           | 1FO       |
| PM <sub>2.5</sub> | Annual           | 4.19                            | 1FO       |
| PM <sub>10</sub>  | 24-Hour          | 66.0                            | 1H        |
| PM <sub>10</sub>  | Annual           | 10.6                            | 1H        |

1. The PM<sub>2.5</sub> data is obtained from Table 18 of the NMAQB modeling guidelines and is the 24-hour background 98<sup>th</sup> percentile concentration. Since it is nearest the plant, PM<sub>2.5</sub> data is taken from outside of Farmington Environment Department Office monitoring station.
2. The PM<sub>10</sub> data is obtained from Table 19 of the NMAQB modeling guidelines and is the 24-hour background 2<sup>nd</sup> High concentration. Since it is nearest the plant, PM<sub>10</sub> data is taken from outside of Shiprock Substation monitoring station.

### PSD Increment Analysis

If the results of the ROI for any pollutants show an exceedance of the significance levels, PSD increment analysis will be conducted because the minor source baseline date has been established in the region. The PSD analysis will

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be conducted including all PSD increment consuming sources within the surrounding sources within 50 km plus the ROI or 65 km of the facility (whichever is greater). Unlike the CIA, a predicted maximum NO<sub>2</sub> concentration will be compared with the PSD standard. There is not a PSD Increment for the 1-hr SO<sub>2</sub> or 1-hr or 24-hr NO<sub>2</sub>, therefore this analysis is not anticipated.

**Class I Areas Analysis**

The nearest Class I area is Weminuche Wilderness at fifty-two (52) km from the facility; therefore, Class I Area analysis will not be conducted.

If you have any questions, please contact me at 405-702-1618 or [laura.worthen-lodes@altamira-us.com](mailto:laura.worthen-lodes@altamira-us.com).

Sincerely,  
**Altamira-US, LLC**

Laura Worthen Lodes, PE  
Chief Engineering Officer

**From:** [Kassanje, Sahil, ENV](#)  
**To:** [Laura Worthen-Lodes](#)  
**Cc:** [Mustafa, Sufi A., ENV](#)  
**Subject:** 32-8#2 Central Delivery Point Protocol and Waiver  
**Date:** Tuesday, August 26, 2025 4:02:30 PM  
**Attachments:** [image001.png](#)

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Laura,

I reviewed the protocol and waiver for 32-8#2 Central Delivery Point.

For the protocol, I am ruling it complete and acceptable, and you may begin with modeling.

For the waiver, I still need some additional information. I understand that emissions are decreasing, however, since it is a new unit, we want to verify that dispersion improves. I cannot go solely off previous modeling since the unit changed. On page 4 of the modeling waiver there is a formula. This formula will show if the new unit will have a better or equal dispersion. Please work out this formula for the units that the waiver is being requested for. Please send that at the end of the waiver. Afterwards, I will return an approved copy.

Regards,

Sahil Kassanje  
Environmental Scientist & Specialist  
NMED – AQB – Air Modeling



# 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:            | 32-8#2 Central Delivery Point       |
| 2 | Name of company:             | Harvest Four Corners, LLC           |
| 3 | Current Permit number:       | 1033M7                              |
| 4 | Name of applicant's modeler: | Laura Worthen Lodes, PE             |
| 5 | Phone number of modeler:     | 405-919-4129                        |
| 6 | E-mail of modeler:           | Laura.Worthen-Lodes@Altamira-us.com |

### 16-B: Brief

|   |                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                         |                             |
|---|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------|-----------------------------|
| 1 | Was a modeling protocol submitted and approved?                                                                                                                                                                                                                                                                                                                                                                                                | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> |
| 2 | Why is the modeling being done?                                                                                                                                                                                                                                                                                                                                                                                                                | Adding New Equipment                    |                             |
| 3 | Describe the permit changes relevant to the modeling.<br>32-8 #2 CDP implementing the following changes: <ul style="list-style-type: none"><li>Updating five (5) compressor engines (Units 7-8 and 17-19) to Waukesha 7044GSI natural gas-fired compressors and reflect the lower NOx emissions required to comply with the ozone rule.</li><li>Addition of one (1) triethylene glycol dehydrator (Unit 22) and associated reboilers</li></ul> |                                         |                             |
| 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 <input type="checkbox"/> | No <input checked="" type="checkbox"/> |
| 7  | Identify the Air Quality Control Region (AQCR) in which the facility is located                                                                  | 014                          |                                        |
| 8  | List the PSD baseline dates for this region (minor or major, as appropriate).                                                                    |                              |                                        |
|    | NO2                                                                                                                                              | 6/6/1989                     |                                        |
|    | SO2                                                                                                                                              | 8/7/1978                     |                                        |
|    | PM10                                                                                                                                             | 8/7/1978                     |                                        |
|    | PM2.5                                                                                                                                            | Not established.             |                                        |
| 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 Weminuche Wilderness at fifty-two (52) km from the facility; therefore, Class I Area analysis will not be conducted. |                              |                                        |
| 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.                                                              |                              |                                        |
|    | N/A                                                                                                                                              |                              |                                        |

### 16-C: Modeling History of Facility

|   |                                                                                                                                                                                                                                                       |                                                                                 |                |          |
|---|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------|----------------|----------|
| 1 | Describe the modeling history of the facility, including the air permit numbers, the pollutants modeled, the National Ambient Air Quality Standards (NAAQS), New Mexico AAQS (NMAAQs), and PSD increments modeled. (Do not include modeling waivers). |                                                                                 |                |          |
|   | Pollutant                                                                                                                                                                                                                                             | Latest permit and modification number that modeled the pollutant facility-wide. | Date of Permit | Comments |
|   | CO                                                                                                                                                                                                                                                    | 1033 M6                                                                         | 2022           |          |
|   | NO <sub>2</sub>                                                                                                                                                                                                                                       | 1033 M6                                                                         | 2022           |          |
|   | SO <sub>2</sub>                                                                                                                                                                                                                                       | 1033 M6                                                                         | 2022           |          |
|   | H <sub>2</sub> S                                                                                                                                                                                                                                      | N/A                                                                             | N/A            |          |
|   | PM2.5                                                                                                                                                                                                                                                 | 1033 M6                                                                         | 2022           |          |
|   | PM10                                                                                                                                                                                                                                                  | 1033 M6                                                                         | 2022           |          |
|   | Lead                                                                                                                                                                                                                                                  | N/A                                                                             | N/A            |          |
|   | NM Toxic Air Pollutants (20.2.72.402 NMAC)                                                                                                                                                                                                            | N/A                                                                             | N/A            |          |

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

|   |                                                                                                                                                                                                                                                  |
|---|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1 | For each pollutant, indicate the modeling performed and submitted with this application. Choose the most complicated modeling applicable for that pollutant, i.e., culpability analysis assumes ROI and cumulative analysis were also performed. |
|---|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

| Pollutant                                | ROI                                 | Cumulative analysis      | Culpability analysis                | Waiver approved          | Pollutant not emitted or not changed. |
|------------------------------------------|-------------------------------------|--------------------------|-------------------------------------|--------------------------|---------------------------------------|
| CO                                       | <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 type="checkbox"/> | <input checked="" 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 checked="" 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)<br>(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.<br>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 |
|   | N/A                                                                                                                                               | N/A                         | N/A                                         | N/A                   | N/A               | N/A                             |
|   |                                                                                                                                                   |                             |                                             |                       |                   |                                 |

### 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"/> |
|   | The latest version of AERMOD with regulatory default options was used.                       |                                         |                             |

### 16-G: Surrounding source modeling

|   |                                                                                                                                                                                                                                                                                                |                            |
|---|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------|
| 1 | Date of surrounding source retrieval                                                                                                                                                                                                                                                           | 09/17/2025                 |
| 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 |
|   | N/A                                                                                                                                                                                                                                                                                            | N/A                        |
|   |                                                                                                                                                                                                                                                                                                |                            |

**16-H: Building and structure downwash**

|   |                                                                                      |                                         |                             |
|---|--------------------------------------------------------------------------------------|-----------------------------------------|-----------------------------|
| 1 | How many buildings are present at the facility?                                      | 12                                      |                             |
| 2 | How many above ground storage tanks are present at the facility?                     | 0                                       |                             |
| 3 | Was building downwash modeled for all buildings and tanks? If not explain why below. | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> |
|   | N/A                                                                                  |                                         |                             |
| 4 | Building comments                                                                    |                                         |                             |

**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>Chain-Link Fence</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                               |
|   | Discrete                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | Square | 100m    | Fenceline                                                 | 1000m                                                   |                                        |
|   | Discrete                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | Square | 250m    | 1000m                                                     | 2500m                                                   |                                        |
|   | Discrete                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | Square | 500m    | 2500m                                                     | 5000m                                                   |                                        |
|   | Discrete                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | Square | 1000m   | 5000m                                                     | 10000m                                                  |                                        |
| 5 | <p>Describe receptor spacing along the fence line.</p> <p>50-meter grid spacing for the boundary receptors</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |        |         |                                                           |                                                         |                                        |
| 6 | <p>Describe the PSD Class I area receptors.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |        |         |                                                           |                                                         |                                        |

**16-J: Modeling Scenarios**

|   |                                                                                                                                                                                                                                                                                                                                                                                                                                       |        |             |        |  |  |  |  |  |                              |                                        |  |
|---|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------|-------------|--------|--|--|--|--|--|------------------------------|----------------------------------------|--|
| 1 | Identify, define, and describe all modeling scenarios. Examples of modeling scenarios include using different production rates, times of day, times of year, simultaneous or alternate operation of old and new equipment during transition periods, etc. Alternative operating scenarios should correspond to all parts of the Universal Application and should be fully described in Section 15 of the Universal Application (UA3). |        |             |        |  |  |  |  |  |                              |                                        |  |
|   | Routine                                                                                                                                                                                                                                                                                                                                                                                                                               |        |             |        |  |  |  |  |  |                              |                                        |  |
| 2 | Which scenario produces the highest concentrations? Why?                                                                                                                                                                                                                                                                                                                                                                              |        |             |        |  |  |  |  |  |                              |                                        |  |
|   | N/A                                                                                                                                                                                                                                                                                                                                                                                                                                   |        |             |        |  |  |  |  |  |                              |                                        |  |
| 3 | Were emission factor sets used to limit emission rates or hours of operation?<br>(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.<br>(Modify or duplicate table as necessary. It's ok to put the table below section 16-K if it makes formatting easier.)<br>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.                                                                                                                                                                                                                                                                                                                                      |        |             |        |  |  |  |  |  |                              |                                        |  |
|   |                                                                                                                                                                                                                                                                                                                                                                                                                                       |        |             |        |  |  |  |  |  |                              |                                        |  |
| 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?<br>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:                                                              |
| 2 | Describe the NO <sub>2</sub> modeling.                                                                                                                  |                                                                     |
|   | NO <sub>x</sub> modeling was conducted using OLM an ozone background concentration of                                                                   |                                                                     |
| 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"/> |
|   | Default values were used.                                                                                                                               |                                                                     |
| 4 | Describe the design value used for each averaging period modeled.                                                                                       |                                                                     |
|   | 1-hour: High eighth high<br>Annual Highest Annual Average of Three Years:                                                                               |                                                                     |

### 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.<br>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.                                                             |                     |                                                                     |                     |
|   | <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.<br>N/A                                                                                                                                                                                                                                                         |                                                                     |
| 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 PM2.5. | Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> |
| 4 | Was secondary PM modeled for PM2.5?                                                                                                                                                                                                                                                                                                              | Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> |
| 5 | If MERPs were used to account for secondary PM2.5 fill out the information below. If another method was used describe below.                                                                                                                                                                                                                     |                                                                     |
|   | Pollutant                                                                                                                                                                                                                                                                                                                                        | NO <sub>x</sub> SO <sub>2</sub>                                     |
|   | MERP <sub>annual</sub>                                                                                                                                                                                                                                                                                                                           | 10397 1820                                                          |
|   | MERP <sub>24-hour</sub>                                                                                                                                                                                                                                                                                                                          | 2649 359                                                            |
|   | Emission rate (ton/yr)                                                                                                                                                                                                                                                                                                                           | 60.097 2.28                                                         |

**16-N: Setback Distances****N/A**

|   |                                                                                                                                                                                                                                                                                                                          |
|---|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 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. |
| 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.                                                                                                                                             |

**16-O: PSD Increment and Source IDs****N/A**

|   |                                                                                                                                                                                                                       |                               |                             |
|---|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------|-----------------------------|
| 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 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 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 type="checkbox"/> |

|   |                                                                                                                                                                                                                                                                                        |                 |                 |                              |                             |
|---|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------|-----------------|------------------------------|-----------------------------|
| 4 | Which units consume increment for which pollutants?                                                                                                                                                                                                                                    |                 |                 |                              |                             |
|   | Unit ID                                                                                                                                                                                                                                                                                | NO <sub>2</sub> | SO <sub>2</sub> | PM10                         | PM2.5                       |
|   |                                                                                                                                                                                                                                                                                        |                 |                 |                              |                             |
|   |                                                                                                                                                                                                                                                                                        |                 |                 |                              |                             |
| 5 | PSD increment description for sources.<br>(for unusual cases, i.e., baseline unit expanded emissions after baseline date).                                                                                                                                                             |                 |                 |                              |                             |
| 6 | Are all the actual installation dates included in Table 2A of the application form, as required?<br>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 type="checkbox"/> | No <input type="checkbox"/> |
|   |                                                                                                                                                                                                                                                                                        |                 |                 |                              |                             |

### 16-P: Flare Modeling N/A

|   |                                                            |                          |                            |                              |
|---|------------------------------------------------------------|--------------------------|----------------------------|------------------------------|
| 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) |
|   |                                                            |                          |                            |                              |

### 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? | Yes <input type="checkbox"/> | No <input type="checkbox"/> |
|   | If not please explain how increment consumption status is determined for the missing installation dates below.                |                              |                             |
| 2 | Describe the determination of sigma-Y and sigma-Z for fugitive sources.                                                       |                              |                             |
| 3 | Describe how the volume sources are related to unit numbers.<br>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"/> |
|---|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------|-----------------------------|

|   |                                                                                           |                              |                                        |
|---|-------------------------------------------------------------------------------------------|------------------------------|----------------------------------------|
|   | CO: N/A                                                                                   |                              |                                        |
|   | NO <sub>2</sub> : Navajo Dam (350450018)                                                  |                              |                                        |
|   | PM <sub>2.5</sub> : N/A                                                                   |                              |                                        |
|   | PM <sub>10</sub> : N/A                                                                    |                              |                                        |
|   | SO <sub>2</sub> : N/A                                                                     |                              |                                        |
|   | 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.<br><br>Four Corners (Bloomfield)                                                                                                   | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> |
| 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.<br><br>N/A |                                         |                             |

### 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?<br><br><a href="#">TNM Download v2</a> |                                         |                             |

### 16-U: Modeling Files

|   |                                                                                                                                                                                                                       |                                                                              |                                                            |
|---|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------|------------------------------------------------------------|
| 1 | Describe the modeling files: All criteria pollutants were modeled as one complete SIL run. NAAQS/PSD Increment analysis was required for 1-hr and annual NO <sub>2</sub> and the 24-hr and annual PM <sub>2.5</sub> . |                                                                              |                                                            |
|   | File name (or folder and file name)                                                                                                                                                                                   | Pollutant(s)                                                                 | Purpose (ROI/SIA, cumulative, culpability analysis, other) |
|   | Harvest Midstream_32-2#8_SIL.BST                                                                                                                                                                                      | NO <sub>2</sub> , CO, SO <sub>2</sub> , PM <sub>10</sub> , PM <sub>2.5</sub> | ROI                                                        |
|   | Harvest Midstream_32-2#8_NAAQSNOx_1.BST                                                                                                                                                                               | NO <sub>2</sub>                                                              | Culpability analysis                                       |
|   | Harvest Midstream_32-2#8_NAAQSNOx_A.BST                                                                                                                                                                               | NO <sub>2</sub>                                                              | Culpability analysis                                       |
|   | Harvest Midstream_32-2#8_NAAQSPM2.5_24.BST                                                                                                                                                                            | PM <sub>2.5</sub>                                                            | Culpability analysis                                       |
|   | Harvest Midstream_32-2#8_NAAQSPM2.5A.BST                                                                                                                                                                              | PM <sub>2.5</sub>                                                            | Culpability analysis                                       |
|   |                                                                                                                                                                                                                       |                                                                              |                                                            |

**16-V: PSD New or Major Modification Applications**

|   |                                                                                                                                                                                                                                |                              |                             |
|---|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------|-----------------------------|
| 1 | A new PSD major source or a major modification to an existing PSD major source requires additional analysis.<br>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 checked="" 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,<br>Time Period<br>and<br>Standard | Modeled<br>Facility<br>Concentration<br>(µg/m3)                                                                                                                                                                                                                                               | Modeled<br>Concentration<br>with<br>Surrounding<br>Sources (µg/m3) | Secondary<br>PM<br>(µg/m3) | Background<br>Concentratio<br>n (µg/m3) | Cumulative<br>Concentration<br>(µg/m3) | Value of<br>Standard<br>(µg/m3) | Percent<br>of<br>Standard | Location                     |                                        |                   |
|                                              |                                                                                                                                                                                                                                                                                               |                                                                    |                            |                                         |                                        |                                 |                           | UTM E (m)                    | UTM N (m)                              | Elevation<br>(ft) |
| NOx – 1hr -<br>Class II SIL                  | 95.51                                                                                                                                                                                                                                                                                         |                                                                    |                            |                                         | 95.5                                   | 7.52                            | 1270.07                   | 263031.5                     | 4093531.5                              | 2054.37           |
| NOx-24-hr-<br>Class II SIL                   | 31.27                                                                                                                                                                                                                                                                                         |                                                                    |                            |                                         | 31.3                                   | 5                               | 625.30                    | 263000                       | 4093600                                | 2057.46           |
| NOx -<br>annual-<br>Class II SIL             | 7.63                                                                                                                                                                                                                                                                                          |                                                                    |                            |                                         | 7.6                                    | 1                               | 762.51                    | 263031.5                     | 4093531.5                              | 2054.37           |
| CO-1 hr-<br>SIL                              | 78.50                                                                                                                                                                                                                                                                                         |                                                                    |                            |                                         | 78.5                                   | 2,000.00                        | 3.93                      | 263031.5                     | 4093531.5                              | 2054.37           |
| CO-8 hr-<br>SIL                              | 41.94                                                                                                                                                                                                                                                                                         |                                                                    |                            |                                         | 41.9                                   | 500.00                          | 8.39                      | 262800                       | 4093900                                | 2092.1            |
| PM10 –<br>24hr- Class<br>II SIL              | 2.457                                                                                                                                                                                                                                                                                         |                                                                    |                            |                                         | 2.5                                    | 5                               | 49.14                     | 263000                       | 4093600                                | 2057.46           |
| PM10 –<br>Annual-<br>Class II SIL            | 0.630                                                                                                                                                                                                                                                                                         |                                                                    |                            |                                         | 0.6                                    | 1                               | 63.04                     | 263031.5                     | 4093531.5                              | 2054.37           |
| PM2.5 –<br>24hr- Class<br>II SIL             | 2.46                                                                                                                                                                                                                                                                                          |                                                                    | 0.0348                     |                                         | 2.5                                    | 1.2                             | 207.66                    | 263000                       | 4093600                                | 2057.46           |
| PM2.5 –<br>Annual-                           | 0.63                                                                                                                                                                                                                                                                                          |                                                                    | 0.0014                     |                                         | 0.6                                    | 0.13                            | 486.04                    | 263031.5                     | 4093531.5                              | 2054.37           |

| Pollutant,<br>Time Period<br>and<br>Standard | Modeled<br>Facility<br>Concentration<br>(µg/m3) | Modeled<br>Concentration<br>with<br>Surrounding<br>Sources (µg/m3) | Secondary<br>PM<br>(µg/m3) | Background<br>Concentratio<br>n (µg/m3) | Cumulative<br>Concentration<br>(µg/m3) | Value of<br>Standard<br>(µg/m3) | Percent<br>of<br>Standard | Location  |           |                   |
|----------------------------------------------|-------------------------------------------------|--------------------------------------------------------------------|----------------------------|-----------------------------------------|----------------------------------------|---------------------------------|---------------------------|-----------|-----------|-------------------|
|                                              |                                                 |                                                                    |                            |                                         |                                        |                                 |                           | UTM E (m) | UTM N (m) | Elevation<br>(ft) |
| Class II<br>SIL                              |                                                 |                                                                    |                            |                                         |                                        |                                 |                           |           |           |                   |
| SO2-1hr-<br>Class II<br>SIL                  | 0.75                                            |                                                                    |                            |                                         | 0.7                                    | 7.8                             | 9.59                      | 263031.5  | 4093531.5 | 2054.37           |
| SO2-3hr-<br>Class II<br>SIL                  | 0.25                                            |                                                                    |                            |                                         | 0.2                                    | 25                              | 0.98                      | 263000    | 4093600   | 2057.46           |
| SO2-24hr-<br>Class II<br>SIL                 | 0.59                                            |                                                                    |                            |                                         | 0.6                                    | 5                               | 11.90                     | 263031.5  | 4093531.5 | 2054.37           |
| SO2-<br>Annual-<br>Class II<br>SIL           | 0.06                                            |                                                                    |                            |                                         | 0.1                                    | 1                               | 6.14                      | 263031.5  | 4093531.5 | 2054.37           |
|                                              |                                                 |                                                                    |                            |                                         |                                        |                                 |                           |           |           |                   |
| NOx – 1hr-<br>NMAAQS                         | 196.39                                          |                                                                    |                            | 43.9                                    | 240.3                                  | 188.03                          | 127.79                    | 262900    | 4093900   | 2090.9            |
| NOx – 1hr-<br>NMAAQS                         | 143.36                                          | 143.36                                                             |                            | 43.9                                    | 187.3                                  | 188.03                          | 99.59                     | 262932    | 4093539   | 2053.26           |
| NOx -<br>annual-<br>NMAAQS                   | 13.89                                           | 13.89                                                              |                            | 10.8                                    | 24.7                                   | 94.02                           | 26.26                     | 263031.5  | 4093531.5 | 2054.37           |
| PM2.5 –<br>24hr-<br>NMAAQS                   | 3.40                                            | 3.40                                                               | 0.0348                     | 11.77                                   | 15.2                                   | 35                              | 43.45                     | 263031.5  | 4093531.5 | 2054.37           |
| PM2.5 –<br>Annual-<br>NMAAQS                 | 1.22                                            | 1.22                                                               | 0.0014                     | 4.19                                    | 5.0                                    | 9                               | 55.56                     | 263031.5  | 4093531.5 | 2054.37           |
| NOx - annual-<br>Class II PSD                | 13.89                                           | 13.89                                                              |                            | 10.8                                    | 24.69                                  | 25                              | 98.77                     | 263031.5  | 4093531.5 | 2054.37           |
| PM2.5 – 24hr-<br>Class II PSD                | 3.40                                            | 3.40                                                               | 0.0348                     |                                         | 3.44                                   | 9                               | 38.18                     | 263031.5  | 4093531.5 | 2054.37           |
| PM2.5 –<br>Annual-Class<br>II PSD            | 1.22                                            | 1.22                                                               | 0.0014                     |                                         | 1.22                                   | 4                               | 30.53                     | 263031.5  | 4093531.5 | 2054.37           |

**16-X: Summary/conclusions**

|   |                                                                                                                                                                                                                                                                                                             |
|---|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|   | A statement that modeling requirements have been satisfied and that the permit can be issued.                                                                                                                                                                                                               |
| 1 | Air dispersion modeling results that no exceedances of the NAAQS or PSD Increment will occur for the 1-hr or annual NO <sub>2</sub> standard or the 24-hr and annual PM <sub>2.5</sub> standards and predicted offsite concentrations do not exceed the SIL for all other pollutants and averaging periods. |



# Section 17

## Compliance Test History

(Submitting under 20.2.70, 20.2.72, 20.2.74 NMAC)

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

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

**Compliance Test History Table**

| Unit No. | Test Description                                      | Test Date |
|----------|-------------------------------------------------------|-----------|
| 1        | NOX and CO testing in accordance with Condition 201.A | 4/17/2024 |
| 2        | NOX and CO testing in accordance with Condition 201.A | 4/15/2024 |
| 3        | NOX and CO testing in accordance with Condition 201.A | 8/5/2025  |
| 4        | NOX and CO testing in accordance with Condition 201.A | 8/5/2025  |
| 5        | NOX and CO testing in accordance with Condition 201.A | 8/5/2025  |
| 6        | NOX and CO testing in accordance with Condition 201.A | 8/4/2025  |
| 7        | NOX and CO testing in accordance with Condition 201.A | 7/29/2025 |
| 8        | NOX and CO testing in accordance with Condition 201.A | 7/29/2025 |
| 9        | NOX and CO testing in accordance with Condition 201.A | 8/4/2025  |
| 17       | NOX and CO testing in accordance with Condition 201.A | 4/29/2024 |
| 18       | NOX and CO testing in accordance with Condition 201.A | 2/4/2025  |
| 19       | NOX and CO testing in accordance with Condition 201.A | N/A*      |

\*Engine not installed therefore; this unit has not run. Harvest Midstream will conduct emissions testing after engine installation.



# 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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Not applicable, as no other relevant information is provided.



## Section 22: Certification

Company Name: Harvest Four Corners, LLC

I, Jennifer Nygren, 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 25 day of August, 2025 upon my oath or affirmation, before a notary of the State of

New Mexico.Jennifer Nygren  
\*Signature8/25/25  
DateJennifer Nygren  
Printed NameEnv. Specialist  
Title

Scribed and sworn before me on this 25 day of August, 2025

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

27th day of December, 2025.Monica Smith  
Notary's Signature8/25/2025  
DateMonica Smith  
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.

STATE OF NEW MEXICO  
NOTARY PUBLIC  
MONICA SMITH  
COMMISSION # 1061356  
COMMISSION EXPIRES 12/27/2025